NEW ISSUE – Book-Entry-Only

Ratings: S&P: "AA-"
Fitch: "AA-"
See "Ratings" herein

In the opinion of Bowles Rice LLP, Bond Counsel, under existing laws, regulations, rules and published rulings and judicial decisions of the United States of America, as presently written and applied, and assuming among other matters, the accuracy of certain representations and compliance with certain covenants, the interest on the Series 2021 Bonds is excludable from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and such interest will not be treated as a preference item for purposes of the alternative minimum tax imposed under the Code with respect to individuals. In addition, Bond Counsel is of the opinion that under the Act (as defined herein), the Series 2021 Bonds, their transfer and the income therefrom (including any profit made on the sale thereof) shall at all times be free from taxation within the State of West Virginia. See "TAX MATTERS" herein.

$333,630,000
WEST VIRGINIA PARKWAYS AUTHORITY
Senior Lien Turnpike Toll Revenue Bonds
Series 2021

Dated: Date of Delivery **Due: June 1, as shown on inside cover**

The $333,630,000 Senior Lien Turnpike Toll Revenue Bonds, Series 2021 (the "Series 2021 Bonds") are being issued by the West Virginia Parkways Authority (the "Authority"), a public body corporate and politic and instrumentality of the State of West Virginia (the "State"), under the Master Trust Indenture dated as of August 1, 2018, between the Authority and United Bank, a Virginia banking corporation authorized to transact business in the State, as trustee (the "Master Trust Indenture"), as supplemented and amended by that certain First Supplemental Trust Indenture dated as of August 1, 2018 and a Second Supplemental Trust Indenture dated as of June 1, 2021 (collectively, the "Indenture"). The Series 2021 Bonds are issued pursuant to Chapter 17, Article 16A of the Code of West Virginia, 1931, as amended (the "Act").

The Series 2021 Bonds are issuable only as fully-registered Bonds without coupons, and when initially issued, will be registered to Cede & Co., as nominee of The Depository Trust Company ("DTC"), New York, New York. Individual purchases will be made in book-entry form only, in the principal amount of $5,000 or any integral multiple thereof. Beneficial owners of the Series 2021 Bonds will not receive physical delivery of bond certificates. So long as DTC or its nominee is the registered owner of the Series 2021 Bonds, payments of the principal of and interest on the Series 2021 Bonds will be made directly to DTC. Disbursements of such payments to DTC participants is the responsibility of DTC, and disbursement of such payments to the beneficial owners is the responsibility of DTC participants. See "APPENDIX G – BOOK-ENTRY ONLY SYSTEM."

The maturities, interest rates, yields and prices of the Series 2021 Bonds are shown on the inside cover hereof. Interest on the Series 2021 Bonds will be payable on each June 1 and December 1, commencing December 1, 2021.

The Series 2021 Bonds are subject to optional and mandatory sinking fund redemption prior to maturity in the manner set forth herein. See "THE SERIES 2021 BONDS – Redemption" herein.

The proceeds of the Series 2021 Bonds, together with a cash contribution from the Authority, will provide funds to (i) finance the costs of certain transportation projects consisting of parkway projects, as defined in the Act, and described more particularly in "THE PROJECTS" herein (the "Projects"), (ii) reimburse the Authority for, or provide funds to finance, certain costs and expenses incurred prior to, or after, the issuance of the Series 2021 Bonds in connection with the acquisition, design, construction, reconstruction, maintenance, improvement, repair or funding of the Projects, (iii) make a required deposit to the Composite Senior Lien Bonds Debt Service Reserve Account, and (iv) pay costs of issuing the Series 2021 Bonds. See "PLAN OF FINANCE" and "SOURCES AND USES" herein.

The Series 2021 Bonds constitute obligations of the Authority secured by and payable solely from a first lien on and pledge of (i) the Net Toll Road Revenues (as defined herein), (ii) amounts on deposit in certain Funds and Accounts created pursuant to and pledged by the Indenture, and (iii) any and all other property of any kind from time to time by delivery or by writing of any kind specifically conveyed, pledged, assigned or transferred, as and for additional security under the Indenture for the Series 2021 Bonds, by the Authority or by anyone on its behalf or its written consent in favor of the Trustee (collectively, the "Trust Estate"). The Series 2021 Bonds will be secured on a parity basis with the Authority's Senior Lien Turnpike Toll Revenue Bonds, Series 2018 (the "Series 2018 Bonds"). See "SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS" herein.

THE SERIES 2021 BONDS ARE OBLIGATIONS OF THE AUTHORITY PAYABLE SOLELY FROM THE TRUST ESTATE. THE SERIES 2021 BONDS, SHALL NOT BE DEEMED TO BE A DEBT OR LIABILITY OF THE STATE OR ANY POLITICAL SUBDIVISION THEREOF OR A PLEDGE OF THE FAITH, CREDIT OR TAXING POWER OF THE STATE OR OF ANY SUCH SUBDIVISION, AND ARE PAYABLE SOLELY FROM THE TRUST ESTATE. THE AUTHORITY HAS NO TAXING POWER.

This cover page contains certain summary information regarding the Series 2021 Bonds and is not a complete summary of the Series 2021 Bonds or the security therefor. Investors should read this entire Official Statement to obtain information necessary to the making of an informed investment decision. The capitalized terms not otherwise defined in this cover page have the same meaning as that meaning assigned to them elsewhere in this Official Statement.

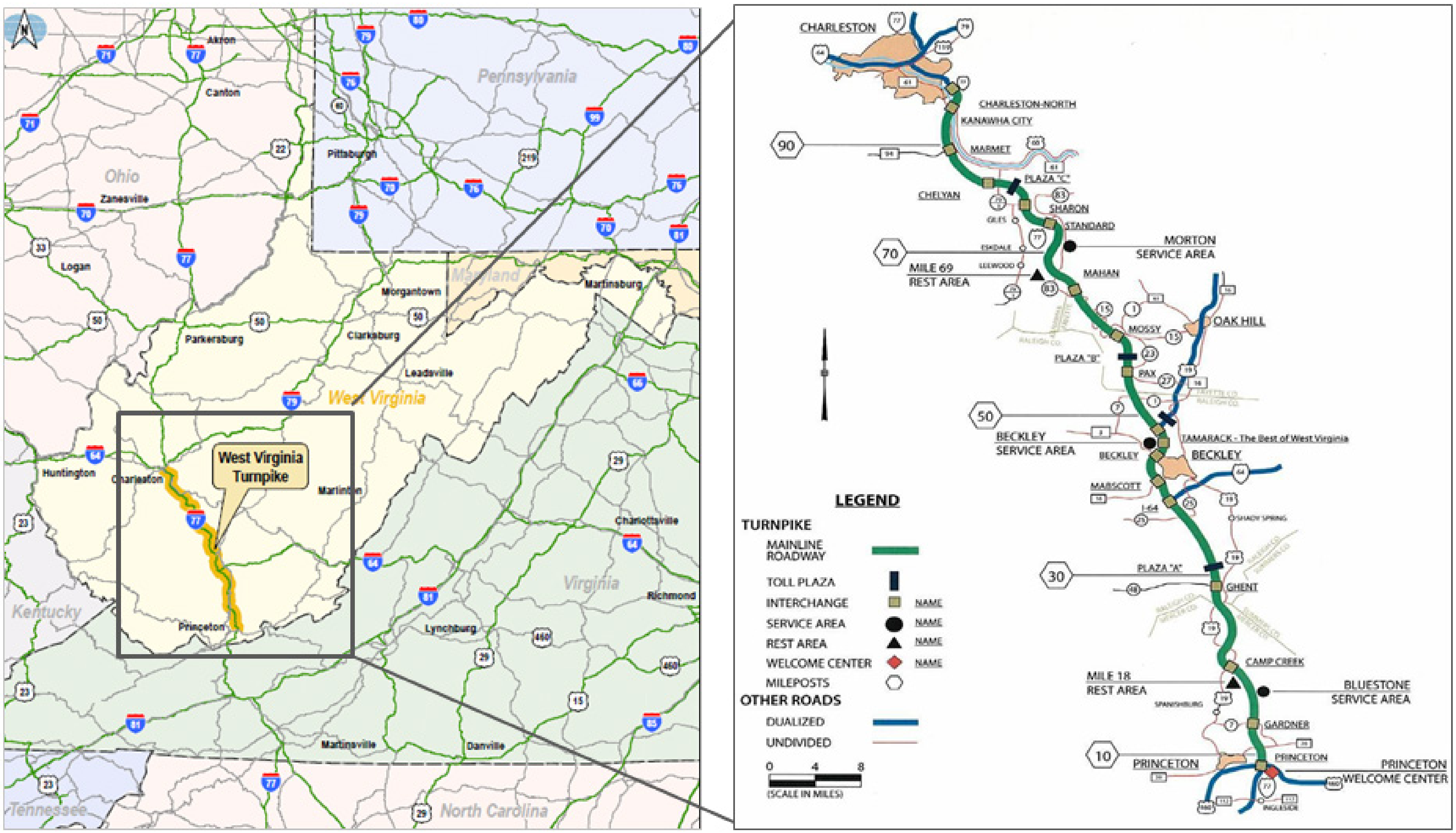
The purchase of the Series 2021 Bonds involves certain risk factors. See "RISK FACTORS" herein.

The Series 2021 Bonds are offered when, as and if issued by the Authority and accepted by the Underwriters, subject to prior sale, to withdrawal or modification of the offer without notice, and to approval of the legality of the Series 2021 Bonds by Bowles Rice LLP, Charleston, West Virginia, Bond Counsel. Certain legal matters will be passed upon for the Authority by its counsel, Abrams & Byron, Beckley, West Virginia, and for the Underwriters by their counsel, Jackson Kelly PLLC, Charleston, West Virginia. Certain legal matters will be passed upon by Spilman Thomas & Battle, PLLC, Charleston, West Virginia, as disclosure counsel to the Authority. It is expected that the Series 2021 Bonds will be available for delivery to DTC in New York, New York, on or about June 23, 2021.

WELLS FARGO SECURITIES **J.P. MORGAN**
CREWS & ASSOCIATES, INC. **PIPER SANDLER & CO.**

Dated: June 9, 2021

MAP OF THE WEST VIRGINIA TURNPIKE



$333,630,000
WEST VIRGINIA PARKWAYS AUTHORITY
SENIOR LIEN TURNPIKE TOLL REVENUE BONDS
SERIES 2021

Maturity (June 1)	Principal Amount	Interest Rate	Yield	Price	CUSIP**
2022	$6,015,000	5.000%	0.060%	104.636	956510BA8
2023	5,370,000	5.000%	0.090%	109.509	956510BB6
2024	5,640,000	5.000%	0.200%	114.058	956510BC4
2025	5,920,000	5.000%	0.330%	118.260	956510BD2
2026	6,220,000	5.000%	0.440%	122.253	956510BE0
2027	6,530,000	5.000%	0.580%	125.765	956510BF7
2028	6,855,000	5.000%	0.710%	128.995	956510BG5
2029	7,200,000	5.000%	0.830%	131.973	956510BH3
2030	7,560,000	5.000%	0.960%	134.527	956510BJ9
2031	7,935,000	5.000%	1.030%	137.412	956510BK6
2032	8,335,000	5.000%	1.080%	136.847*	956510BL4
2033	8,750,000	5.000%	1.120%	136.397*	956510BM2
2034	9,190,000	5.000%	1.170%	135.836*	956510BN0
2035	9,645,000	5.000%	1.220%	135.278*	956510BP5
2036	10,130,000	5.000%	1.250%	134.945*	956510BQ3
2037	10,635,000	5.000%	1.280%	134.612*	956510BR1
2038	11,165,000	5.000%	1.310%	134.281*	956510BS9
2039	11,725,000	5.000%	1.340%	133.950*	956510BT7
2040	12,310,000	5.000%	1.380%	133.511*	956510BU4
2041	12,930,000	3.000%	1.780%	111.067*	956510BV2
2042	13,315,000	4.000%	1.570%	122.279*	956510BW0
2043	13,850,000	4.000%	1.600%	121.971*	956510BX8

$62,070,000 5.000% Term Bond due June 1, 2047, Priced at 131.556%* to Yield 1.560%, CUSIP 956510BY6
$74,335,000 4.000% Term Bond due June 1, 2051, Priced at 120.544%* to Yield 1.740%, CUSIP 956510BZ3

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*Priced to first optional call date of June 1, 2031.

YOU SHOULD MAKE YOUR OWN DECISION WHETHER THIS OFFERING MEETS YOUR INVESTMENT OBJECTIVES AND RISK TOLERANCE LEVEL. NO FEDERAL OR STATE SECURITIES COMMISSION HAS APPROVED, DISAPPROVED, ENDORSED OR RECOMMENDED THIS OFFERING. NO INDEPENDENT PERSON HAS CONFIRMED THE ACCURACY OR TRUTHFULNESS OF THIS DISCLOSURE, NOR WHETHER IT IS COMPLETE. THE WEST VIRGINIA SECURITIES COMMISSION HAS NOT REVIEWED THE DISCLOSURE CONTAINED HEREIN AND THE AUTHORITY IS RELYING ON AN EXEMPTION FROM REGISTRATION BY QUALIFICATION UNDER THE WEST VIRGINIA SECURITIES ACT. IMPORTANT RISK FACTORS ARE EXPLAINED HEREIN UNDER "RISK FACTORS."

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this final Official Statement for purposes of, and as that term is defined in, Securities and Exchange Commission Rule 15c2-12.

In connection with this offering, the Underwriters may overallot or effect transactions which stabilize or maintain the market price of the Series 2021 Bonds at a level which might not otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time.

The Series 2021 Bonds have not been registered with the Securities and Exchange Commission under the Securities Act of 1933, as amended, in reliance upon exemptions contained in such act. The registration or qualification of the Series 2021 Bonds in accordance with applicable provisions of the securities laws of the states, if any, in which the Series 2021 Bonds have been registered or qualified and the exemption from registration or qualification in certain other states cannot be regarded as a recommendation thereof. Neither these states nor any of their agencies have passed upon the merits of the Series 2021 Bonds or the accuracy or completeness of this Official Statement. Any representation to the contrary may be a criminal offense.

In making an investment decision, investors must rely on their own examination of this Official Statement and the terms of the offering, including the merits and risks involved. The Series 2021 Bonds have not been recommended by any federal or state securities commission or regulatory commission including, but not limited to, the West Virginia Securities Commission. Furthermore, the foregoing authorities have not confirmed the accuracy or completeness or determined the adequacy of this Official Statement. Any representation to the contrary may be a criminal offense.

This Official Statement does not constitute an offer to sell, or the solicitation of an offer to buy, any securities other than the securities offered hereby, or an offer to sell or solicitation of offers to buy, nor shall there be any sale of the Series 2021 Bonds, by any person in any jurisdiction where such offer, or solicitation or sale would be unlawful in such jurisdiction. No dealer, broker, salesman or other person has been authorized to give any information or to make any representation other than those contained in this official statement in connection with the offering contained herein, and, if given or made, such information or representation must not be relied upon as having been authorized by the authority or any other person. Neither the delivery of this Official Statement nor the sale of any Series 2021 Bonds implies that there has been no change in the matters described herein since the date hereof.

The information contained in this Official Statement has been obtained from the Authority and other sources which are believed to be reliable, but the accuracy or completeness of such information is not guaranteed by and should not be construed as a representation by any of the foregoing. The presentation of such information, including but not limited to financial data, is intended to show recent historic information and is not intended to indicate future or continuing trends. No representation is made that past experience, as shown by such financial and other information, will necessarily be repeated in the future. This Official Statement contains, in part, estimates and matters of opinion, whether or not expressly stated to be such, which are not intended as statements or representations of fact or certainty, and no representation is made as to the correctness of such estimates and opinions, or that they will be realized. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority since the date hereof.

No representation, warranty or guaranty is made by the Underwriters as to the accuracy or completeness of any information in this Official Statement, and nothing contained in this Official Statement is or shall be relied upon as a promise or representation by the Underwriters. The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with and as part of their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

This Official Statement contains forecasts, projections and estimates that are based on current expectations or assumptions. When used in this Official Statement, the words "estimated," "forecasted," "intended," "expected," "anticipated," "projected," and similar expressions identify "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. Such statements are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in such forward-looking statements. Any forecast is subject to uncertainties. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between forecasts and actual results, and those differences may be material.

This Official Statement speaks only as of the date printed on the cover page hereof. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstance, create any implication that there has been no change in the affairs of the Authority since the date hereof in any of the information set forth herein since the date hereof or the date as of which particular information was given, if earlier. This Official Statement will be made available through the Electronic Municipal Market Access System, which is the sole nationally recognized municipal securities information repository under Securities and Exchange Commission Rule 15c2-12.

WEST VIRGINIA PARKWAYS AUTHORITY

HONORABLE JAMES C. JUSTICE, II
Governor of the State of West Virginia, Chairman

A. BRAY CARY, *Governor's Chairman Designee*

BYRD E. WHITE, III, *Member*
Secretary of the West Virginia Department of Transportation
Commissioner of the West Virginia Division of Highways

MIKE VINCIGUERRA, *Vice Chairman and Member*

TOM MAINELLA, *Secretary and Member*

DOUG M. EPLING, *Member*

ALISHA MADDOX, *Member*

BILL SEAVER, *Member*

Authority Staff

Jeffrey A. Miller, *Executive Director*

Parrish French, *Director of Finance*

Tyrone Gore, *Director of Operations and Training*

Douglas Ratcliff, *Director of Toll*

Leslie Ball, *Director of Maintenance*

Wayne Webb, *Director of Customer Service*

Brian Bowling, *Director of Information Technology, Communication Systems and Cyber-Security*

Margaret Vickers, *Director of Purchasing*

Sherry Lilly, *Director of Human Resources*

Captain Bruce W. Clendenin, *Officer in Charge of State Police Troop 7*

Service Providers

HNTB Corporation, *Consulting Engineers*

CDM Smith Inc., *Traffic Consultant*

Bowles Rice LLP, *Bond Counsel*

Abrams & Byron, *Counsel to Authority*

Spilman Thomas & Battle, PLLC, *Disclosure Counsel*

Public Resources Advisory Group, *Financial Advisor*

Suttle & Stalnaker, PLLC, *Independent Auditors*

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SUMMARY

This summary is furnished to provide limited introductory information regarding the terms of the Series 2021 Bonds and is qualified by the more detailed descriptions appearing in this Official Statement, including the appendices hereto. Capitalized terms are used as defined in this Official Statement. The offering of the Series 2021 Bonds is made only by means of the entire Official Statement, and no person is authorized to make offers to sell or to solicit offers to buy the Series 2021 Bonds unless the entire Official Statement is delivered.

The Issuer	West Virginia Parkways Authority
The Series 2021 Bonds	West Virginia Parkways Authority $333,630,000 Senior Lien Turnpike Toll Revenue Bonds, Series 2021 (the "***Series 2021 Bonds***").
Terms of the Series 2021 Bonds	For a discussion of the terms of the Series 2021 Bonds, including the redemption provisions, see "THE SERIES 2021 BONDS."
Purpose	Proceeds of the Series 2021 Bonds, which are being issued pursuant to Chapter 17, Article 16A of the Code of West Virginia, 1931, as amended (the "***Act***"), together with a cash contribution from the Authority, will provide funds to (i) finance the costs of certain transportation projects consisting of parkway projects, as defined in the Act (collectively, the "***Projects***"), as described more particularly in "THE PROJECTS" herein, (ii) reimburse the Authority for, or to provide funds to finance, certain costs and expenses incurred prior to or after the issuance of the Series 2021 Bonds in connection with the acquisition, design, construction, reconstruction, maintenance, improvement, repair or funding of the Projects, (iii) make a required deposit to the Composite Senior Lien Bonds Debt Service Reserve Account and (iv) pay costs of issuing the Series 2021 Bonds.
Book-Entry Only System	The Series 2021 Bonds are initially issuable only to Cede & Co., the nominee of The Depository Trust Company, New York, New York ("***DTC***"), pursuant to its book-entry only system. No physical delivery of the Series 2021 Bonds will be made to the beneficial owners of the Series 2021 Bonds. Principal and interest will be paid to Cede & Co., which will distribute such payments to the participating members of DTC for remittance to the beneficial owners of the Series 2021 Bonds. See "APPENDIX G – BOOK-ENTRY ONLY SYSTEM."
Trustee and Paying Agent	The Trustee and the initial Paying Agent is United Bank, a Virginia banking corporation authorized to transact business in the State, and its successors in such capacity.
Security and Source of Payment	The Series 2021 Bonds are obligations of the Authority, secured by a first lien on and pledge of (i) the Net Toll Road Revenues (as defined herein), (ii) amounts on deposit in certain Funds and Accounts created pursuant to and pledged by the Indenture as described herein, and (iii) any and all other property of any kind from time to time by delivery or by writing of any kind specifically conveyed, pledged, assigned or transferred, as and for additional security under the Indenture for the Series 2021 Bonds, by the Authority or by anyone on its behalf or its written consent in favor of the Trustee (collectively, the "***Trust Estate***"). The Series 2021 Bonds will be secured on a parity basis with the Authority's Series 2018 Bonds, currently outstanding in the principal amount of $158,105,000. See "SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS."

Composite Senior Lien Bonds Debt Service Reserve Fund Requirement

The Composite Senior Lien Bonds Debt Service Reserve Requirement for the Composite Senior Lien Bonds, which are comprised of the Series 2018 Bonds and, upon issuance, the Series 2021 Bonds, is equal to the lesser of (i) 10% of the aggregate stated principal amount of the Composite Senior Lien Bonds (plus or minus original issue premium or discount, if more than 2% of the stated principal amount), (ii) the aggregate maximum annual debt service on the outstanding Composite Senior Lien Bonds or (iii) 125% of the average annual debt service on the outstanding Composite Senior Lien Bonds. At the time of issuance of the Series 2021 Bonds, the Authority will make a deposit of $20,114,912.37, from cash on hand, into the Composite Senior Lien Bonds Debt Service Account to increase the balance in such account to an amount equal to the Composite Senior Lien Bonds Debt Service Reserve Requirement. See “SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Senior Lien Debt Service Reserve Fund” herein.

Operation and Maintenance Reserve Account Requirement

The Authority has covenanted to maintain funds in its Operation and Maintenance Reserve Account, an account within its Operation and Maintenance Fund, equal to the one-sixth of the amount recommended by its Consulting Engineers as the Operation and Maintenance Expenses, as defined herein, for its current fiscal year as included in the Authority’s Annual Budget. See “SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Operation and Maintenance Reserve Account Requirement” herein.

Renewal and Replacement Reserve Fund Requirement

The Authority has covenanted to fund its Renewal and Replacement Reserve Fund in an annual amount equal to the amount recommended by its Consulting Engineers as the Renewal and Replacement Costs for its current fiscal year as included in the Authority’s Annual Budget and to deposit in such Fund each month a minimum of one-twelfth of such annual amount. The Authority has covenanted in the Indenture to include estimates of its Renewal and Replacement Reserve Fund Requirement in its five-year capital program for the Turnpike that is required as a part of its Annual Budget. See “SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Renewal and Replacement Reserve Fund Requirement.”

Toll Rate Covenant

The Authority has covenanted, at all times, to establish, charge and collect tolls for the privilege of traveling on the Turnpike at rates sufficient in each fiscal year to meet Operation and Maintenance Expenses and produce Net Toll Road Revenues of at least (i) 125% of the Annual Debt Service with respect to the Series 2021 Bonds and all other Outstanding Senior Lien Bonds issued under the Indenture, and (ii) 100% of the sum of (a) Annual Debt Service with respect to all Outstanding Bonds issued under the Indenture, (b) the amounts, if any, necessary to restore the amount on deposit in any Debt Service Reserve Fund to the applicable Series or, as applicable, aggregate or composite Debt Service Reserve Requirement and (c) the Renewal and Replacement Reserve Fund Requirement. See “SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Toll Rate Covenant.”

Good Repair Covenant

The Authority has covenanted, at all times, to operate or cause the Turnpike to be operated, in an efficient manner and at a reasonable cost, to maintain, preserve and keep, or cause to be maintained, preserved and kept, the Turnpike, in good repair, working order and condition, and that its Consulting Engineers shall make a physical examination and inspection of the Turnpike each year and submit an annual report prior to the end of each fiscal year regarding the condition of the Turnpike and whether it has been maintained in good repair, working order and condition and in compliance with all covenants under the Indenture related to the efficient management and maintenance of the Turnpike. See "SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Good Repair Covenant."

Incurrence of Additional Senior Lien Indebtedness

Under the terms of the Indenture, the Authority may issue one or more series of Senior Lien Bonds on parity as to lien and source of payment with the Outstanding Senior Lien Bonds, including the Series 2021 Bonds, so long as:

(i) no event of default has occurred under the Indenture,

(ii) the Authority has complied with its Toll Rate Covenant for the prior Annual Period and is current in all deposits into the Funds and Accounts and all payments required to have been deposited into such Funds and Accounts under the Indenture as to all Senior Lien Bonds, and

(iii) either (a) an Authority Authorized Officer certifies that the Net Toll Road Revenues (adjusted to reflect any authorized and to be implemented within six months adjustment in tolls, fees and charges, as if such adjustment had been in effect since the beginning of the period described herein) for (A) the most recent Annual Period for which audited statements are available or (B) a 12-consecutive-month period in the immediately prior 18 months, were at least 125% of the Maximum Annual Debt Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) and the additional Senior Lien Bonds proposed to be issued, or (b) the Authority certifies that, based on reports of its Traffic and Revenue Consultant and Consulting Engineers, the projected Net Toll Road Revenues (adjusted to reflect any authorized adjustment in tolls, fees and charges, provided that such adjustment is to be implemented within six months as if such adjustment had been in effect since the beginning of the period described herein) for the current and each of the Annual Periods through the fifth Annual Period following the issuance of the additional Senior Lien Bonds are at least 135% of Annual Debt Service for each such year and projected Net Toll Road Revenues in the fifth such year equaled or exceeded 135% of the Maximum Annual Debt Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) and the additional Senior Lien Bonds proposed to be issued.

If the additional Senior Lien Bonds are being issued to refund an existing series of Senior Lien Bonds, the additional refunding Senior Lien Bonds may be issued under the Indenture so long either (i) the aggregate Maximum Annual Debt Service for all then outstanding Senior Lien Bonds, after giving effect to the refunding, will be less than the aggregate Maximum Annual Debt Service for all outstanding Senior Lien Bonds prior to the refunding or (ii) the refunding will result in savings in the aggregate Annual Debt Service in every year. See "SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Additional Bonds."

Ratings	S&P Global Ratings, a division of Standard & Poor's Financial Services LLC and Fitch Ratings, Inc. have assigned credit ratings of "AA-" (stable outlook) and "AA-" (stable outlook), respectively, to the Series 2021 Bonds. See "RATINGS."
Tax Exemption	In the opinion of Bond Counsel, under existing laws, regulations, rules and published rulings and judicial decisions of the United States of America, as presently written and applied, and assuming among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 2021 Bonds is excludable from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "***Code***") and such interest will not be treated as a preference item for purposes of the alternative minimum tax imposed under the Code with respect to individuals. In addition, under the Act, the Series 2021 Bonds, their transfer and the income therefrom (including any profit made on the sale thereof) shall at all times be free from taxation within the State. See "TAX MATTERS."
Continuing Disclosure	Rule 15c2-12 under the Securities and Exchange Act of 1934, as amended, generally prohibits an underwriter from purchasing or selling municipal securities in an initial offering unless it has determined that the issuer of such securities has committed to provide, annually, certain information, including audited financial information, and notice of various events, if material. To enable the Underwriters to comply with the provisions of Rule 15c2-12, the Authority will enter into a Continuing Disclosure Agreement to provide continuing disclosure on behalf of the Authority regarding the Authority and the Series 2021 Bonds. See "CONTINUING DISCLOSURE."

OFFICIAL STATEMENT
$333,630,000
WEST VIRGINIA PARKWAYS AUTHORITY
SENIOR LIEN TURNPIKE TOLL REVENUE BONDS
SERIES 2021

INTRODUCTION

General

The purpose of this Official Statement is to set forth certain information concerning the West Virginia Parkways Authority (the "***Authority***") and its $333,630,000 Senior Lien Turnpike Toll Revenue Bonds, Series 2021 (the "***Series 2021 Bonds***"). The Series 2021 Bonds are being issued pursuant to the Constitution and laws of the State of West Virginia (the "***State***"), including Chapter 17, Article 16A of the Code of West Virginia, 1931, as amended (the "***Act***"), a Resolution adopted by the Authority on May 20, 2021, a Certificate of Determinations of the Authority dated as of June 9, 2021, a Direction of the Governor dated as of May 28, 2021, a Master Trust Indenture dated as of August 1, 2018 (the "***Master Indenture***"), as supplemented and amended by the First Supplemental Indenture dated as of August 1, 2018 (the "***First Supplemental Indenture***") and the Second Supplemental Indenture dated as of June 1, 2021 (the "***Second Supplemental Indenture"*** and together with the Master Indenture and the First Supplemental Indenture, the "***Indenture***"), between the Authority and United Bank, a Virginia banking corporation authorized to transact business in the State, as trustee (the "***Trustee***"). The Series 2021 Bonds are initially issued in "book-entry" form only. See "APPENDIX G − BOOK-ENTRY ONLY SYSTEM" herein. Certain capitalized terms used in this Official Statement, unless otherwise defined in this Official Statement, have the meanings set forth in "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE."

The Authority

The Authority (formerly the West Virginia Parkways, Economic Development and Tourism Authority), as the successor-in-interest to the West Virginia Turnpike Commission (the "***Turnpike Commission***"), is a public body corporate and politic and instrumentality of the State organized and existing by virtue of the Act, with the power to (i) construct, reconstruct, improve, maintain, repair, operate or finance parkway projects on or off the West Virginia Turnpike (the "***Turnpike***"*)*, as described in detail herein, (ii) charge and fix tolls or fees for use of the Turnpike or other parkway projects and (iii) issue revenue bonds for such purposes. The Authority's composition, powers, duties, functions and other attributes are derived from the Act. See "THE AUTHORITY" herein.

Purpose of the Series 2021 Bonds

In 2017, Governor James C. Justice, II, announced a $2.6 billion transportation financing initiative known as the "Roads to Prosperity Program," to improve the State's roads and bridges, create jobs and boost the State's economy. In connection with his Roads to Prosperity Program, the Governor signed new legislation into law in June 2017 to amend the Act to authorize the Authority to issue revenue bonds as a means of financing certain transportation projects to be constructed by the State Division of Highways (the "***Division of Highways***"), a division of the State Department of Transportation (the "***WVDOT***"). Projects to be funded from proceeds of the Authority's revenue bonds, including the Series 2021 Bonds, must be included in either the Division of Highways' Statewide Transportation Improvement Plan ("***STIP***") in effect on June 1, 2017 (see "WEST VIRGINIA DEPARTMENT OF TRANSPORTATION – General − Division of Highways" herein for a description of the Division of Highways' STIP), or the Division of Highways SOS Transportation Investment Program Candidate Project List dated May 3, 2017.

Additionally, the Act, as amended, requires that projects financed from proceeds of the Authority's revenue bonds, including the Series 2021 Bonds, must be located in ten specific counties with a nexus to the Turnpike, including four counties through which the Turnpike runs and six counties contiguous to those four counties, to the extent allowed under the Act and applicable federal laws.

The Series 2021 Bonds are being issued to finance transportation projects as part of Governor Justice's Roads to Prosperity Program. See "ROADS TO PROSPERITY PROGRAM," "SOURCES AND USES OF FUNDS" and "PLAN OF FINANCE" herein.

Security for the Series 2021 Bonds

The Series 2021 Bonds constitute obligations of the Authority secured by and payable solely from a first lien on and pledge of (i) the Net Toll Road Revenues (as defined herein), (ii) amounts on deposit in certain Funds and Accounts created pursuant to and pledged by the Indenture, and (iii) any and all other property of any kind from time to time conveyed, pledged, assigned or transferred, as additional security for the Series 2021 Bonds, by the Authority or anyone on its behalf or its consent in favor of the Trustee (collectively, the "***Trust Estate***"). See "SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS" herein.

The Series 2021 Bonds will be secured on a parity basis with the Authority's $166,370,000 aggregate principal amount Senior Lien Turnpike Toll Revenue Bonds, Series 2018 (the "Series 2018 Bonds"), currently outstanding in the principal amount of $158,105,000. After issuance of the Series 2021 Bonds, Outstanding Senior Lien Bonds will consist of the Series 2018 Bonds and the Series 2021 Bonds. See "OUTSTANDING BONDS AND ANNUAL DEBT SERVICE REQUIREMENTS" herein.

Redemption

The Series 2021 Bonds are subject to optional and mandatory sinking fund redemption prior to maturity under certain circumstances as more fully set forth herein. See "THE SERIES 2021 BONDS – Redemption" herein.

Limited Obligations

THE SERIES 2021 BONDS ARE OBLIGATIONS OF THE AUTHORITY PAYABLE SOLELY FROM THE TRUST ESTATE. THE SERIES 2021 BONDS SHALL NOT BE DEEMED TO BE A DEBT OR LIABILITY OF THE STATE OR ANY POLITICAL SUBDIVISION THEREOF OR A PLEDGE OF THE FAITH, CREDIT OR TAXING POWER OF THE STATE OR OF ANY SUCH SUBDIVISION, AND ARE PAYABLE SOLELY FROM THE TRUST ESTATE. THE AUTHORITY HAS NO TAXING POWER.

PLAN OF FINANCE

The proceeds of the Series 2021 Bonds, together with a cash contribution from the Authority, will provide funds to (i) finance the costs of the Projects, as described more particularly in "THE PROJECTS" herein (the "***Projects***"), (ii) reimburse the Authority for certain costs and expenses incurred prior to the issuance of the Series 2021 Bonds in connection with the acquisition, design, construction, reconstruction, maintenance, improvement, repair or funding of the Projects, (iii) make a required deposit to the Composite Senior Lien Bonds Debt Service Reserve Account, and (iv) pay costs of issuing the Series 2021 Bonds. The Series 2021 Bonds are being issued as part of Governor Justice's Roads to Prosperity Program. See "ROADS TO PROSPERITY PROGRAM" herein.

In accordance with the Act, a portion of the proceeds of the Series 2021 Bonds will be deposited into the State Road Construction Account and expended by the Division of Highways, in accordance with the terms of a Memorandum of Understanding among the Authority, the Division of Highways, the Trustee and the State

Treasurer (the ***"MOU")***, to pay costs of constructing the Projects. See "SOURCES AND USES OF FUNDS," "ROADS TO PROSPERITY PROGRAM – Legislation Amending the Act" and "THE PROJECTS – Memorandum of Understanding" herein. The use of proceeds of the Series 2021 Bonds deposited into the State Road Construction Account and expended by the Division of Highways to finance the Projects will be subject to the terms of the MOU which limits the Authority's financial obligations to the Division of Highways to only the amounts so deposited in the State Road Construction Account. See "APPENDIX H – FORM OF MEMORANDUM OF UNDERSTANDING" herein.

SOURCES AND USES OF FUNDS

The proceeds from the sale of the Series 2021 Bonds are to be applied as set forth in the following table:

SOURCES OF FUNDS	
Principal Amount of the Series 2021 Bonds	$333,630,000.00
Original Issue Premium	90,003,133.10
Authority Contribution from Cash on Hand	20,582,103.52
Total Sources of Funds	$444,215,236.62
USES OF FUNDS	
Deposit to State Road Construction Account	$422,881,498.60
Deposit to Series 2021 Debt Service Reserve Account, a subaccount of the Composite Senior Lien Bonds Debt Service Reserve Account*	20,114,912.37
Series 2021 Costs of Issuance**	1,218,825.65
Total Uses of Funds	$444,215,236.62

* Deposit will be made from a cash contribution from the Authority.
**Includes fees and expenses of Bond Counsel, Disclosure Counsel, Underwriter's Counsel, other legal fees, if any, Underwriters' discount, fees for the rating agencies, Financial Advisor fees, Trustee fees, Traffic Consultant fees, printing fees, and miscellaneous fees and expenses relating to the issuance of the Series 2021 Bonds.

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ROADS TO PROSPERITY PROGRAM

General

In 2017, Governor Justice announced a $2.6 billion transportation financing plan known as the "Roads to Prosperity Program," now known as "Drive Forward WV," which he announced as an initiative to improve the State's roads and bridges, create jobs and boost the economy. The Roads to Prosperity Program includes, among other financing sources, toll revenue bonds issued by the Authority, including the Series 2018 Bonds and the Series 2021 Bonds, to finance transportation projects both on the Turnpike and off the Turnpike in a ten-county area adjacent to the Turnpike, in accordance with the Act.

In addition to the Authority's toll revenue bonds, financing of transportation projects in the State under the Roads to Prosperity Program is being provided through a combination of proceeds from the issuance by the State of up to $1.6 billion of general obligation bonds over a four-year period and proceeds from surface transportation special obligation notes issued by the State's Commissioner of Highways. See "WEST VIRGINIA DEPARTMENT OF TRANSPORTATION – Past and Anticipated Financings for State Transportation Projects" below.

The issuance by the Authority of its toll revenue bonds, including the Series 2021 Bonds, is not dependent on the issuance by the State of general obligation bonds or by the State Commissioner of Highways of surface transportation special obligation notes under the Roads to Prosperity Program.

Under the Act, the Authority is not restricted in its ability to issue additional toll revenue bonds. However, the Roads to Prosperity Program envisioned that the Authority would issue toll revenue bonds in a par amount not to exceed $500 million to finance transportation projects in the State. Upon issuance of the Series 2021 Bonds, the Authority will have issued an aggregate par amount of $500 million of its toll revenue bonds and will have deposited bond proceeds of approximately $581.8 million into the State Road Construction Account to finance transportation projects in the State. At this time, the Authority does not expect that it will issue any additional toll revenue bonds to fulfill its role in the Roads to Prosperity Program.

Legislation Amending the Act

On June 22, 2017, Governor Justice signed into law Senate Bill 1003, which was one of several pieces of legislation enacted by the State Legislature during the First Extraordinary Session of the 2017 Legislature to implement the Roads to Prosperity Program. Senate Bill 1003 amended the Act to expand the powers of the Authority to, among other things:

(i) continue to charge and collect tolls and/or increase or adjust tolls for passage along the Turnpike, which powers were otherwise scheduled to end in the summer of 2019;

(ii) issue toll revenue bonds for the purpose of paying all or a portion of the costs of the Authority to construct, maintain, improve or repair parkway projects on the Turnpike, which the Authority was not authorized to do under the Act prior to passage of Senate Bill 1003;

(iii) issue toll revenue bonds for the purpose of paying all or a portion of the costs of the Division of Highways to construct, maintain, improve or repair off-Turnpike parkway projects in ten counties of the State, as described below, and deposit all or a portion of the proceeds from the issuance of such toll revenue bonds including, without limitation, in accordance with the MOU, the Series 2021 Bonds, into the newly created State Road Construction Account within the State Road Fund to be used by the Division of Highways to construct, maintain, improve or repair such off-Turnpike parkway projects; and

(iv) implement a single fee program as a condition of, and in connection with, any increase in its toll rates to provide Toll Class 1 passenger (non-commercial) motor vehicle customers using a West Virginia *E-ZPass*® transponder with unlimited passage on the Turnpike (or any future toll roads in the State) for an annual flat fee, not to exceed $25 per year (subject to adjustments of up to 5% every three years), plus a transponder issuance cost.

Under the Act, as amended by Senate Bill 1003, the Authority may issue revenue bonds payable from tolls collected for passage along the Turnpike and may deposit, in accordance with the MOU, some or all of the net proceeds of such bonds into the State Road Construction Account for off-Turnpike parkway projects in the four counties through which the Turnpike runs, being Kanawha County, Fayette County, Raleigh County and Mercer County, and six additional counties that surround the Turnpike, being Greenbrier County, Monroe County, Summers County, McDowell County, Nicholas County and Wyoming County. The Authority may also issue toll revenue bonds to finance the construction, maintenance, improvement or repair of parkway projects on the Turnpike.

Major Transportation Projects Financed Under the Roads to Prosperity Program

The Department of Transportation has approved the funding of more than 700 projects totaling $2.97 billion under the Roads to Prosperity Program. See "THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION – Past and Anticipated Financings for State Transportation Projects under the Roads to Prosperity Program" herein.

Some of the major transportation projects completed or currently under construction with funding from prior bonds issued under the Roads to Prosperity Program, including projects financed with proceeds from general obligation bonds, surface transportation special obligation notes, and toll revenue bonds, are shown on the table on the following page.

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Project	County	Project No.	Estimated Construction Cost (In Millions)	Status
I-64 Widening Project Between Scott Depot Exit and Nitro Exit	Kanawha/Putnam	U34064413700	$245.0	Construction
I-70 Bridge Rehabilitation/Renovation	Ohio	S3357000100	243.0	Construction
I-64/I-77 Turnpike Widening Project	Raleigh	US34177403000	119.0	Construction
King Coal Highway WV 123 to John Nash Blvd.	Mercer	X32852111611	65.0	Construction
I-64 Milton to US 35 Pavement Rehabilitation	Cabell/Putnam	S30664279100	62.0	Completed
I-77 Bluefield to Princeton Pavement Rehabilitation	Mercer	S3287700100	37.0	Completed
I-79 Exit 99 Weston & Buckhannon Off Ramp	Lewis	US32179990000	30.0	Construction

Source: West Virginia Department of Transportation Project Dashboard found at transportation.wv.gov. Includes projects funded by the issuance of general obligation bonds, surface transportation special obligation notes, and toll revenue bonds.

Traffic and Toll Revenue Forecast and Projected Results

Attached hereto as Appendix D is the West Virginia Turnpike 2021 Traffic & Revenue Study prepared by CDM Smith Inc. ("***CDM Smith***"), the Authority's Traffic Consultant, dated July 2020, as amended April 2021 (the "***Traffic and Revenue Study***"). As set forth in the Traffic and Revenue Study, total gross toll revenue is estimated to increase each year from approximately $139.8 million in calendar year 2020 to approximately $298.1 million in calendar year 2050. The forecast assumes the end of the early enrollment option coverage of the Single Fee Discount Program on December 31, 2021, when early enrollees under the program must begin to pay the regular annual fee, the impact of the COVID-19 pandemic and escalation of both toll rates and the Single Fee Discount Program annual fee, as described below. See "THE WEST VIRGINIA TURNPIKE – Toll Rates" herein. The Traffic and Revenue Study is subject to the limitations and assumptions detailed therein, and should be read in its entirety for a full description of assumptions and methodologies used to develop such forecasts and the related limitations. See "SUMMARY OF PROJECTED OPERATIONS – Summary of Traffic Consultant's Report," "APPENDIX D – TRAFFIC AND REVENUE STUDY" and "RISK FACTORS" herein.

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THE PROJECTS

Description of the Current Projects

The Series 2021 Bonds are being issued, in part, to provide funds to finance the costs of construction by the Division of Highways of certain transportation projects off the Turnpike in seven counties, which are included in the ten counties adjacent to the Turnpike. These Projects are part of the list of projects expected to be constructed by the Division of Highways under the Roads to Prosperity Program. These Projects have been selected by the Authority in consultation with, and upon the recommendation and determination of, the Division of Highways. All such selected projects that were included are also included in either the Division of Highways STIP in effect on June 1, 2017, or its SOS Transportation Investment Program Candidate Project List dated May 3, 2017. All of the Projects are designed to be complementary to the Turnpike and fall within a clear nexus to the Turnpike itself. The Authority is not responsible for any cost-overruns or delays related to construction of the Projects. See "THE PROJECTS – Memorandum of Understanding" herein.

Pursuant to the Act, the Projects that are initially contemplated to be financed with a portion of the proceeds of the Series 2021 Bonds consist of the following:

Coalfields Expressway: West Virginia Route 16 to Welch Project. This project is for the construction of four lane road from Route 16 near Pineville in Wyoming County to Welch in McDowell County.

Beaver to South Eisenhower Project (Beckley Z-Way). This project is for the construction of approximately 1.86 miles of new roadway and relocation of US 19 from a location in the vicinity of Old Crow Road, south of Airport Road, to I-64 at the South Eisenhower Interchange in Raleigh County, West Virginia.

US 19 Shady Spring to Beaver Project (Beckley Z-Way). This project is to widen US 19 from WV 3 (Hinton Road) in Shady Spring, Raleigh County, to WV 307 (Airport Road) in Beaver, Raleigh County, from two to three lanes, which will allow for a through lane in each direction plus a continuous left turn lane.

US Route 60 Operational Improvements Project. This project is to improve the operational performance of approximately 7 miles of US Route 60 between Chelyan and Montgomery in Kanawha County.

RHL Boulevard Connector. This project is to construct a roadway and bridge in Kanawha County.

56th Street – 40th Street. This project is to reconstruct a roadway and sidewalks and correct drainage issues on MacCorkle Avenue between 40th Street and 56th Street in Kanawha County.

Appalachian Drive to New River Gorge Bridge. This project involves reconstructing the roadway from Appalachian Drive to the New River Gorge Bridge in Fayette County.

Princeton Overhead Bridge Project. This project is to replace the Princeton Overhead Bridge on WV 20 over Brush Creek and the Norfolk Southern Railway in Mercer County.

Superior Bridge Project. This project consists of replacing the Superior Bridge in McDowell County.

Other Bridge Projects. The proceeds of the Series 2021 Bonds are also expected to be used to replace or repair the following bridges:

- Replace the 3rd Bridge across North Fork Cherry River in Greenbrier County.
- Replace the Newhall Arch No. 1 and Newhall Arch No. 2 Bridges in McDowell County.
- Replace the Indian Creek Bridge in Summers County.
- Replace the Mahan Bridge and the Big Creek Bridge in Fayette County.
- Replace the Avondale Bridge, the Big Creek Arch Bridge, the Kimball Bridge, the Coalwood Slab and the Northfork Arch Bridge in McDowell County.
- Rehabilitate the Bartley Bridge in McDowell County.
- Replace the PFC WF Harrison Memorial Bridge in Kanawha County.

In addition, a portion of the proceeds of the Series 2021 Bonds will be used to finance, or reimburse the Authority for, or provide funds to finance, certain costs and expenses incurred prior to, or after, the issuance of the Series 2021 Bonds in connection with the acquisition, design, construction, reconstruction, maintenance, improvement, repair or funding of the Projects.

The Authority, in consultation with the Division of Highways, may substitute other transportation projects to be financed with proceeds of the Series 2021 Bonds for those transportation projects described on the foregoing page so long as any substitute project is a project that was included in the Division of Highways' STIP in effect on June 1, 2017 or its SOS Transportation Investment Program Candidate Project List dated May 3, 2017, and is in one of the ten counties adjacent to the Turnpike. See "INTRODUCTION – Purpose of the Series 2021 Bonds" herein.

Memorandum of Understanding

In connection with the issuance of the Series 2021 Bonds, the Authority will enter into a Memorandum of Understanding (the "***MOU***") with the Division of Highways, the Trustee and the State Treasurer, to establish procedures for the use and expenditure by the Division of Highways of any proceeds of the Series 2021 Bonds held in the State Road Construction Account, which will be expended by the Division of Highways for the construction, maintenance, improvement or repair of the Projects, and to address other matters including, without limitation, permitted investments and procedures relating to federal tax requirements. See "PLAN OF FINANCE" and "APPENDIX H – FORM OF MEMORANDUM OF UNDERSTANDING" herein.

Under the MOU, the Division of Highways must provide additional funding as may be necessary to complete the Projects if the amount on deposit in the State Road Construction Account is insufficient due to cost overruns, and the Authority has no liability or responsibility to provide any additional funding beyond the initial deposit it makes from proceeds of the Series 2021 Bonds into the State Road Construction Account. See "APPENDIX H – FORM OF MEMORANDUM OF UNDERSTANDING" herein.

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OUTSTANDING BONDS AND ANNUAL DEBT SERVICE REQUIREMENTS

The Series 2018 Bonds and the Series 2021 Bonds, when issued, are the only series of Bonds outstanding under the Indenture. The Authority may issue one or more series of additional Bonds under the Indenture, including one or more series of additional Senior Lien Bonds, provided certain tests are met. See "SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Additional Bonds" herein.

The following table sets forth, for each fiscal year, the estimated amounts to be required in each fiscal year for the payment of debt service on the Senior Lien Bonds.

Year Ending June 30	Debt Service on Series 2018 Bonds	Series 2021Bonds Principal	Series 2021Bonds Interest	Total Debt Service on all Senior Lien Bonds [(1)]
2022	$10,282,875	$6,015,000	$14,466,306	$30,764,181
2023	10,281,625	5,370,000	15,107,150	30,758,775
2024	10,283,125	5,640,000	14,838,650	30,761,775
2025	10,281,875	5,920,000	14,556,650	30,758,525
2026	10,282,625	6,220,000	14,260,650	30,763,275
2027	10,279,875	6,530,000	13,949,650	30,759,525
2028	10,283,375	6,855,000	13,623,150	30,761,525
2029	10,282,375	7,200,000	13,280,400	30,762,775
2030	10,281,625	7,560,000	12,920,400	30,762,025
2031	10,280,625	7,935,000	12,542,400	30,758,025
2032	10,278,875	8,335,000	12,145,650	30,759,525
2033	10,280,875	8,750,000	11,728,900	30,759,775
2034	10,280,875	9,190,000	11,291,400	30,762,275
2035	10,283,375	9,645,000	10,831,900	30,760,275
2036	10,282,625	10,130,000	10,349,650	30,762,275
2037	10,283,125	10,635,000	9,843,150	30,761,275
2038	10,279,125	11,165,000	9,311,400	30,755,525
2039	10,278,925	11,725,000	8,753,150	30,757,075
2040	10,282,175	12,310,000	8,166,900	30,759,075
2041	10,278,675	12,930,000	7,551,400	30,760,075
2042	10,282,925	13,315,000	7,163,500	30,761,425
2043	10,278,675	13,850,000	6,630,900	30,759,575
2044	10,280,425	14,400,000	6,076,900	30,757,325
2045	10,281,625	15,120,000	5,356,900	30,758,525
2046	10,279,225	15,880,000	4,600,900	30,760,125
2047	10,282,825	16,670,000	3,806,900	30,759,725
2048	10,281,625	17,505,000	2,973,400	30,760,025
2049	-	18,205,000	2,273,200	20,478,200
2050	-	18,935,000	1,545,000	20,480,000
2051	-	19,690,000	787,600	20,477,600
Total	**$277,595,975**	**$333,630,000**	**$280,734,106**	**$891,960,081**

[(1)] Includes debt service on the outstanding Series 2018 Bonds and the Series 2021 Bonds.
Source: Public Resources Advisory Group.

THE AUTHORITY

General

The Authority is a public body corporate and politic and instrumentality of the State, organized and existing by virtue of the Act. The Authority is empowered to construct, reconstruct, improve, maintain, repair, operate or finance parkway projects, to charge and fix tolls or fees for use of the Turnpike or other parkway projects and to issue revenue bonds for its purposes. Parkway projects include projects to be constructed, reconstructed, improved, maintained, repaired or operated on the Turnpike, as well as projects to be constructed, reconstructed, improved, maintained, repaired or operated off the Turnpike, to the extent allowed under the Act and applicable federal laws.

Abolishment of West Virginia Turnpike Commission

On June 1, 1989, pursuant to the Act, the Authority was formed under the name "West Virginia Parkways, Economic Development and Tourism Authority," as the successor-in-interest to the Turnpike Commission which had been created by the West Virginia Legislature in 1947. The duties, powers and functions of the Turnpike Commission were transferred to the Authority, and the Authority assumed all assets, property, obligations, indebtedness and other liabilities of the Turnpike Commission as of June 1, 1989. Personnel of the Turnpike Commission were also assumed by and transferred to the Authority. Upon its creation on June 1, 1989, the Authority replaced the Turnpike Commission in the mission of operating the Turnpike.

During the regular session of the 2010 State Legislature, Senate Bill 427 was enacted to amend and reenact certain sections of the Act effective as of July 1, 2010, which, among other things, renamed the Authority to its current name of the "West Virginia Parkways Authority."

Governance

The Authority consists of nine members and includes two members from each of the State's three congressional districts, one at-large member, the Secretary of Transportation and the Governor or his designee, as Chairman. Public members of the Authority are appointed by the Governor, with the advice and consent of the Senate, to five-year terms. A public member may not serve more than two consecutive five-year terms.

The officers and members of the Authority's Board, certain information regarding their experience and the dates of expiration of the terms of office of the public members are as follows:

James C. Justice, II, Governor of the State. Governor Justice was born April 27, 1951, to James Conley Justice and Edna Ruth Justice. He attended Raleigh County public schools and graduated from Woodrow Wilson High School in 1969, and attended Greenbrier Military Academy as a post graduate. Governor Justice went to Marshall University in Huntington, West Virginia, and was captain of the golf team for two years before earning his undergraduate degree and a master's degree in Business Administration. Before being elected by the citizens of West Virginia as its governor, Governor Justice was the president and CEO of 102 different companies, including companies involved in coal mining, agriculture, cotton gins, turfgrass operations, golf courses, timber enhancement and land projects. Governor Justice also owns and operates the Greenbrier Resort in White Sulphur Springs, West Virginia, as well as The Resort at Glade Springs and Brier Patch Golf Links, all in Raleigh County, West Virginia. The Governor was the 1998 Recipient of the Beckley-Raleigh County Chamber of Commerce's Community Service Award as a result of his involvement with youth programs in the area, the 1998 Recipient of the "Spirit of Beckley" Award from the Beckley-Raleigh County YMCA, the 2000 recipient of the City of Hope Medical Center's "Spirit of Life" award, the 2009 Charleston Gazette's "West Virginian of the Year." In 2010, he was named a "Distinguished West Virginian" by Governor (now Senator) Joe Manchin and the 2011 Honoree at the National Multiple Sclerosis Society's Blue Ridge Chapter "Dinner of Champions." He was chosen Mountain Athletic Conference "Coach of the Year" and West Virginia High School "Coach of the Year" in 2012 and was named" West Virginian of the Year" in 2014 and again in 2016 by the Clarksburg Exponent Telegram.

A. Bray Cary, Governor's Chairman Designee. Mr. Cary is currently the Senior Advisor to Governor Jim Justice. He previously served as the President, Chief Executive Officer and a director of West Virginia Media Holdings, LLC, a television and print media company, from October 2001 to early 2017. Mr. Cary is nationally known as a sports marketing entrepreneur. He was the founder and former President of Creative Sports Marketing, Inc., a sports consultant for ESPN, Inc., and previously served as Vice President, TV and Technology, for NASCAR. He formerly served for twelve years on the Board of Directors of EQT Corporation. Mr. Cary is a graduate of Hinton High School, in Hinton, West Virginia, and earned a bachelor's degree in journalism and a master's degree in public administration from West Virginia University.

Byrd E. White, III. Mr. White was appointed by Governor Jim Justice as the Secretary of the West Virginia Department of Transportation in March of 2019. Secretary White, a licensed CPA, brings a diverse career in both the private and public sectors to Governor Justice's Cabinet, including several years of leadership with one of the nation's largest highway construction companies. Beginning in 2001, Mr. White served as Executive Vice President of The Vecellio Group, gathering extensive road construction and management experience from interstate projects to smaller roadways, before he was named President of one of The Vecellio Group's subsidiaries; Ranger Construction – South, a role he held until 2004. Prior to accepting his role as Transportation Secretary, Mr. White had been involved in the City of Beckley, as the Recorder-Treasurer and later as an elected Commissioner for the Raleigh County Commission, a position he held until tapped by Governor Justice.

Mike Vinciguerra, Vice Chairman, At-Large Member. Mr. Vinciguerra was Vice President and Manager of Paper Supply Company (now known as Jan-Pak). He has extensive experience in purchasing and management and was employed by Paper Supply Company for 35 years. Mr. Vinciguerra also serves on the Mercer County Building Commission and is very active in several civic organizations. He resides in Bluefield, West Virginia. Mr. Vinciguerra was appointed to the Authority on June 2, 2006, and his current term expires on June 30, 2021.

Tom Mainella, Secretary, Member – 1st Congressional District. Mr. Mainella is the manager of United Security Agency Insurance in Fairmont, West Virginia. He also serves as the Mayor of the City of Fairmont. A native of Fairmont, he is a graduate of West Virginia University and a former West Virginia State Policeman. He previously owned Chevrolet dealerships in Hundred and Shinnston, West Virginia. Mr. Mainella has served two terms on Fairmont City Council, currently serves as the President of the Fairmont Airport Authority, has served as president of the Marion County Rescue Squad, and is a member of the Fairmont Sanitary Sewer Board. He is a member of the Fairmont Elks Lodge, Holy Spirit Church, Phi Kappa Psi fraternity, and the Knights of Columbus. He resides in Fairmont, West Virginia. Mr. Mainella was appointed to the Authority on July 10, 2010, and his current term expired on June 30, 2020.

William (Bill) Seaver, IV, Member – 3rd Congressional District. Mr. Seaver is a life-long resident of Princeton, West Virginia, attended Concord University and graduated from the Cincinnati School of Mortuary Science in 1973. He is involved in many community activities including: serving on the Mercer County Board of Education for 18 years, including serving as its President for four years, past member of the Princeton Community Hospital Board of Directors, member of Princeton Elks Lodge, Princeton Moose Lodge, Beni Kedem Shrine Temple, Princeton Masonic Lodge, #134, Royal Arch Mason, #44, Knights Temple, #19, member and past-president of the Princeton Mercer County Chamber of Commerce, and past member of the Princeton City Council. Mr. Seaver is currently the President of Seaver Funeral Service, Inc., which has been a family owned business since 1844. Mr. Seaver was appointed to the Authority on July 9, 2007, and his current term expired on June 30, 2020.

Douglas M. Epling, Member – 3rd Congressional District. Mr. Epling is the owner of Mountain Edge Mining, Legacy Resources and Hanover Resources which are coal mining operations. He previously served as the Chief Engineer for Beckley Coal Mining Company for 19 years. Mr. Epling was involved for many years with boxing and baseball throughout the State of West Virginia, and is a member of the Southern West Virginia Boxing Hall of Fame. He served as West Virginia State Boxing Commissioner for 9 years. He is a member of the Board of Visitors at WVU Tech, and a member of the WVU Tech Athletic Hall of Fame. Presently, he serves as Chairman of the Beckley Police Commission. He is a member and past Master of Coal City Masonic Lodge #156, Royal Arch Mason and 32 degree Scottish Rite Mason. He is a member of the Crab Orchard-MacArthur Lions Club. Mr. Epling was the recipient of Rotary Paul Harris Fellow award and was a 2018 Inductee in the West Virginia Sports Legend. Mr. Epling was appointed to the Authority on January 29, 2009, and his current term expires on June 30, 2022.

Alisha Maddox, Member – 2nd Congressional District. Ms. Maddox is the Chief Communications Officer/Owner of Charles Ryan Associates. She is a graduate of Marshall University with a Bachelor of Arts degree in Journalism and a Master of Arts degree in Journalism. Ms. Maddox was recognized in 2017 as the "Woman on a Mission" by Union Mission Ministries, a "West Virginia Young Gun" by West Virginia Executive Magazine and the "West Virginia Wonder Woman" by West Virginia Living Magazine. She is also a Leadership West Virginia Graduate, Class of 2014, and is the current Project Leader for "Explore the New Manufacturing" Education Campaign for the West Virginia Manufacturers Association Educational Fund. In addition to serving on the Authority's Board, Ms. Maddox currently serves on the following boards and committees: Leadership WV Board of Directors and Fundraising Committee; Robert C. Byrd Institute of Technology, Early Stage Funding Opportunity Committee; WV Department of Education, State Superintendent's Stakeholders Advisory Committee; American Advertising Federation-WV Chapter, Board of Directors, Secretary; and, Public Relations Society of America-WV Chapter, Board of Directors and Membership Committee Co-Chair. She is the Co-founder of WV Visionary Group, committed to working with educators on inspiring, encouraging and elevating students. Ms. Maddox was appointed to the Authority on July 1, 2017, and her current term expires on June 30, 2021.

The Authority currently has two vacancies on its Board. Any public member serving on the Authority board whose term has expired will continue to serve on the Board until a successor is appointed by the Governor.

The following individuals comprise the senior staff of the Authority:

Jeffrey A. Miller was appointed Executive Director of the West Virginia Parkways Authority by Governor Jim Justice on August 10, 2020. A professional with more than a decade of public and private sector experience in administration, governmental affairs and banking, Mr. Miller holds a Bachelor of Science Degree in Business Administration - Finance from Mountain State University and previously served as the County Administrator for the Raleigh County Commission. Before joining the Raleigh County Commission, Mr. Miller was a market executive in banking for over 10 years. A native of Raleigh County, West Virginia, Mr. Miller was a Past Chairman and current Board Member of the Beckley-Raleigh County Chamber of Commerce, Past Chairman and Board Member of the BRCCC Governmental Affairs Committee, Past Chairman of the United Way of Southern WV, Board Member of the Raleigh County Emergency Services Authority, Past President of the Beckley Rotary Club (Paul Harris Fellow) and Past Board Member of the Carter Family Foundation. Mr. Miller was a recipient of the WV State Journal's Generation Next 40 Under 40 Award (2013) and in 2020 he received the inaugural Beckley-Raleigh County Chamber of Commerce's Outstanding Young Business Leader Award. He resides in Daniels, West Virginia.

Parrish French is Director of Finance and has been with the Authority for 18 years. Prior to joining the Authority in 2003, Mr. French had 10 years of experience with local and regional public accounting firms. Mr. French also has experience in accounting for banking, manufacturing and healthcare industries. He received a

BBA degree from Marshall University and obtained an MBA from Marshall University under the West Virginia Graduate College Program. He received the Certified Public Accountant designation in 1990.

Leslie Ball is Director of Maintenance. His current duties as Director of the Maintenance Department include, but are not limited to, Roadway, Fleet, Highway Production and Facilities Maintenance, as well as coordinating inter-agency and intra-agency operations among divisions in project development. Previously, Mr. Ball spent approximately 10 years as the Roadway Manager and 15+ years as the Safety Officer. He has worked as a custodian, toll collector and roadway maintenance over the course of 34 years with the Authority. Mr. Ball spent 6 years active duty with the U.S. Army as a UH-60 Crew Chief and flight instructor. He served in Operation Desert Storm and Operation Provide Comfort during his enlistment and was awarded the Air Medal and exited the service with an Honorable Discharge. Mr. Ball graduated from Woodrow Wilson High School, Beckley, West Virginia, and attended West Virginia Institute of Technology, Montgomery, West Virginia,, and has taken many job related courses over the years.

Tyrone C. Gore is Director of Operations and Training and has been with the Authority for 42 years. Mr. Gore attended West Virginia State College and has served the Authority since 1979, as Toll Collector, Toll Shift Supervisor and as the Quality Control Officer in the Operations Division prior to being promoted to his current position as Director in 2002.

Wayne Webb is Director of Customer Service and has been with the Authority for 33 years. Mr. Webb joined the Authority in 1988 while attending West Virginia State College. Mr. Webb served as a toll collector and Toll Foremen for 16 years and Toll Plaza Supervisor for 10 years before his appointment as Director of Customer Service in 2016.

Douglas Ratcliff is Director of Toll and has been with the Authority for 35 years. Mr. Ratcliff joined the Authority in January 1986 and served as Toll Collector and Toll Foreman for 20 years before becoming a Plaza Supervisor in 2006. He held the position of Supervisor for 11 years spending time at three separate toll plazas as well as being named Administrative Assistant to the Director of Toll in September 2016. Mr. Ratcliff was appointed as Director of Toll in November 2017. Mr. Ratliff is expected to retire effective July 31, 2021.

Brian Bowling is the Director of Information Technology. Mr. Bowling joined the Parkways Authority April 1999 and served as a Toll Equipment Technician for 5 years before creating the Information Technology Department. Mr. Bowling was promoted to Director of Information Technology in September 2020. Mr. Bowling retired from the US Army after 20 years of service while serving as a communications and electronics technician. Mr. Bowling was an honor graduate from his Primary Technical course and Basic Non-Commissioned Officer Course. While serving as the communication's chief in Germany, Mr. Bowling received the Army Accommodation Medal for being the first communications shop to receive a commendable rating on the Brigade Command Inspection. Mr. Bowling served as a US Army Recruiter for 9 years. He is a graduate of Independence High School and received his degree from University of Maryland while serving in the US Army.

Margaret Vickers is Director of Purchasing and has been with the Authority for 10 years. Prior to joining the Authority, Ms. Vickers had a 25-year career with Verizon Communications. She joined the Authority in 2011 and was promoted to the Director of Purchasing in 2015.

Sherry Lilly is Director of Human Resources and has been with the Authority for 22 years. Ms. Lilly joined the Authority in 1999 where she worked in the Accounting Department. In 2005, she moved into the Human Resources Department and held the positions of Human Resources Administrative Assistant, Payroll Manager and Assistant Director of Human Resources. In 2016, she was promoted to the position of Director of Human Resources. Prior to her employment with the Authority, Ms. Lilly worked at McJunkin Corporation for 10 years in the Accounts Payable Department.

Captain Bruce W. Clendenin is the trooper in charge of Troop 7 of the West Virginia State Police and is responsible for all law enforcement on the Turnpike.

Impact of COVID-19 Public Health Crisis

The spread of the novel strain of coronavirus called SARS-CoV-2, which causes the respiratory disease known as COVID-19, is having a material impact on global, national and state economies. On March 11, 2020, the World Health Organization elevated COVID-19 from a Public Health Emergency of International Concern to a pandemic. Former President Trump declared a national emergency related to COVID-19 on March 13, 2020. On March 16, 2020, Governor Justice declared a state of emergency in all fifty-five counties of the State in response to the COVID-19 pandemic. Governor Justice subsequently implemented several executive orders and took various actions to protect the health of West Virginians and prevent the spread of COVID-19, which included, among others, closure of certain non-essential businesses and in-person school operations, and implementing a "Stay At Home" order on March 24, 2020. On May 24, 2020, the Governor replaced the "Stay At Home" order with a "Safer At Home" order that strongly encouraged all West Virginians to stay at home when not performing essential tasks, but no longer mandated them to stay at home. The "Safer At Home" order also provided new guidelines for individuals, businesses, and public gatherings, among others.

Since the "Safer At Home" order, in consultation with public health and safety experts, the State has begun to gradually re-open sectors of its economy. While significant portions of the State's economy are now reopened, the speed and scope of the reopening process, including current limitations on public gatherings, is dependent upon progress toward limiting the continued spread of the disease and the availability and effectiveness of the COVID-19 vaccines now being administered throughout the State and nationally.

In April, 2021, Governor Justice issued an executive order lifting some of the restrictions implemented during the height of the COVID-19 pandemic which, among other things, removed the limitation on the number of people permitted to gather for social purposes.

In consultation with public health and safety experts, on December 11, 2020, Governor Justice announced a phased vaccination plan that focused first on those individuals at the highest risk of serious complications from COVID-19, including residents of the State's long term care facilities and essential frontline workers. The State utilized the West Virginia National Guard, various State agencies, hospitals, health care clinics, local health departments and pharmacies, among others, to develop and implement its vaccination plan. The State received its first allotment of the COVID-19 vaccine on December 14, 2020 and immediately took steps to distribute and administer the vaccines. As of May 27, 2021, the State has administered 1,4135,751 doses of vaccine out of a total of 1,694,980 doses of vaccine received (a vaccine administration rate of 83.5%), and has fully vaccinated 668,185 people or approximately 37.3% of its population. (Source: West Virginia Department of Health & Human Services, West Virginia COVID-19 Dashboard, Vaccine Summary, Updated May 28, 2021 at 10:00 AM).

Due to the success of the State in vaccinating its elderly population, with 73.7% of State residents over the age of 65 fully vaccinated as of May 27, 2021, and the wide availability of vaccines, recently Governor Justice lifted his previous order requiring face coverings in public for those individuals over the age of 9 that have been vaccinated with the recommended dosage (one or two, depending on the vaccine manufacturer) and have waited the two-week period post-vaccination. Businesses and the public school system and institutions of higher learning in the State retain the authority to set their own rules regarding face coverings. This recent change as to face coverings is in addition to an earlier executive order of the Governor issued in April 2021 relaxing certain face covering requirements for individuals actively engaged in physical activity such as indoor sports.

The Authority implemented a number of measures in response to the COVID-19 pandemic. To limit the spread of the virus, some of the Authority's administrative personnel worked remotely until recently, while those in the Maintenance Department worked staggered shifts until March 15, 2021, when they returned to a normal work schedule. In accordance with the most recent executive order issued by Governor Justice, unvaccinated personnel are still required to wear masks and all personnel continues to practice social distancing while working. Toll collectors have been provided additional personal protective equipment including gloves and optional face shields, and have been subjected to temperature checks at the start of each shift. The Authority's customer service center has implemented an appointment only policy to limit the number of members of the public in the Authority's office at any one time. Due to the precautions taken by the Authority to limit the spread of the virus, the Authority's operations were not materially affected by employee absences or any other effects of the COVID-19 pandemic.

The Authority has sought reimbursement in the amount of $164,244 and $523,989 for fiscal years 2019 and 2020, respectively, from funds that the State received under the Coronavirus Aid Relief and Economic Security Act (the "CARES Act"), which was enacted by Congress on March 27, 2020, for COVID-19 related operating expenses incurred by the Authority to provide its employees with personal protective equipment and for sanitizing products and installation of touchless soap and paper towel dispensers in public areas and at the travel plazas.

Because of the public health crisis created by the COVID-19 pandemic, and as a result of stay-at-home orders and other measures put in place by Governor Justice and the leaders of surrounding states, traffic counts declined on the Turnpike in fiscal year 2020. In fiscal year 2020, the number of passenger vehicle transactions declined by 4.039 million transactions, or 14%, while commercial transactions declined slightly by 367,000 transactions, or 4.2%, with total transactions down by 11.8% from fiscal year 2019.

Despite the decline in total transactions in fiscal year 2020, the Authority experienced an 18% increase in toll revenues in fiscal year 2020 compared to fiscal year 2019 due to the doubling of toll rates for all classes of vehicles that went into effect on January 15, 2019. Further, with the end of national stay-at-home orders and the easing of other public health safety measures, transactions on the Turnpike have improved in recent months, increasing from a low of approximately 1.481 million in April 2020 to 3.221 million in May 2021.

The COVID-19 pandemic has not had a material adverse effect on the Authority's toll revenues or its ability to pay debt service on the Series 2018 Senior Lien Bonds, and is not expected to have a material adverse effect on the Authority's ability to pay debt service on the Series 2021 Senior Lien Bonds. See "SUMMARY OF PROJECTED OPERATIONS – Pro-Forma Debt Service Coverage" herein.

Liquidity

As of March 31, 2021, the Authority had cash on hand of $15.6 million and $195.1 million on deposit in accounts held at financial institutions or with the West Virginia State Treasurer's Office, which includes, without limitation, monies held in various reserve accounts including the Turnpike Capital Improvement Fund, the Composite Senior Lien Bonds Debt Service Reserve Account, the Renewal and Replacement Reserve Fund and the Operation and Maintenance Reserve Account.

Annual Budget

Under the Indenture, the Authority has covenanted to adopt an Annual Budget before the start of each fiscal year. The Annual Budget must set forth, at a minimum, (a) the estimated Toll Road Revenues, (b) Operation and Maintenance Expenses, (c) the Annual Debt Service (identifying principal and interest components thereof), and (d) the Renewal and Replacement Reserve Fund Requirement, respectively, for such fiscal year, *provided, however*, that, without limitation of the requirements of the Indenture, the Authority's

Annual Budget and any amended Annual Budget shall include and provide for amounts that, in the judgment of its Consulting Engineers, are necessary to be included in and spent on (a) Operation and Maintenance Expenses and (b) Renewal and Replacement Costs, respectively, for such fiscal year, which shall be memorialized in a certificate to be provided by the Consulting Engineers to the Authority as part of the Annual Budget-making process and which shall be made part of the Annual Budget.

The Authority covenants in the Indenture that it will include in its Annual Budget sufficient amounts to fulfill the Authority's obligations under the Indenture, including its obligations to pay debt service on the Series 2021 Bonds, to fund the Funds and Accounts in the amounts required by the Indenture and its other agreements, and to operate and maintain the Turnpike in good repair. See "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE."

Financial Policies and Guidelines

<u>Debt and Capital Planning Management Policy</u>.

On July 5, 2018, the Authority adopted a debt and capital planning management policy, as amended on June 17, 2021 ("***Debt and Capital Planning Management Policy***") to provide guidance governing the issuance, management and reporting of all debt obligations. The Debt and Capital Planning Management Policy establishes parameters and provides guidance governing the issuance and management of the Authority's debt to assure sound financial decisions. The Debt and Capital Planning Management Policy provides that the Authority will borrow only to fund capital requirements, not operation and maintenance costs, and that the final maturity of the bonds issued to finance capital improvements may not exceed the useful lives of such capital improvements. The Debt and Capital Planning Management Policy addresses such topics as the process for debt issuance, including pre-issuance evaluation through the engagement of consultants and financial advisors, the structure of debt, the issuance of variable rate debt, the use of credit enhancements such as insurance or liquidity facilities, refunding criteria and financial covenants limiting future debt issuances, as described below. The Debt and Capital Planning Management Policy also calls for the Authority to engage the services of a third-party dissemination agent to ensure the prompt filing of all financial information and material notice events after the issuance of any debt. See "CONTINUING DISCLOSURE" herein.

The Debt and Capital Planning Management Policy calls for the Authority to target annual debt service coverage ratios of at least 2.0x on its Senior Lien Bonds and 1.1x on all Authority debt (excluding annual Renewal and Replacement Reserve Fund deposits). Additionally, under the Debt and Capital Planning Management Policy, the Authority has also agreed to target a minimum of 365 days cash on hand to manage unforeseen operation and maintenance expenses and unplanned capital needs.

A copy of the Authority's Debt and Capital Planning Management Policy is available on the Authority's website at https://transportation.wv.gov/Turnpike/about/investorrelations.

The Debt and Capital Planning Management Policy authorizes the Authority to deviate from such policy due to changing financial goals, alternative financial products, debt structures, market opportunities or other circumstances that will benefit the Authority.

<u>Swap Policy</u>.

The Authority adopted an Interest Rate Exchange Policy on July 10, 2008, which was amended on May 10, 2018 ("***Swap Policy***"), which establishes guidelines for the use and management of interest rate swap agreements, exchange agreements and other derivative agreements and instruments, entered into in connection with the issuance of debt. A copy of the Authority's Swap Policy is available on its website at https://transportation.wv.gov/Turnpike/about/investorrelations. The Authority does not have any swaps outstanding and does not currently anticipate entering into any new swaps.

Other Policies.

On August 9, 2018, the Authority adopted policies related to its post-issuance tax compliance procedures and its continuing disclosure procedures, as amended on June 17, 2021, to ensure compliance with all applicable laws, rules, regulations and covenants associated with its proposed and any future issuance of debt.

Tripartite Agreement

In 1971, the Turnpike Commission, as predecessor to the Authority, together with the Federal Highway Administration (FHWA) and the West Virginia Department of Highways (the predecessor to the WVDOT), adopted an agreement necessary for the WVDOT to participate in the reconstruction of the Turnpike. The 1971 Agreement was superseded and replaced on December 13, 1988. The 1988 Agreement was amended and modified on June 1, 2018, pursuant to that certain Amended and Restated Agreement between the Division of Highways, the Authority and FHWA (the "***Amended and Restated Tripartite Agreement***"). The Amended and Restated Tripartite Agreement specifies (a) that the Authority and the Division of Highways agree that the tolls collected from the operation of the Turnpike shall be used on the Turnpike for amounts necessary for operation and maintenance, for the payment of debt service, for a reasonable return on investment for any private person or entity authorized by the State to operate and maintain any facility on the Turnpike, and costs necessary for improvement, including reconstruction, resurfacing, restoration and rehabilitation; (b) that excess toll revenues after satisfying all of the foregoing, may be used for any other purpose for which federal funds may be obligated under Title 23 of the United States Code ("***Title 23***"), provided that the Authority and the Division of Highways certify annually that the Turnpike is being adequately maintained and is in compliance with audit requirements under Section 129(a)(3)(B) of Title 23; (c) that the Authority and the Division of Highways agree to comply with the annual audit requirements under Section 129(a)(3)(B) of Title 23 which includes a requirement that an independent auditor conduct an annual audit of the Turnpike records to verify adequate maintenance and compliance with Section 129(a)(1)(3)(A) of Title 23, and to make all Turnpike records available for audit by the FHWA or its Secretary; and (d) that any bonds issued or any costs incurred will not cause tolls to be increased to an unreasonable amount. The Authority has covenanted in the Indenture to comply with the terms and conditions of the Amended and Restated Tripartite Agreement. See "APPENDIX I – AMENDED AND RESTATED TRIPARTITE AGREEMENT" herein.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

General

The WVDOT was created as a department within the Executive Branch of the State by an Act of the State Legislature, effective July 1, 1989. The WVDOT is headed by the Secretary of Transportation, who is appointed by the Governor with the approval of the Senate.

The WVDOT provides essential services in transportation, tourism and economic development in the State, including:

- Safety and protection for citizens through modern operating standards for the State's highways, rail and airport facilities and licensing and permitting of drivers and motor vehicles.

- Transportation services including public transit, railway operation and maintenance, airport and river port development and highway construction and maintenance.

- Community and economic development through accessible roads, rivers, railways and airports and support for the artisan community through Tamarack (as defined under the caption "THE WEST VIRGINIA TURNPIKE – General" below) and other development initiatives.

- Revenue generation through the highway trust fund; air, railway and waterway fuel funds and tolls and concession fees.

- Information and education through driver education, travel information, safety guidance, public involvement in transportation planning and continuing education.

Included within the WVDOT are the Authority, the Division of Highways, the State Rail Authority, the Public Port Authority, the Aeronautics Commission, the Division of Motor Vehicles, the Public Transit Division and the Office of Administrative Hearings.

Division of Highways

The State Legislature created the Department of Highways in 1970 as the successor to the State Road Commission, which was first established in 1933. Effective July 1, 1989, the Department of Highways became the Division of Highways when the WVDOT was established by the State Legislature. The Division of Highways is responsible for planning, engineering, right-of-way acquisition, construction, reconstruction, traffic regulation and maintenance of approximately 39,000 miles of public highways. Of those miles, approximately 35,000 miles are State owned highways, 835 miles are federally owned roads, 555 miles are part of the interstate system and 1,988 miles are non-interstate National Highway System routes (23 miles of which are connectors to other modes of transportation such as airports, trains and buses). The Division of Highways is also responsible for maintaining 6,958 bridges, which are part of the State road system. Additional duties include highway research, outdoor advertising contiguous to State roads, roadside development, safety and weight enforcement and dissemination of highway information.

With roughly 39,000 miles of public highway mileage, the State is one of only four states (Delaware, North Carolina and Virginia are the others) in which there is no county ownership of highways. As a result, the Division of Highways has statutory authority for the construction, improvement and maintenance of nearly all public highway miles (approximately 36,000 or 92%) in the State, the highest percentage in the nation. Despite the State's relatively small size, the Division of Highways is responsible for the sixth largest state-maintained highway network in the nation.

The Division of Highways is a decentralized organization, with most of its functions performed in ten geographical districts. The districts are each headed by a District Engineer, who each report to the Secretary of Transportation, who also serves as the Commissioner of Highways.

Short-term goals and policies for the Division of Highways reside in the 2020-2025 STIP. The STIP is organized so that all projects that are programmed fall within one of seven core programs. The STIP includes a wide variety of projects including roadway, bridge, bicycle, pedestrian, safety and public transportation (transit) projects. Long-term goals and policies for the Division of Highways currently reside in the Multimodal Statewide Transportation Plan for 2010-2034, which discusses in broad terms the long-range goals and objectives. This plan is used to help prioritize larger projects which must compete for scarce resources. It also allows the Division of Highways to monitor and adjust projects to meet the needs of citizens of the State. The Division of Highways is currently conducting an update to its multimodal statewide long-range transportation plan, to be known as the 2050 Multimodal Long-Rang Transportation Plan, which will provide a 30-year blueprint to fund and improve the preservation, management and expansion of the State's multimodal transportation system. To build this blueprint, the Division of Highways has been working with transportation stakeholders, coordinating with Federal partners and seeking input from State residents across five study phases that began in 2020 and will continue through the third quarter of 2021, with an expected goal of completing a new draft plan by June 30, 2021, and implementing the final plan following a 45-day public comment period.

Past and Anticipated Financings for State Transportation Projects under the Roads to Prosperity Program

State transportation projects completed under the Roads to Prosperity Program have been or are being funded by several financing sources. First, on October 26, 2017, the State, through its Commissioner of Highways, issued its $219,985,000 Surface Transportation Improvements Special Obligation Notes, Series 2017 A, to finance surface transportation projects around the State. Then, on June 7, 2018, the State, through its Commissioner of Highways, issued its $78,810,000 Surface Transportation Improvement Improvements Special Obligation Notes, Series 2018A, also to finance surface transportation projects around the State. These surface transportation special obligation notes are payable from a pledge of federal surface transportation funds received by the Division of Highways from the Federal Highways Administration that represent reimbursement of the costs incurred in connection with the projects financed by the notes. The State's surface transportation improvement special obligation notes, which may be issued by the State from time to time, are not general obligation bonds and are not backed by the full faith and credit of the State.

Additionally, as part of the State's Roads to Prosperity Program, the following general obligation bonds have been issued by the State to finance certain state road construction projects: (i) $167,600,000 General Obligation State Road Bonds, Series 2018 A (Negotiated) and $632,400,000 General Obligation State Road Bonds, Series 2018 B (Competitive), issued on June 7, 2018, of which approximately $119 million of the proceeds from such bonds were used by the Division of Highways to finance the lane widening project at the I-77/I-64 interchange on the Turnpike at Beckley, West Virginia; (ii) $600,000,000 General Obligation State Road Bonds, Series 2019 A Bonds, issued on December 17, 2019; and (iii) $200,000,000 General Obligation State Road Bonds, Series 2021 A Bonds, issued on June 3, 2021. See "ROADS TO PROSPERITY PROGRAM – Past Transportation Projects Financed Under the Roads to Prosperity Program" herein for a list of the prior transportation infrastructure projects funded by proceeds of bonds issued under the Roads to Prosperity Program and the status of those projects.

THE SERIES 2021 BONDS

The following is a summary of certain provisions of the Series 2021 Bonds. Reference is hereby made to the Indenture in its entirety for the detailed provisions pertaining to the Series 2021 Bonds.

General

The Series 2021 Bonds shall be issued in fully registered form in authorized denominations of $5,000 or any integral multiple thereof. The principal of, purchase price of, if applicable, premium, if any, and interest on the Series 2021 Bonds is payable in currency of the United States of America which at the time of payment is legal tender for the payment of public and private debts. The Series 2021 Bonds will be dated, will mature on the dates and in the principal amounts, and bear interest at the rates, all as set forth on the inside cover page of this Official Statement.

Interest on the Series 2021 Bonds is payable on June 1 and December 1 of each year, commencing December 1, 2021. Interest with respect to the Series 2021 Bonds will be computed on the basis of a year of 360 days and twelve 30-day months. The record date is fifteen days preceding each interest payment date for the Series 2021 Bonds. In the event of a default by the Authority in making timely payment of interest, such defaulted interest will be payable to the person in whose name a Bond is registered at the close of business on a special record date for payment of such defaulted interest established by notice mailed by the Registrar to the registered owner not less than 10 days preceding such special record date.

Redemption

Optional Redemption

The Series 2021 Bonds maturing on or after June 1, 2032, are subject to redemption at the option of the Authority on or after June 1, 2031, in whole or in part on any date, in increments of $5,000, at a price of 100% of the principal amount thereof to be redeemed plus accrued interest to the date of redemption.

Mandatory Sinking Fund Redemption

The Series 2021 Bonds shall be subject to mandatory sinking fund redemption and shall be redeemed at a Redemption Price equal to 100% of the principal amount to be redeemed plus accrued interest to the redemption date on June 1 in the years and amounts as follows:

Year (June 1)	Principal Amount
2044	$14,400,000
2045	15,120,000
2046	15,880,000
2047*	16,670,000

* Final Maturity

Year (June 1)	Principal Amount
2048	$17,505,000
2049	18,205,000
2050	18,935,000
2051*	19,690,000

* Final Maturity

At its option, to be exercised on or before the fortieth (40th) day next preceding each mandatory sinking fund redemption date, the Authority may (i) cause to be paid to the Trustee for deposit in the Series 2021 Bonds Redemption Account such amount, or direct the Trustee to use moneys in the Series 2021 Bonds Redemption Account in such amount, as the Authority may determine, accompanied by a certificate signed by the Authority Authorized Officer directing the Trustee to apply such amount to the purchase of the applicable Series 2021 Bonds and the Trustee shall use all reasonable efforts to expend such funds as nearly as may be practicable in the purchase of such Series 2021 Bonds, at a price not exceeding the principal amount thereof plus accrued interest to such sinking fund redemption date; or (ii) receive a credit against its sinking fund redemption obligation for the applicable Series 2021 Bonds maturing on Bond Payment Dates in the same years which prior to such date have been purchased by the Authority and presented to the Trustee for cancellation or redeemed (otherwise than through the operation of the sinking fund) and cancelled by the Trustee and, in either case, not theretofore applied as a credit against any sinking fund redemption obligation. Each Series 2021 Bond so purchased, delivered or previously redeemed shall be credited by the Trustee at 100% of the principal amount thereof against the obligation of the Authority on such sinking fund redemption date to redeem Series 2021 Bonds of the same maturity. Any excess over such obligation shall be credited against applicable future sinking fund redemption obligations, or deposits with respect thereto, in such order of maturity as shall be determined by the Authority, and the principal amount of such Series 2021 Bonds of the same maturity to be redeemed by operation of the sinking fund shall be accordingly reduced. Any funds received by the Trustee from the Authority to be deposited in the Series 2021 Bonds

Redemption Fund that is not expended by the Trustee for the purchase of Series 2021 Bonds on or before said fortieth (40^{th}) day shall be retained by the Trustee in the Series 2021 Bonds Redemption Account and be used only for the purchase of Series 2021 Bonds as a credit against future sinking fund obligations, or deposits with respect thereto, to be applied to such Series 2021 Bonds maturing on Bond Payment Dates in the same years and in such order of maturity as determined by the Authority.

Selection of the Series 2021 Bonds to be Redeemed

In connection with any optional redemption of the Series 2021 Bonds, the Authority shall select the maturities of serial bonds, and portions of the amortization of term bonds, that shall be redeemed and shall designate such selections in an officer's certificate delivered to the Trustee. In the case of any partial redemption of a serial maturity of the Series 2021 Bonds, the particular Series 2021 Bonds of such maturity to be redeemed shall be selected by DTC in accordance with its procedures or, if the book-entry system has been discontinued, by the Trustee by lot in such manner as the Trustee shall determine. Each increment of $5,000 of principal amount of Series 2021 Bonds shall be counted as one Series 2021 Bond, for purposes of selecting Series 2021 Bonds for a partial redemption. If a Series 2021 Bond shall be called for partial redemption, upon its surrender a new Series 2021 Bond, representing the unredeemed balance of the principal amount of the Series 2021 Bond, shall be issued to its Holder.

Notice of Redemption

When the Trustee receives notice from the Authority of its election to redeem Series 2021 Bonds, the Trustee will give notice of the redemption not less than 20 nor more than 60 days prior to the date set for redemption by first-class mail (i) to the Holder of each such Series 2021 Bond to be redeemed in whole or in part at his address as it appears on the Register, or while the Series 2021 Bonds are held in book-entry form, to the Securities Depository, (ii) to all organizations registered with the Securities and Exchange Commission as securities depositories, and (iii) to the Municipal Securities Rulemaking Board. During such period, the Trustee shall not be responsible for mailing notices of redemption to anyone other than such Securities Depository or its nominee. The failure to give notice as described herein, or any defect in any notice, shall not affect the validity of any proceedings for the redemption of any Series 2021 Bonds for which notice has been given correctly. If at the time of mailing of notice of any optional redemption of the Series 2021 Bonds, there shall not have been deposited with the Trustee moneys sufficient to redeem all of the Series 2021 Bonds called for redemption, the notice may state that it is conditional in that it is subject to the deposit of sufficient moneys by not later than the redemption date, and if the deposit is not timely made the notice shall be of no effect.

Partial Redemption

Upon the selection and call for redemption of, and the surrender of, any Series 2021 Bond for redemption in part only, the Authority shall cause to be executed and the Authenticating Agent shall authenticate and deliver to or upon the written order of the Holder thereof, at the expense of the Authority, one or more new Series 2021 Bonds of authorized denominations and like tenor of the same maturity and interest rate, in an aggregate face amount equal to the unredeemed portion of the Series 2021 Bonds surrendered.

Purchase or Cancellation in Lieu of Redemption

On or before the forty-fifth (45^{th}) day next preceding any applicable sinking fund redemption date, the Authority has the option to: (i) cause to be paid to the Trustee for deposit in the Series 2021 Bonds Redemption Account such amount, or direct the Trustee to use moneys in the Series 2021 Bonds Redemption Account in such amount, as the Authority may determine, accompanied by a certificate signed by an Authority Authorized Officer directing the Trustee to apply such amount to the purchase of the applicable Series of Bonds, and the Trustee shall use all reasonable efforts to expend such funds as nearly as may be practicable in the purchase of such Series 2021 Bonds, at a price not exceeding the principal amount thereof plus accrued interest to such sinking fund redemption date; or (ii) receive a credit against the sinking fund redemption obligation for the Series 2021 Bonds to the extent such Series 2021 Bonds have been purchased by the Authority and presented to the Trustee for cancellation or redeemed (other than pursuant to the above-mentioned sinking fund requirements) and cancelled by the Trustee.

Each Series 2021 Bond so purchased, delivered or previously redeemed shall be credited by the Trustee at 100% of the principal amount thereof against the obligation of the Authority on the applicable sinking fund redemption date. Any excess over such obligation shall be credited as directed by the Authority against applicable future sinking fund redemption obligations, or deposits with respect thereto, and the principal amount of such Series of Bonds to be redeemed by operation of the sinking fund shall be accordingly reduced. Any funds received by the Trustee for redemption of the Series 2021 Bonds, but not expended by the Trustee for the purchase of Series 2021 Bonds on or before said forty-fifth (45^{th}) day shall be retained in the Series 2021 Bonds Redemption Account and shall thereafter be used only for the purchase of Series 2021 Bonds, as a credit as directed by the Authority, against future sinking fund obligations, or deposits with respect thereto as directed by the Authority.

Book-Entry Only System

The Series 2021 Bonds will be issued as fully-registered bonds in the name of Cede & Co., as nominee of DTC. DTC will act as securities depository for the Series 2021 Bonds. One fully-registered Series 2021 Bond will be issued for each maturity, and will be deposited with the DTC.

Purchases of the Series 2021 Bonds will be made only in book-entry form through DTC Participants in the principal amount of $5,000 and integral multiples thereof and no physical delivery of the Series 2021 Bonds will be made to purchasers. Unless otherwise provided herein, payments of the principal, interest and premium, if any, will be made to purchasers by DTC through its Participants.

Except as otherwise provided herein or in APPENDIX G – "BOOK-ENTRY ONLY SYSTEM," each actual purchaser of each Series 2021 Bond ("***Beneficial Owner***") will not be or be considered to be and will not have any rights as, owners or holders of the Series 2021 Bonds under the Indenture. For additional information about DTC and the book-entry-only system, see APPENDIX G – "BOOK-ENTRY ONLY SYSTEM."

SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS

The following is a summary of certain provisions of the Indenture relating to the security and sources of payment for the Senior Lien Bonds, including the Series 2021 Bonds. Reference is made to the Indenture in its entirety for the detailed provisions pertaining to the Senior Lien Bonds.

Pledge of Trust Estate

General

The Senior Lien Bonds, including the Series 2021 Bonds, are obligations of the Authority payable solely from, and secured solely by a first lien on and pledge of the Trust Estate, consisting of (i) the Net Toll Road Revenues (as defined herein), (ii) amounts on deposit in certain Funds and Accounts created pursuant to and pledged by the Indenture, and (iii) any and all other property of any kind from time to time by delivery or by writing of any kind specifically conveyed, pledged, assigned or transferred, as and for additional security under the Indenture for the Senior Lien Bonds, by the Authority or by anyone on its behalf or its written consent in favor of the Trustee.

The Series 2021 Bonds are payable on a parity with the Series 2018 Bonds, which are the only other series of Senior Lien Bonds that have been issued under the Indenture, and all additional Senior Lien Bonds that may be issued in the future under the Indenture.

Revenues

The principal component of the Trust Estate consists of the Net Toll Road Revenues (the "***Net Toll Road Revenues***"), which are defined in the Indenture as the Toll Road Revenues less Operation and Maintenance Expenses.

"***Toll Road Revenues***" means the sum of (a) Tolls, (b) any interest income on, and any profit realized from, the investment of moneys in any Fund or Account, excluding, however, any interest income on, and any profit realized from, the investment of moneys in the Arbitrage Rebate Fund, (c) all proceeds of insurance payable to or received by the Authority with respect to the Turnpike (whether by way of claims, return of premiums, ex gratia settlements or otherwise), including proceeds from business interruption insurance and loss of advance profits insurance, except for proceeds of fire and other casualty insurance, (d) the proceeds of any condemnation awards with respect to the Turnpike and (e) all other amounts derived from or with respect to the operation of the Turnpike, plus (f) any additional revenues added to the Turnpike as provided in Section 216 of the Indenture, *but excluding, however*, any concession revenues, and other revenues derived from the operation or use of service plazas and tourist and information centers, including without limitation Tamarack (as defined in "THE WEST VIRGINIA TURNPIKE - General" herein), the proceeds of any sale of land, buildings or equipment; and any other amounts which are not deemed to be revenues in accordance with generally accepted accounting principles or which are restricted as to their use. Unless otherwise provided in a Supplemental Indenture, there also shall be excluded from the term "Toll Road Revenues" any Hedge Termination Payments received by the Authority. To the extent that the Authority shall adopt a resolution and enter into a Supplemental Indenture that identifies a new source of revenues and pledges such new source of revenues for the repayment of, and as security for, Senior Lien Bonds issued under and secured by the Indenture, including the Series 2021 Bonds, then such revenues shall also be included in "Toll Road Revenues".

For purposes of the Trust Estate, "***Tolls***" within the definition of Toll Road Revenues mean all tolls, fares, incomes, receipts, and charges and all returns or moneys of an income nature derived by or for the benefit of the Authority from motor vehicle travelers of any part of the Turnpike, including without limitation any moneys received in consideration of issuing *EZ-Pass*® transponders to travelers who establish an *EZ-Pass*® account with the Authority, but *excluding, however*, any concession revenues, and other revenues derived from the operation or use of service plazas and tourist and information centers, including without limitation Tamarack.

Operation and Maintenance Expenses

Operation and Maintenance Expenses are deducted from Toll Road Revenues to determine Net Toll Road Revenues. Under the Indenture, "***Operation and Maintenance Expenses***" means expenses for operation, maintenance, repairs, ordinary acquisition of equipment, and any other current expenses or obligations required to be paid by the Authority under or pursuant to the provisions of the Indenture, or by law, all to the extent properly and directly attributable to the operation of the Turnpike, but not any costs or expenses for new construction or any allowance for depreciation. Operation and Maintenance Expenses may include, without limitation (but subject to the preceding sentence, including but not limited to the condition that such expenses are properly and directly attributable to the operation of the Turnpike): (a) salaries, supplies, equipment, utilities, labor, travel and rent; (b) fees and expenses for data processing, policing, insurance, legal, accounting, engineering, consulting and banking services; and (c) payments to pension, retirement, health and hospitalization funds for Authority employees. Without limitation of the foregoing, Operation and Maintenance Expenses shall include costs of toll collection and enforcement, including without limitation the costs of purchasing transponders for use in the toll collection system for the Turnpike and the costs of issuing transponders to customers of the Turnpike.

Toll Rate Covenant

The Authority has covenanted in the Indenture that it will establish, charge, and collect Tolls for the privilege of traveling on the Turnpike at rates sufficient to meet its Operation and Maintenance Expenses and produce Net Toll Road Revenues in each fiscal year and in each fiscal year thereafter that are at least equal to (i) 125% of the Annual Debt Service with respect to the Series 2021 Bonds and all other Outstanding Senior Lien Bonds issued under the Indenture including, without limitation, the Series 2018 Bonds, for such fiscal year and (ii) 100% of the sum of (A) Annual Debt Service with respect to all Outstanding Bonds, (B) the amounts, if any, necessary to restore the amount on deposit in any Debt Service Reserve Fund to the applicable Series, aggregate or composite Debt Service Reserve Requirement in accordance with the Indenture, and (C) the Renewal and Replacement Reserve Fund Requirement. The Authority has also covenanted in the Indenture that it shall not reduce tolls unless and until the Toll Road Consultant certifies that the Toll Rate Covenant will be achieved, after the application of such reduction, in the current fiscal year and all future fiscal years in which Bonds are then Outstanding. See "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE."

Good Repair Covenant

The Authority has covenanted in the Indenture that it will at all times operate the Turnpike, or cause the Turnpike to be operated, in an efficient manner and at reasonable cost; will maintain, preserve and keep, or cause to be maintained, preserved and kept, the properties of the Turnpike and all additions and betterments thereto and thereof, and every part and parcel thereof, in good repair, working order and condition, and to that end will from time to time make, or cause to be made, all necessary and proper repairs, renewals, replacements, additions, extensions and betterments thereto. See "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE."

Composite Senior Lien Bonds Debt Service Reserve Account

The Series 2021 Bonds will be secured by the Composite Senior Lien Bonds Debt Service Reserve Account, a subaccount within the Senior Lien Debt Service Reserve Fund established pursuant to the Indenture and held by the Trustee. The Composite Senior Lien Bonds Debt Service Reserve Account was initially funded with a deposit of Series 2018 Bond proceeds into the Series 2018 Debt Service Reserve Account, a subaccount of the Composite Senior Lien Bonds Debt Service Reserve Account, in an amount equal to the Debt Service Reserve Requirement for the Series 2018 Bonds, which at issuance, equaled $10,283,375. On the date of issuance of the Series 2021 Bonds, the Authority will use cash on hand to fund a deposit of $20,114,912.37 to the Composite Senior Lien Bonds Debt Service Reserve Account to bring the balance in such account to an amount equal to the Composite Senior Lien Debt Service Reserve Requirement of $30,764,181.11. See "SOURCES AND USES OF FUNDS" herein. Amounts on deposit in the Composite Senior Lien Bonds Debt Service Reserve Account are pledged to secure the repayment of the Series 2021 Bonds, the Series 2018 Bonds and any Additional Bonds issued in the future by the Authority and designated by the Authority from time to time as being secured by the Composite Senior Lien Bonds Debt Service Reserve Account. Deposits into and application of amounts in the Composite Senior Lien Bonds Debt Service Reserve Account shall be done in accordance with the Indenture. See "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE."

The Indenture requires the Authority to fund the Composite Senior Lien Bonds Debt Service Reserve Account with cash and investments or with a DSRF Credit Facility (as defined herein) meeting the Indenture requirements. A DSRF Credit Facility means a letter of credit, surety bond or similar credit enhancement facility acquired by the Authority from, or reimbursement agreement entered into by the Authority with, a financial institution (including, without limitation, any bank, trust company, insurance company, or broker-dealer) with a long-term credit rating at the time of issuance of such facility in the third highest rating category or higher by any Rating Agency, to substitute for cash or investments required to be held in a Debt Service Reserve Fund for any Series of Bonds pursuant to the Supplemental Indenture relating to and governing the issuance of such Series of Bonds. The Authority has not drawn upon the Composite Senior Lien Bonds Debt Service Reserve Account, or any subaccount thereunder, to make up a shortfall in debt service on the Series 2018 Bonds.

The Indenture requires that the balance of the Composite Senior Lien Bonds Debt Service Reserve Account must be maintained at the Composite Senior Lien Bonds Debt Service Reserve Requirement, which is an amount equal to the Debt Service Reserve Requirement for all Composite Senior Lien Bonds, currently consisting of the Series 2018 Bonds and, upon issuance, the Series 2021 Bonds, which is equal to the lesser of (i) 10% of the aggregate stated principal amount of all outstanding Composite Senior Lien Bonds (plus or minus original issue premium or discount, if more than 2% of the stated principal amount of the Composite Senior Lien Bonds), (ii) the aggregate maximum annual debt service on the Composite Senior Lien Bonds or (iii) 125% of the average annual debt service on the Composite Senior Lien Bonds. See "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE" herein.

Operation and Maintenance Reserve Account Requirement

The Authority has covenanted in the Indenture to maintain in its Operation and Maintenance Reserve Account an amount equal to one-sixth of the amount recommended by its Consulting Engineers as the Operation and Maintenance Expenses, as defined herein, for its current fiscal year as included in the Authority's Annual Budget. See "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE" herein.

Renewal and Replacement Reserve Fund Requirement

The Authority has covenanted to fund its Renewal and Replacement Reserve Fund over the course of each fiscal year in an amount equal to the amount recommended by its Consulting Engineers as the Renewal and Replacement Costs for its current fiscal year as included in the Authority's Annual Budget. Renewal and Replacement Costs include all costs and expenses that, in the judgment of the Authority's Consulting Engineers, are necessary and appropriate to be expended by the Authority in the upcoming fiscal year that are not incurred on any annual or seasonal basis and are necessary in keeping the Turnpike open to public travel or use, excluding, however, Operation and Maintenance Expenses, as defined herein. The Authority has also covenanted in the Indenture to include estimates of its Renewal and Replacement Reserve Fund Requirement in its five-year capital program for the Turnpike that is required as a part of its Annual Budget. See "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE" herein.

Additional Bonds

Provided that there is no Event of Default which has occurred and is continuing under the Indenture, the Authority may issue one or more Series of additional Bonds for purposes of paying costs of parkway projects, refunding all or a portion of a Series of Bonds, paying costs of issuance, or for any combination of such purposes.

Each Series of additional Bonds shall be issued pursuant to a Supplemental Indenture. The Indenture authorizes the Authority to issue additional Bonds that are either Senior Lien Bonds or Subordinate Lien Bonds. If such Series of additional Bonds are Senior Lien Bonds, they will be equally and ratably secured under the Indenture with all other Senior Lien Bonds, including the Series 2018 Bonds and the Series 2021 Bonds, without preference, priority or distinction of any Senior Lien Bonds over any other Senior Lien Bonds. If such Series of additional Bonds are Subordinate Lien Bonds, they will be equally and ratably secured under the Indenture with all other Subordinate Lien Bonds, without preference, priority or distinction of any Subordinate Lien Bonds over any other Subordinate Lien Bonds.

Any Subordinate Lien Bonds issued by the Authority shall be junior and subordinate in right of payment to the Senior Lien Bonds, including the Series 2021 Bonds and the Series 2018 Bonds.

The issuance of additional Bonds is subject to satisfaction of certain conditions and tests described below.

The Trustee shall authenticate and deliver such additional Bonds, but only upon receipt by the Trustee of, among other things, a certificate of the Authority, dated as of the date of delivery of such additional Bonds, stating that, as of the date of such certificate, no event or condition has happened or existed, or is happening or existing, that continues, or that, with notice or lapse of time or both, would constitute, an Event of Default by the Authority under the Indenture, and (ii) a certificate of the Authority, dated as of the date of delivery of such additional Bonds, stating that, with respect to all then Outstanding Bonds, all applicable Toll Rate Covenants were met in the prior Annual Period and the Authority is current in all deposits into the various Funds and Accounts and in all payments theretofore required to have been deposited or made by it under the provisions of the Indenture as to all Senior Lien Bonds.

Senior Lien Bonds – New Money

Before the Authority may issue additional Senior Lien Bonds to finance parkway projects, including the Series 2021 Bonds, it must also deliver to the Trustee either:

(i) a certificate of an Authority Authorized Officer certifying that the Net Toll Road Revenues (adjusted to reflect any authorized and to be implemented within six months adjustment in tolls, fees and charges, as if such adjustment had been in effect since the beginning of the period described herein) for (a) the most recent Annual Period for which audited statements are available or (b) a 12-consecutive-month period in the immediately prior 18 months were at least 125% of the Maximum Annual Debt Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) and the additional Senior Lien Bonds proposed to be issued; or

(ii) a certificate of the Authority stating that, based upon the report of its Consulting Engineers and Traffic and Revenue Consultant, the projected Net Toll Road Revenues (adjusted to reflect any authorized adjustment in tolls, fees and charges, provided that such adjustment is to be implemented within six months as if such adjustment had been in effect since the beginning of the period described herein) for the current and each of the Annual Periods through the fifth Annual Period following the issuance of the additional Senior Lien Bonds are at least 135% of Annual Debt Service for each such year and projected Net Toll Road Revenues in the fifth such year equaled or exceeded 135% of the Maximum Annual Debt Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) and the additional Senior Lien Bonds proposed to be issued.

Subordinate Lien Bonds

If additional Bonds to be issued by the Authority are Subordinate Lien Bonds, then the Trustee shall authenticate and deliver such additional Bonds, upon compliance with the applicable requirements of the Master Trust Indenture and upon such further terms and subject to such further conditions as are provided in a Supplemental Indenture authorizing such Subordinate Lien Bonds.

Refunding Bonds

If additional Bonds are being issued by the Authority to refund all or a portion of any Series of Bonds, the Authority must deliver to the Trustee a certificate certifying that either (i) the Maximum Annual Debt Service for all then Outstanding Senior and Subordinate Lien Bonds, after giving effect to such refunding, would not be more than the Maximum Annual Debt Service for all then Outstanding Senior and Subordinate Lien Bonds immediately prior to the issuance of such additional Bonds, (ii) as a result of the proposed refunding, savings in the aggregate Annual Debt Service savings for all then Outstanding Senior and Subordinate Lien Bonds will be achieved in each Annual Period, or (iii) if the additional Bonds are Senior Lien Bonds that are refunding Senior Lien Bonds, then, as an alternative to (i) or (ii) above, a certificate demonstrating compliance with either of the two coverage tests set forth in subsection 213(c)(i) of the Indenture for Senior Lien Bonds being issued to finance parkway projects (as described above under subsection (i) under the subheading "Senior Lien Bonds – New Money").

Flow of Funds

The Indenture requires that the Authority deposit all Toll Road Revenues, as received, into the Revenue Fund created by the Indenture. The Revenue Fund is maintained by the Authority as a separate account with an Authorized Depositary. Amounts held in the Revenue Fund will be transferred by the Authority by no later than the fifth day of each month to the Trustee to make deposits to the other funds or accounts as depicted in the diagram on the following page. A more detailed description of the funds and accounts created by the Indenture, and shown on the diagram on the following page, is set forth on the immediately following pages.

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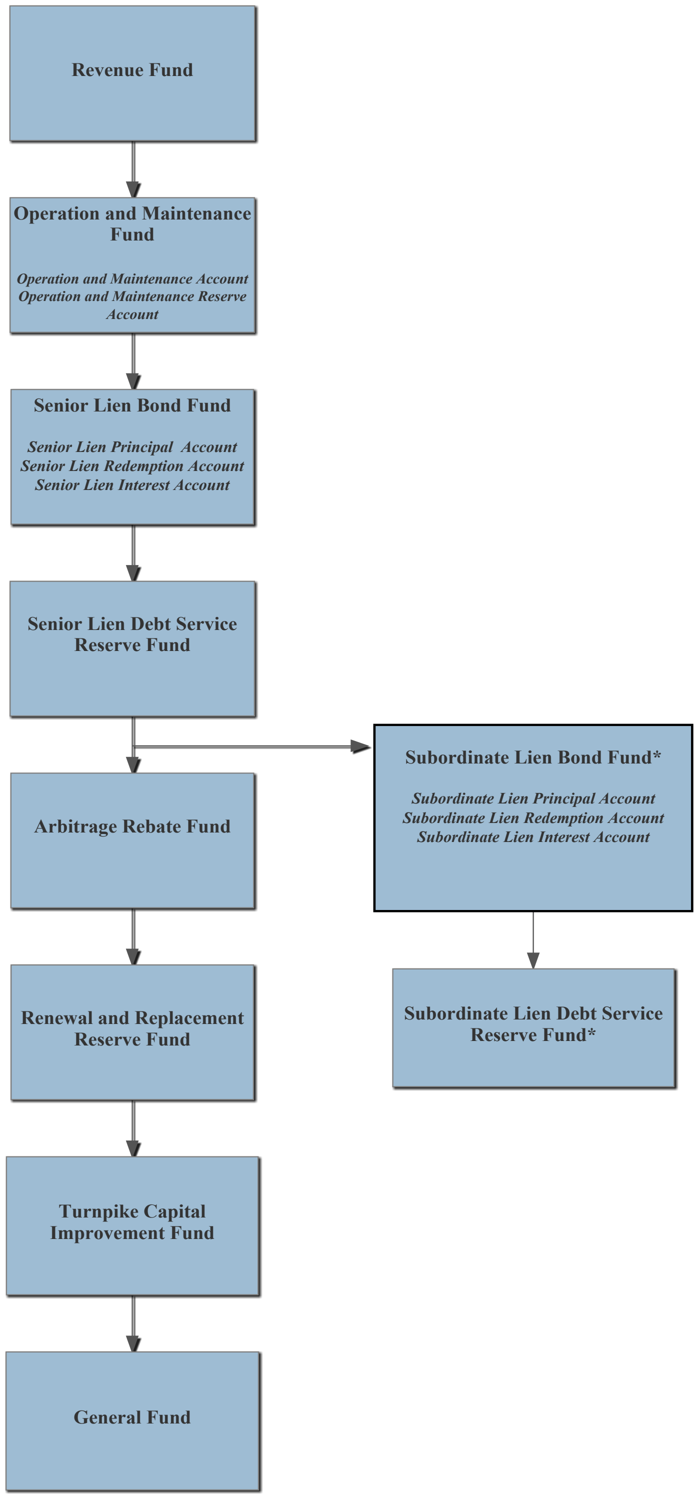
Trust Indenture Flow of Funds



* Currently, there are no Subordinate Lien Bonds issued under the Indenture.

The Indenture pledges as security for the Senior Lien Bonds, including the Series 2021 Bonds, all monies held in certain Funds and Accounts created under the Indenture, except for amounts held by the Trustee in the Arbitrage Rebate Fund, and amounts in the Operation and Maintenance Account within the Operation and Maintenance Fund and the General Fund, the last two of which are accounts that will be separately maintained by the Authority with an Authorized Depositary. As depicted on the flow of funds set forth on the previous page, the Operation and Maintenance Fund also includes the Operation and Maintenance Reserve Account, into which the Authority must transfer funds each month in the amount, if any, necessary to maintain a balance therein equal to its Operation and Maintenance Reserve Account Requirement. Monies held in this account of the Operation and Maintenance Fund are pledged to the holders of the Senior Lien Bonds, including the Series 2021 Bonds, as part of the Trust Estate under the Indenture.

Pursuant to the Indenture, the Authority has entered into an account control agreement to perfect the pledge of and security interest of the Trustee in the Revenue Fund and the Operation and Maintenance Reserve Account, both of which are accounts that are pledged as security to the holders of the Senior Lien Bonds, including the Series 2021 Bonds, but are not accounts that are held by the Trustee. See "EXHIBIT A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE" herein.

The Funds and Accounts created by the Indenture are as follows:

Revenue Fund

Under the Indenture, the Authority shall deposit all Toll Road Revenues upon receipt into the Revenue Fund created under the Indenture and maintained by the Authority with an Authorized Depositary.

Operation and Maintenance Fund

The Indenture requires the establishment of an Operation and Maintenance Fund to be held by the Authority with an Authorized Depositary, to be used to pay the Authority's Operation and Maintenance Expenses. This Fund contains two accounts:

(i) the Operation and Maintenance Account to be used by the Authority solely to pay Operation and Maintenance Expenses; and

(ii) the Operation and Maintenance Reserve Account to be used by the Authority to pay Operation and Maintenance Expenses in the event the amounts on deposit in the Operation and Maintenance Account are insufficient to pay the Authority's Operation and Maintenance Expenses when due.

The Indenture requires the Authority to deposit an amount each month into the Operation and Maintenance Account equal to $1/12^{th}$ of the Operation and Maintenance Expenses for the Turnpike set forth in the Authority's current fiscal year budget, provided that the payment due for the last month of each fiscal year shall equal the difference between budgeted and actual expenses so that the total deposits to the Operation and Maintenance Account shall equal the actual expenses for the fiscal year. Monthly payments shall be increased or decreased, as necessary, to reflect any amendments to the Authority's Annual Budget.

The Indenture also requires the Authority to deposit an amount each month into the Operation and Maintenance Reserve Account equal to $1/6^{th}$ of the Operation and Maintenance Expenses for the Turnpike set forth in the Authority's current fiscal year budget.

Senior Lien Bond Fund

The Indenture provides that there must be transferred by the Authority to the Trustee from the Revenue Fund into the applicable Principal Account of the Senior Lien Bond Account, a subaccount under the Senior Lien Bond Fund, an amount each month equal to 1/12th of the principal installment due on the next succeeding Bond Payment Date that is a principal payment date with respect to the Senior Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Principal Account, will be sufficient to pay principal on the Senior Lien Bonds coming due on the next succeeding Bond Payment Date that is a principal payment date; *provided, however,* that if the first installment of principal on a Series of Bonds will be due on a date that is either less than or greater than twelve months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Principal Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) twelve months that actually will elapse until the Bond Payment Date on which such first installment of principal will come due.

The Indenture also requires that there must be transferred by the Authority to the Trustee from the Revenue Fund into the applicable Redemption Account of the Senior Lien Bond Account, a subaccount under the Senior Lien Bond Fund, an amount each month equal to 1/12th of any sinking fund installment due on the next succeeding Bond Payment Date with respect to the Senior Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Redemption Account, will be sufficient to pay any sinking fund installment on all Senior Lien Bonds coming due on the next succeeding Bond Payment Date; *provided, however*, that if the first sinking fund installment on a Series of Bonds will be due on a date that is either less than or greater than twelve months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Redemption Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) twelve months that actually will elapse until the Bond Payment Date on which such first sinking fund installment will come due.

The Indenture provides that there must be transferred by the Authority to the Trustee from the Revenue Fund into the applicable Interest Account of the Senior Lien Bond Account, a subaccount under the Senior Lien Bond Fund, an amount each month equal to 1/6th of the interest installment due with respect to all Senior Lien Bonds on the next succeeding Bond Payment Date; *provided, however*, that if the first installment of interest coming due on a Series of Bonds will be due a Bond Payment Date that is either less than or greater than six months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Interest Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) six months that actually will elapse until the Bond Payment Date on which such first installment of interest will come due.

Senior Lien Debt Service Reserve Fund

The Indenture requires the establishment of a Senior Lien Debt Service Reserve Account, a subaccount of the Senior Lien Debt Service Reserve Fund, into which the Trustee is to transfer each month to the applicable Account in the Senior Lien Debt Service Reserve Fund with respect to each Series of Senior Lien Bonds the amounts, if any, of the aggregate 1/12th monthly replenishment installments required by the Indenture for such Series (following withdrawal by the Trustee of funds from such applicable Account) or the aggregate 1/36th monthly replenishment installments required by the Indenture for such Series (when applicable, following termination of a Debt Service Reserve Fund Credit Facility ("***DSRF Credit Facility***") that had been provided for such applicable Account), that are necessary to restore the amount on deposit therein to the related Series or, as applicable, aggregate or composite Debt Service Reserve Requirement in accordance with the applicable Supplemental Indenture; *provided, however,* that if under the Indenture as then in effect there is an aggregate or composite Debt Service Reserve Fund for Bonds issued under the Indenture and then Outstanding, then there shall be deposited each month, to such aggregate or composite Debt Service Reserve Fund the amounts, if any, of the aggregate $1/12^{th}$ monthly replenishment installments required by the Indenture for all such Outstanding Bonds (following withdrawal by the Trustee of funds from such applicable Fund and Accounts) or the aggregate $1/36^{th}$ monthly replenishment installments required by Indenture for all such Outstanding Bonds (when applicable, following termination of a DSRF Credit Facility that had been provided for such applicable Fund and Accounts), that are necessary to restore the amount on deposit therein to the applicable Series, aggregate or composite Debt Service Reserve Requirement in accordance with the Indenture.

Arbitrage Rebate Fund

Under the Indenture, the Arbitrage Rebate Fund shall be maintained by the Trustee as a fund separate from any other fund established and maintained under the Indenture. Within the Arbitrage Rebate Fund, the Trustee shall maintain such accounts as shall be required by the Authority in order to comply with the terms and requirements of the tax compliance certificate executed and delivered in connection with any Bonds issued under the Indenture (the "***Tax Certificate***"). All money at any time deposited in the Arbitrage Rebate Fund shall be held by the Trustee in trust, to the extent required to satisfy the Rebate Requirement (as defined in the Tax Certificate), for payment to the Treasury Department of the United States of America.

Renewal and Replacement Reserve Fund

Under the Indenture, the Authority is required to establish a Renewal and Replacement Reserve Fund to be held by the Authority, and used exclusively for funding Renewal and Replacement Costs, as certified for a fiscal year, by the Authority's Consulting Engineers, in accordance with its Annual Budget. Transfers from the Revenue Fund into this fund are to be made each month in the amount equal to a minimum of $1/12^{th}$ of the amount of the Renewal and Replacement Reserve Fund Requirement set forth in the Authority's Annual Budget; *provided, however*, that the Indenture shall not be construed as preventing the Authority in its sole discretion from depositing amounts in excess of such minimum deposit in any month, or from crediting against such minimum monthly deposit some or all of any cumulative excess deposits made to such fund during the current fiscal year.

"***Renewal and Replacement Costs***" are defined in the Indenture as all costs and expenses that, in the judgment of the Authority's Consulting Engineers, are necessary or appropriate to be expended by the Authority in an Annual Period that are not incurred on any annual or seasonal basis and are necessary in keeping the Turnpike open to public travel or use, but shall not include any cost which, in the judgment of the Consulting Engineers is to be treated as Operation and Maintenance Expenses in the current Annual Period and, in reliance on such judgment, have been included in the Authority's Annual Budget for such Annual Period. The judgment of the Consulting Engineers as to the costs and expenses that are to be included in (a) "Renewal and Replacement Costs" and (b) "Operation and Maintenance Expenses", respectively, shall be memorialized in a certificate to be provided by the Consulting Engineers to the Authority as part of the annual budget-making process as required by the Indenture.

Turnpike Capital Improvement Fund

Under the Indenture, the Authority is required to maintain its Turnpike Capital Improvement Fund in a separate account with an Authorized Depositary. Amounts in the Turnpike Capital Improvement Fund may, from time to time, be disbursed or transferred by the Authority for the purposes of providing funds to pay certain Capital Costs on the Turnpike that are not included in the Renewal and Replacement Costs budgeted by the Authority in its then current Annual Budget. Amounts to be deposited in the Turnpike Capital Improvement Fund shall be the aggregate of the amounts specified at the discretion of the Authority from time to time in resolutions of the Authority as the total estimated amounts that will need to be deposited therein to fund Capital Costs on the Turnpike that are not included in the Renewal and Replacement Costs budgeted by the Authority in its then current Annual Budget. Such amounts, once specified, at the discretion of the Authority, shall be reflected in the Authority's five-year capital improvement program for the Turnpike, as provided in the Indenture. Upon the determination of the Authority in its sole discretion that funds in the Turnpike Capital Improvement Fund are not needed for such Capital Costs, and after satisfying any deficiencies in any Debt Service Fund, any Debt Service Reserve Fund, and Renewal and Replacement Fund, respectively, created under the Indenture, the Authority may transfer such amounts to the General Fund or any other Fund or Account created under the Indenture.

"***Capital Costs***" are costs that are capitalized under the Authority's internal policies and procedures governing capital expenditures and are incurred for or in connection with the (a) acquisition or construction of assets of the Authority having an anticipated useful life of greater than one year, or (b) improvements that extend the anticipated useful life of assets by more than one year.

General Fund

The Authority shall maintain its General Fund in a segregated account with an Authorized Depositary. Under the Indenture, after first having made the required deposits described on the immediately preceding pages, and while any Bonds are Outstanding, the Authority shall transfer monthly from the Revenue Fund to the credit of the General Fund any funds remaining in the Revenue Fund. Moneys in the General Fund may be expended by the Authority to restore deficiencies in any funds or accounts created under this Indenture, and absent any such deficiency, for any of the following purposes, with no one item having priority over any of the others:

(i) to purchase or redeem Bonds;

(ii) to secure and pay the principal or redemption price of and interest on, any Senior Lien Bonds;

(iii) to secure and pay the principal or redemption price of and interest on, any Subordinate Lien Bonds;

(iv) to make payments into the Parkway Projects Fund or any other Fund or Account created under the Indenture;

(v) to fund improvements, extensions and replacements of the Turnpike; or

(vi) to further any corporate purpose of the Authority that involves expenditures on assets, operations and/or employees of the Authority and is in furtherance of the acquisition, operation, maintenance, improvement, enhancement and/or preservation of assets, operations and/or employees of the Authority.

Additional information regarding the Funds and Accounts created under the Indenture and the flow of funds under the Indenture is set forth in "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE" herein.

Limited Obligations

ALL BONDS ISSUED UNDER THE INDENTURE, INCLUDING THE SERIES 2021 BONDS, ARE OBLIGATIONS OF THE AUTHORITY PAYABLE SOLELY FROM THE TRUST ESTATE. ALL BONDS ISSUED UNDER THE INDENTURE, INCLUDING THE SERIES 2021 BONDS, SHALL NOT BE DEEMED TO BE A DEBT OR LIABILITY OF THE STATE OR ANY POLITICAL SUBDIVISION THEREOF OR A PLEDGE OF THE FAITH, CREDIT OR TAXING POWER

OF THE STATE OR OF ANY SUCH SUBDIVISION, AND ARE PAYABLE SOLELY FROM THE TRUST ESTATE. THE AUTHORITY HAS NO TAXING POWER.

THE WEST VIRGINIA TURNPIKE

General

The Authority operates the Turnpike, which is an 88-mile toll roadway located between Charleston and Princeton, West Virginia. The Turnpike carries the designation of I-77 for its entire length. At its northern terminus near Charleston, the Turnpike intersects with U.S. Route 60. I-79 feeds into I-77 approximately 10 miles north of the northern terminus of the Turnpike. At the southern terminus near Princeton, the Turnpike intersects with U.S. Route 460. U.S. Route 19 (Corridor L) near Beckley is also important as a connector road.

The Turnpike is an integral part of the I-77 road network, which extends from Cleveland, Ohio to Columbia, South Carolina. In 1988, the final segment of I-64, which intersects with the Turnpike south of Beckley, West Virginia, was completed. The section of the Turnpike between the I-64 interchange and the northern terminus in Charleston carries the I-64 designation as well. I-64 travels west to east from St. Louis, Missouri to Virginia Beach, Virginia.

Within the region, the Turnpike is an important north-south and east-west Interstate travel corridor linking eastern Ohio and western Pennsylvania in the north to western Kentucky, Virginia, North Carolina, and other states in the southeastern U.S. The Turnpike extends through mountainous terrain over much of its length; these mountains are otherwise a barrier to travel and make it impractical for vehicles to traverse the State on other roadways. Posted speed limits are up to 70 miles per hour, reflecting the high design standards of the Turnpike.

A map depicting the Turnpike in relation to geographic alternative routes is set forth on the following page.

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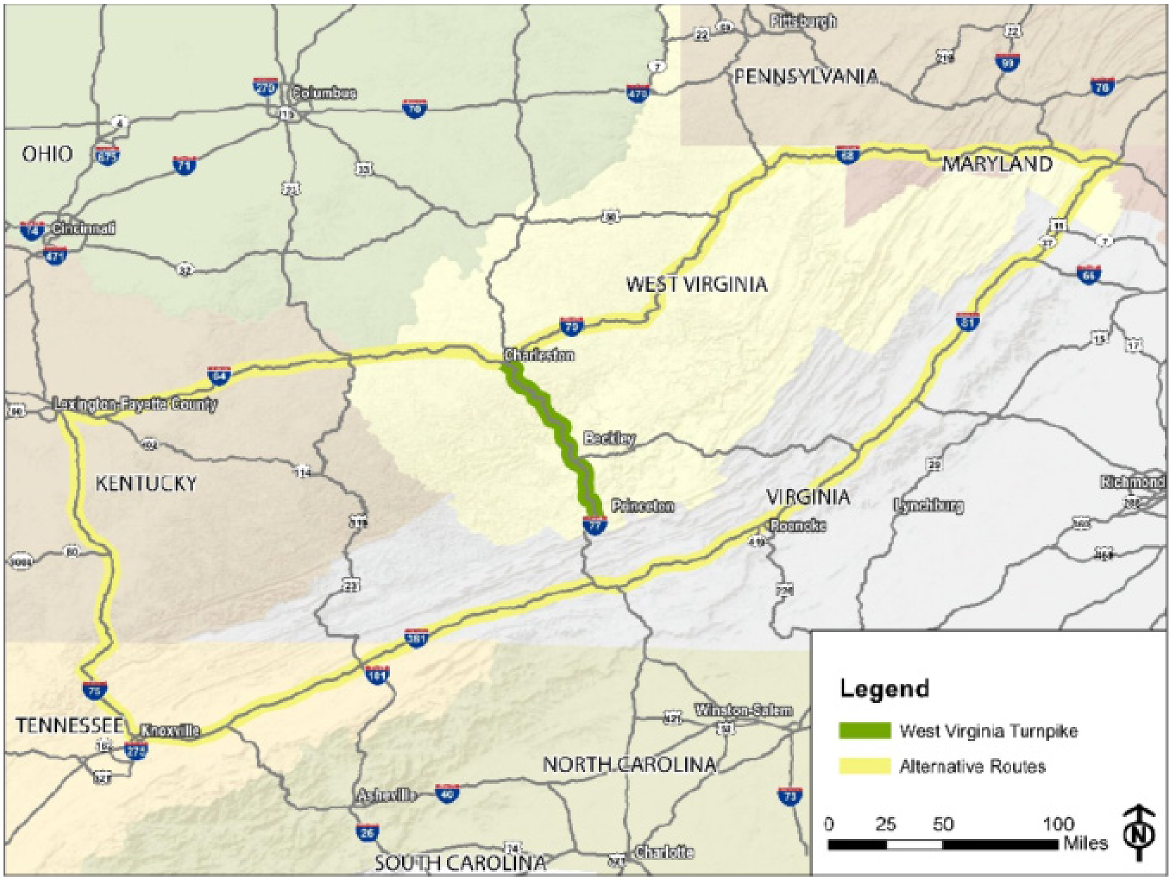
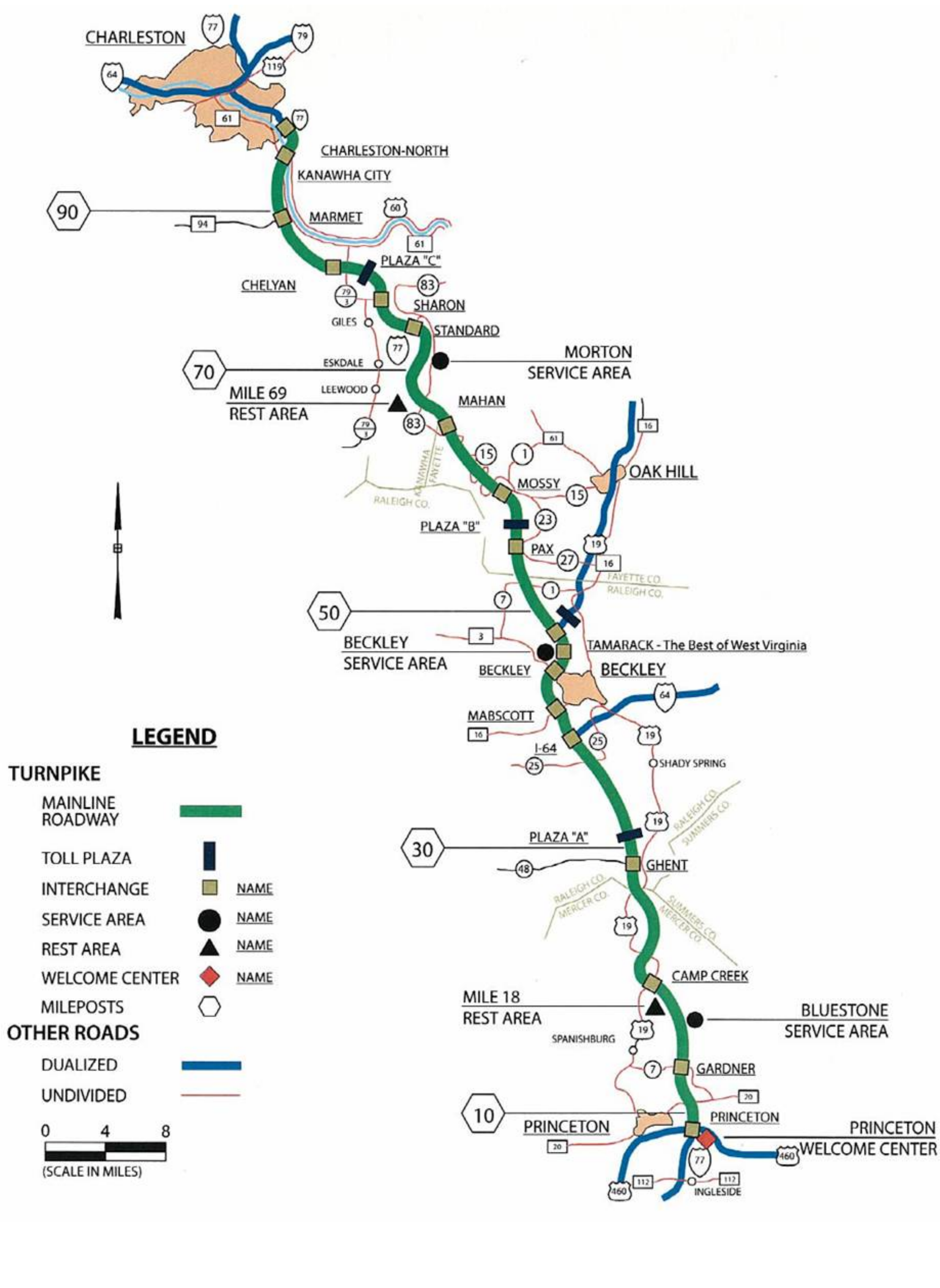


The Turnpike uses an "open" toll barrier system with three mainline toll barriers, or plazas, located between Charleston and Princeton, located at milepost 30 at Ghent (Toll Plaza A), at milepost 56 at Pax (Toll Plaza B) and at milepost 83 at Chelyan (Toll Plaza C), all as depicted on the below graphic. Tolls are collected in both directions at the mainline barriers. There are entrance-exit ramps off the mainline connecting to local feeder roads at eighteen locations. All such ramps are toll-free except for the movements to and from the south at the interchange just north of Beckley (intersection of U.S. Route 19), which maintains a toll barrier facility.

There are three "travel plazas" on the Turnpike, which provide restaurant, fuel, and rest facilities. These facilities provide convenient service to Turnpike travelers and also serve as tourist information centers and foster a positive image of West Virginia. Two such areas are accessible for northbound travelers, and one near Beckley serves both northbound and southbound motorists. Integrated with the Beckley service area is Tamarack-The Best of West Virginia, an arts and crafts, tourism and exposition center with additional dining and conference facilities that is owned and operated by the Authority (***"Tamarack"***), and is located off of Exit 45 of the Turnpike. In addition, there are two rest areas southbound and a Welcome Center located near Princeton at the interchange of US 460 and I-77. The rest stop at southbound milepost 69 is a full service area with restroom, telephone, concession and picnic areas. The rest stop at southbound milepost 19 has ample parking areas, picnic shelters and a scenic overlook. The travel plazas are shown on the map on the following page.

Tamarack is an economic development project authorized by the State Legislature under section 6 of the Act. The Tamarack facility was constructed with non-toll revenues of the Authority and must be maintained by the Authority only from its non-toll revenues. Revenues derived from Tamarack, as well as the other service plazas and information centers on the Turnpike, are excluded from Toll Road Revenues under the Indenture.


CHARLESTON
CHARLESTON-NORTH
KANAWHA CITY
90
MARMET
PLAZA "C"
CHELYAN
SHARON
GILES
STANDARD
MORTON
SERVICE AREA
ESKDALE
70
LEEWOOD
MILE 69
REST AREA
MAHAN
OAK HILL
MOSSY
RALEIGH CO.
PLAZA "B"
PAX
FAYETTE CO.
RALEIGH CO.
50
BECKLEY
SERVICE AREA
TAMARACK - The Best of West Virginia
BECKLEY
BECKLEY
MABSCOTT
I-64
SHADY SPRING
LEGEND
TURNPIKE
MAINLINE ROADWAY
TOLL PLAZA
INTERCHANGE
NAME
SERVICE AREA
NAME
REST AREA
NAME
WELCOME CENTER
NAME
MILEPOSTS
OTHER ROADS
DUALIZED
UNDIVIDED
0 4 8
(SCALE IN MILES)
PLAZA "A"
30
GHENT
RALEIGH CO.
SUMMERS CO.
RALEIGH CO.
MERCER CO.
SUMMERS CO.
MERCER CO.
CAMP CREEK
MILE 18
REST AREA
BLUESTONE
SERVICE AREA
SPANISHBURG
GARDNER
10
PRINCETON
PRINCETON
PRINCETON
WELCOME CENTER
INGLESIDE

The Turnpike is patrolled by a company of West Virginia State Police, which is dedicated solely to the Turnpike and is responsible for traffic safety management and drug interdiction.

The Turnpike benefits from a strategic location that connects a number of major economic centers and travel routes for key U.S. commerce in both the Midwest and the Southeast. Historical estimates by the Authority and CDM Smith demonstrate that approximately 75% of toll revenues are generated from out-of-state traffic.[1] As shown on the map below, the Turnpike provides a critical connection for vehicles bound to and from Ohio, Pennsylvania, North Carolina and Kentucky.

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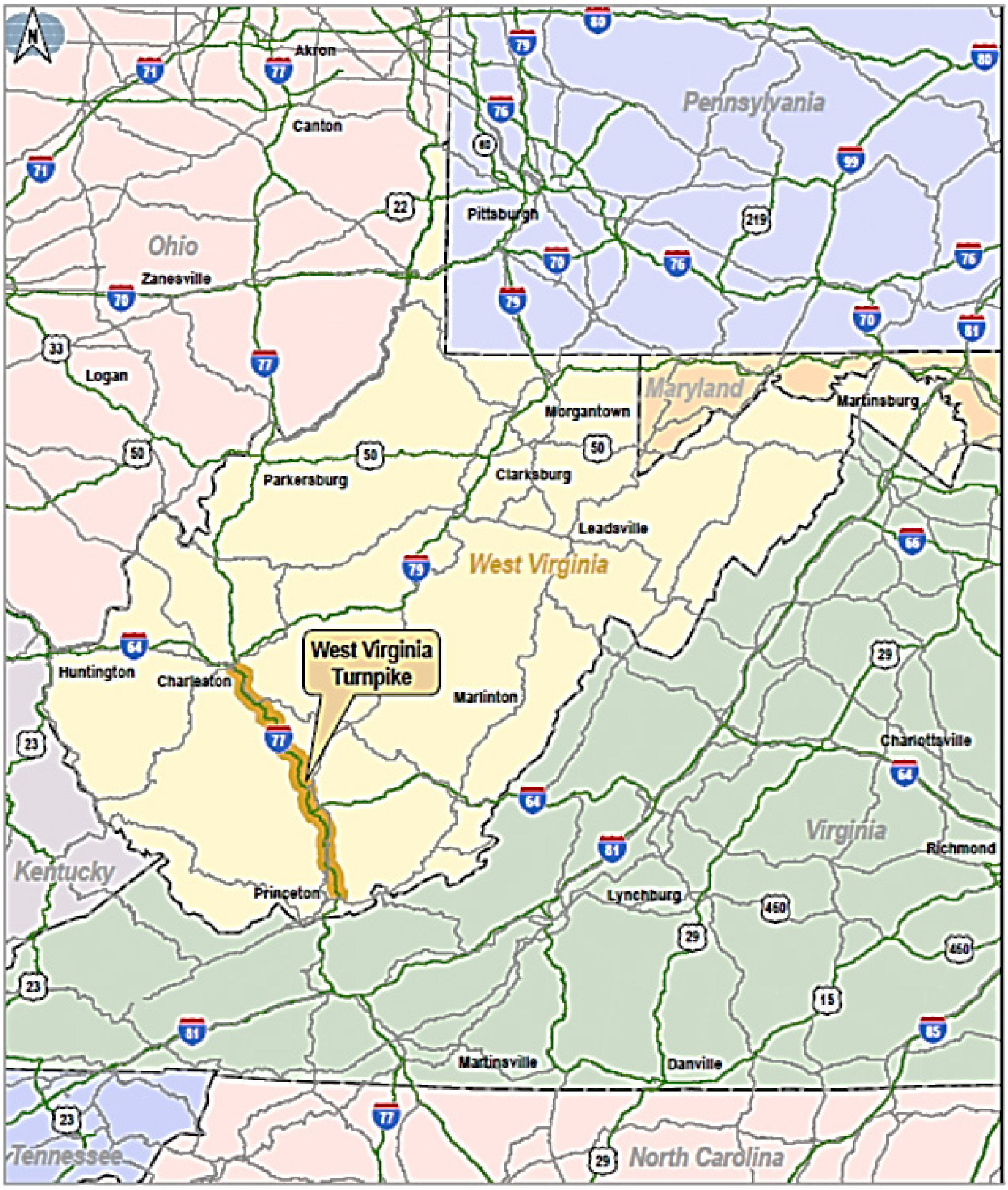
[1] Source: CDM Smith, Inc. (formerly Wilbur Smith Associates) Traffic and Toll Revenue Study dated April 10, 2009 (revised April 13, 2009), as measured by the registration of vehicles using the Turnpike.


Akron
Canton
Pennsylvania
Pittsburgh
Ohio
Zanesville
Logan
Maryland
Morgantown
Martinsburg
Parkersburg
Clarksburg
Leadsville
West Virginia
West Virginia Turnpike
Huntington
Charleston
Marlinton
Charlottsville
Virginia
Richmond
Kentucky
Princeton
Lynchburg
Martinsville
Danville
Tennessee
North Carolina

Tolling Collection

Toll Collection System

The Authority conducts toll collection, customer service and toll violation enforcement operations at three mainline toll plazas (Barriers A, B and C) and one interchange ramp toll plaza (North Beckley), and self-operated customer service locations, the primary one located the Authority's headquarters in Charleston and a smaller satellite office in Beckley. The mainline toll plazas are bidirectional with 10-12 lanes of low-speed or stop-condition tolling equipment, and reversible capabilities in the center lanes at Barriers B and C. Barrier A is a split location serving both directions. All lanes can read the *E-ZPass*® radio frequency identification (RFID) standard using automatic vehicle identification (AVI) readers. The mainline plazas have both staffed and *E-ZPass*® only lanes, some capable of shifting between modes depending on operational needs. All lanes include automated vehicle classification (AVC) systems that determine a vehicle's class based on its axles and height. Lanes that have the *E-ZPass*®-only mode also have license plate image capture cameras that support the Authority's toll collection enforcement operations, but the staffed lanes do not. The existing toll system includes host and back office systems located at the Authority's headquarters and disaster recovery systems for the host and back office at the Authority's Beckley office. The Authority is in the process of planning for a major equipment replacement and system upgrade to its tolling collection system, at an estimated cost of $18 million. See "THE WEST VIRGINIA TURNPIKE – Capital Improvement Plan" herein.

Electronic Tolling Collection

The Authority is a full member agency of the *E-ZPass*® Group, which develops guidelines for and facilitates the electronic collection of tolls among at least 34 toll agencies in 19 states, as depicted on the graphic on the following page. This allows any vehicle equipped with a transponder to travel seamlessly without stopping to pay a cash toll. The *E-ZPass*® program is the largest, most successful interoperable toll collection program, servicing more than 27 million accounts, 43 million tags and the collection of over $11.3 billion dollars in electronic toll revenues.

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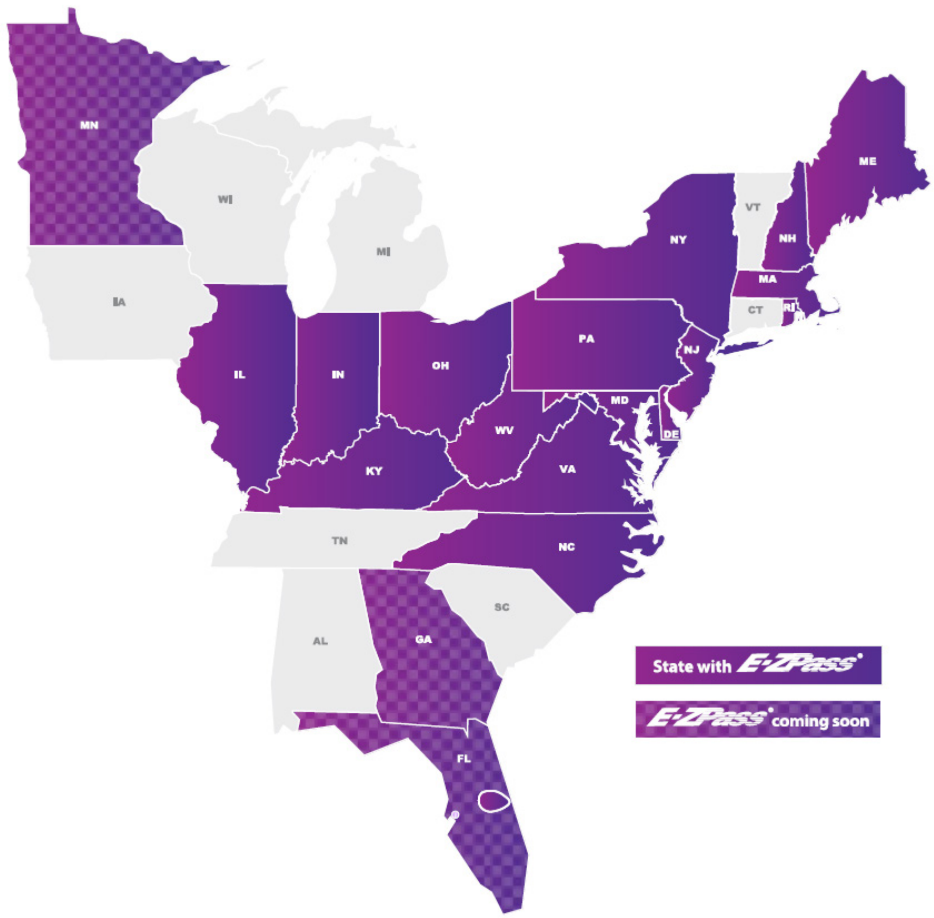

Source: https://e-zpassiag.com/about-e-zpass/31-map

All toll lanes on the Turnpike accept *E-ZPass*®. In calendar year 2019, approximately 55% of all transactions on the Turnpike were paid by *E-ZPass*® (including those customers using a transponder issued by the Authority under the Single Fee Discount Program). While cash has historically been the preferred method of payment by passenger cars traveling the Turnpike, total cash transactions dropped from 60% in calendar year 2017 to 45% in calendar year 2019, due largely to the implementation of the Single Fee Discount Program and the increase in toll rates that took effect in January 2019. See "APPENDIX D – TRAFFIC AND REVENUE STUDY."

Authority-issued *E-ZPass*® transponders ("***WV E-ZPass*® *Transponders***") represented 29% of all transactions on the Turnpike in calendar year 2019 (including 22% of all transactions using transponders issued under the Single Fee Discount Program), while non-WV *E-ZPass*® Transponders issued by other tolling authorities represented 26% of all transactions for that same period. As of December 2019, the WV *E-ZPass*® system had approximately 147,300 passenger car accounts and 6,900 commercial accounts. See "APPENDIX D – TRAFFIC AND REVENUE STUDY."

The table below shows historic electronic tolling penetration rates based on both revenues and transactions.

Electronic Toll Collection Penetration Rates by Transactions and Revenues (2010-2020)

Fiscal Year	Transactions	Revenues
2010	29.00%	33.37%
2011	30.16%	35.60%
2012	32.69%	36.70%
2013	34.20%	39.09%
2014	35.70%	40.80%
2015	36.54%	42.15%
2016	37.24%	43.63%
2017	38.83%	45.66%
2018	40.91%	48.34%
2019	49.40%	55.24%
2020	56.81%	61.07%

Source: West Virginia Parkways Authority.

The Authority continues to evaluate the costs and benefits associated with removing the toll barriers and converting the Turnpike to a cashless, all electronic tolling ("AET") system. As reflected in the above table, the *E-ZPass®* penetration rate is currently about 57% of all transactions conducted on the Turnpike, considerably less than the industry recommended penetration rate of about 80% to justify conversion to an AET system. However, even when the Turnpike reaches a penetration rate of 80%, due to the unique nature of the Turnpike, which derives a significant portion of its toll revenues from commercial traffic and out-of-state passenger vehicles, the revenue risk may outweigh any benefits to be derived from total conversion to an AET system.

Cash Tolling Collection

The Turnpike still maintains traditional cash collection booths, but cash transactions have been on the decline in recent years, down from 60% in calendar year 2017 to 45% in calendar year 2019. The decrease in cash transactions was the result of a shift from cash payment to *E-ZPass®* transactions among both passenger and commercial vehicles to take advantage of lower toll rates offered for electronic transactions. See "APPENDIX D – TRAFFIC AND REVENUE STUDY."

Unpaid Toll Collections

The Turnpike's toll barrier system significantly limits violations. Collection rates coupled with enforcement activities and violation penalties and fees have made the impact of toll violations net neutral on the overall financial results of the Turnpike.

Capital Improvement Plan

The Authority takes an active approach to maintaining and investing in all aspects of the Turnpike. Over the 10-year period from 2009 to 2019, the Authority spent approximately $313 million to complete a 10-year capital investment plan to address backlogged essential deferred maintenance and capital needs identified by the Authority's Consulting Engineers, HNTB Corporation (***"HNTB"***). Such projects included full depth concrete repairs and undersealing, asphalt pavement overlay, bridge deck overlay, bridge and facilities retrofit work, guardrails, median barriers, retaining walls, buildings, toll plazas, culverts and drainage pipes, and signs and pavement markings.

Additionally, the Authority is planning to make major improvements to its current tolling system by replacing outdated equipment and making system upgrades. These upgrades are expected to include, without limitation, license plate cameras in all toll barrier lanes, new technology for automated cash, license-plate based or other payment options for the North Beckley toll plaza, technology to accept credit card payments in all staffed toll plaza lanes at the mainline barriers and multiple protocol radio frequency identification (RFID) reader capabilities in all staffed toll plaza lanes and not just the *E-ZPass®* lanes.

The table below shows historic renewal and replacement amounts budgeted for the Authority on the Turnpike for fiscal years 2015 through 2021, together with capital investments made on the Turnpike for fiscal years 2015 through 2021.

Historical R&R and Capital Costs ($ millions)

	Fiscal Year						
	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Renewal and Replacement*							
Facilities Repair	$1.09	$0.72	$0.56	$0.47	$0.62	$1.10	$0.80
Safety Projects	0.08	0.08	0.08	0.08	0.14	-	-
Roadway Painting	1.50	1.50	1.50	1.50	1.50	2.70	2.60
Shotcrete Bridges	0.25	0.20	0.17	0.10	-	0.10	0.20
Signs	0.11	0.11	0.12	0.12	0.12	0.10	0.10
Roadway Lighting	-	-	-	0.10	0.10	0.10	0.10
Full Depth Concrete Repairs	1.23	0.99	0.79	0.63	1.50	1.60	1.00
Guardrail Replacement	0.54	1.70	1.94	0.54	0.64	0.70	0.70
Culvert Repairs	1.30	1.14	1.40	1.56	5.39	6.00	6.70
Bridge & Facility Repairs	1.52	2.07	1.62	1.86	1.98	2.00	2.20
Bridge Painting	2.30	2.37	2.44	2.51	1.92	1.70	2.00
Bridge Overlays	0.31	1.40	0.83	0.50	0.50	0.50	0.60
Slope Reconditioning	-	-	-	-	0.60	0.60	0.60
Equipment Replace and Rebuild	1.45	2.17	2.38	3.22	1.98	1.60	1.10
Total R&R	**$11.68**	**$14.44**	**$13.83**	**$13.20**	**$16.99**	**$18.80**	**$18.70**
Total Capital Costs**	**$35.16**	**$32.47**	**$34.53**	**$46.89**	**$44.58**	**$61.29**	**

* R&R figures are budgeted amounts from the Authority's Annual Budget.

** Total Capital Costs are actual figures, as reported in the Authority's Comprehensive Annual Financial Reports. Fiscal Year 2021 Capital Costs are not yet available.

Source: West Virginia Parkways Authority.

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Future Capital Improvement Program

The Consulting Engineers make annual inspections of bridges, pavements, culverts, signs, lighting, pavement markings and other structures on the Turnpike, and then prepares an annual report which contains its ten-year funding recommendation for the Authority's renewal and replacement requirements and future capital needs, such as paving needs ("***Ten-Year Capital Program***"). See "APPENDIX E – CONSULTING ENGINEER'S REPORT."

In addition to upgrades to the Authority's toll collection system, see "THE WEST VIRGINIA TURNPIKE – Capital Improvement Plan" herein, key aspects of the Ten-Year Capital Program include:

Bridge Deck Replacements. There are 116 bridges on the Turnpike (106 painted steel; 10 concrete). The Ten-Year Capital Program recommended by the Authority's Consulting Engineers calls for replacement of 40 bridge decks at an estimated cost of $194.4 million. As of their most recent Annual Report, the Consulting Engineers noted that the bridges along the Turnpike remain in good condition.

Pavement. The Turnpike mainline roadways were originally constructed in the early 1950s of Portland Cement Concrete (PCC), and substantially redone in the 1970s and 1980s when the Turnpike was upgraded to interstate standards. Currently 77% of the pavements are rated to be in good to very good condition. The Ten-Year Capital Program will address future paving needs. Those paving needs consist of rehabilitation of the pavements and overlays to preserve existing asphalt pavements, at an estimated cost over the next ten years of $138.2 million.

Travel Plaza Replacements. The Beckley Travel Plaza will be replaced at an estimated cost of $30.0 million, with construction to begin in fiscal year 2022. The Authority also plans to replace the Morton Travel Plaza beginning in fiscal year 2025 and the Princeton Travel Plaza beginning in fiscal year 2027, at an estimated cost of $25.0 million and $20.0 million, respectively.

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The table below provides HNTB's Summary of the 10-Year Plan for Renewal and Replacement and capital investment in the Turnpike.

Consulting Engineer's R&R and Capital Cost Estimates ($ in milions)

	Fiscal Year										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Renewal & Replacement											
Facilities/Safety/SP	$0.85	$1.30	$0.90	$1.38	$0.96	$1.46	$1.01	$1.55	$1.08	$1.65	**$12.13**
Pavement Striping	2.68	2.76	2.84	2.93	3.01	3.11	3.20	3.29	3.39	3.49	**30.70**
Shot-crete	0.24	0.24	0.25	0.26	0.27	0.28	0.28	0.29	0.30	0.31	**2.72**
Sign Replacement	0.14	0.14	0.14	0.15	0.15	0.16	0.16	1.70	1.80	1.90	**6.44**
Roadway Lighting	0.11	0.12	0.12	0.12	0.13	-	-	-	-	-	**0.60**
Full Depth Repairs	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	**10.00**
Guardrail	0.69	0.72	0.74	0.76	0.78	0.80	0.83	0.85	0.88	0.91	**7.96**
Culvert Repair	6.96	7.17	7.39	7.61	7.84	8.07	8.32	8.56	8.82	9.09	**79.83**
BFR	2.23	2.29	2.36	2.43	2.51	2.58	2.66	2.74	2.82	2.90	**25.52**
Bridge Painting	2.10	2.16	2.22	2.29	2.36	2.43	2.50	2.58	2.65	5.31	**26.60**
BDO	0.58	0.60	0.61	0.63	0.65	0.67	0.69	0.71	0.73	0.76	**6.64**
Slope	0.66	0.68	0.70	0.72	0.74	0.76	0.78	0.81	0.83	0.86	**7.52**
Equipment	1.73	1.78	1.83	1.89	1.94	2.00	2.06	2.12	2.19	2.25	**19.79**
Tree Clearing	0.62	0.64	0.66	0.68	0.70	0.72	0.74	0.76	0.78	0.81	**7.08**
Total R&R	**$20.57**	**$21.58**	**$21.76**	**$22.84**	**$23.03**	**$24.04**	**$24.24**	**$26.97**	**$27.28**	**$31.22**	**$243.53**
Capital Costs											
Paving	$10.60	$26.90	$11.60	$11.60	$12.00	$12.30	$12.70	$13.10	$13.50	$13.90	**$138.20**
Facilities	1.00	1.00	1.00	1.10	1.10	1.10	1.20	1.20	1.20	1.30	**11.20**
Toll System Upgrade*	9.00	7.00	2.00	-	-	-	12.00	-	-	-	**30.00**
Bridge Deck Replacement	15.00	15.60	16.20	16.90	17.50	18.20	18.90	24.60	25.40	26.10	**194.40**
Yeager Bridge Painting	5.00	11.00	6.00	-	-	-	-	-	-	-	**22.00**
Bluestone Bridge Painting	-	-	-	-	11.00	-	-	-	-	-	**11.00**
Travel Plaza Replacement	12.00	12.00	6.00	15.00	10.00	10.00	10.00	-	-	-	**75.00**
Barrier Wall Upgrade	1.40	1.10	1.40	2.00	1.70	1.70	-	-	-	-	**9.30**
Total Capital Costs	**$54.00**	**$74.60**	**$44.20**	**$46.60**	**$53.30**	**$43.30**	**$54.80**	**$38.90**	**$40.10**	**$41.30**	**$491.10**

*The Authority anticipates additional upgrades to its toll collection system may be necessary beginning in fiscal year 2028.
Source: Consulting Engineer's Report. See "APPENDIX E - CONSULTING ENGINEER'S REPORT."

Routine Maintenance

In addition to snow removal and ice control, road and bridge maintenance crews perform activities associated with all aspects of highway maintenance including: pavements, drainage, signage and other traffic control devices, bridge repairs, bench cleaning, vegetation control and litter pickup. Utilizing the Maintenance Management System (MMS), the Maintenance Division prepares periodic condition ratings on maintenance performance areas. Actual conditions are compared to established performance targets to assess the effectiveness of the maintenance program.

Traffic Management and Safety

The Turnpike is patrolled by an up to 31 member group designated as Troop 7 of the West Virginia State Police who are dedicated to the Turnpike and are responsible for traffic safety management and drug interdiction. With its 24-hour patrol, the State Police are dedicated to making the Turnpike safer by monitoring compliance with posted speed limits, assisting disabled motorists, detecting impaired drivers, and apprehending drug traffickers. Troop 7's efforts are strengthened by two Public Service Commission of West Virginia (PSC) officers whose focus is inspection and enforcement of commercial vehicle safety and operating regulations.

The Authority provides roadside assistance to Turnpike travelers with disabled vehicles. In winter, snow and ice removal is a top priority and major concern of the Maintenance Department. The Authority's annual operating budget includes funds necessary to adequately maintain safe highways during the winter storm season. Speed monitoring awareness radar trailers are employed to remind motorists of their speed. Rumble strips and eight inch edge lines are utilized to enhance the travel lane for the safety of motorists.

Toll Rates

In June of 2018, the Authority adopted toll rate increases that took effect on January 15, 2019 increasing its toll rates by 100% for all classes of vehicles. In addition, the current toll schedule includes forward-looking automatic toll increases that will begin on January 1, 2022, equal to 1.60% per year for all cash, West Virginia *E-ZPass®* and non-West Virginia *E-ZPass®* customers (except for those enrolled in the Single Fee Discount Program described below), with the increased cash toll rates to be rounded to the nearest $0.25.

Under the current toll schedule, Toll Class 1 passenger motor vehicles (*i.e.*, two axle passenger vehicles weighing less than 8,000 pounds and under 7 feet six inches that are being driven for personal, non-commercial use), that have a West Virginia *E-ZPass®* account and transponder are eligible for unlimited travel on the Turnpike for an annual flat fee equal to $25 per year per vehicle (plus transponder issuance costs, unless such passengers already have a transponder issued by the Authority). This annual flat fee program is known as the "Single Fee Discount Program." The Single Fee Discount Program is available to any customer for a Toll Class 1 passenger motor vehicle that purchases a West Virginia *E-ZPass®* transponder from the Authority, whether such customer is a West Virginia resident or a resident of any other state or country. On January 1, 2022, the $25 annual flat fee will automatically increase by 5.0%, and will then automatically increase by 5.0% on January 1st of every third year thereafter. Existing accounts enrolled in the Single Fee Discount Program with a valid credit card on file will automatically be re-enrolled in the Single fee Discount Program at the new, annual rate.

While commercial vehicles may not enroll in the Single Fee Discount Program, commercial vehicles enrolled in the WV *E-ZPass®* program or any other state's *E-ZPass®* program are still eligible for discounts off of the cash rates equal to 20% and 13%, respectively.

At the time of implementation, a total of 64,200 WV E-ZPass® accounts were automatically converted to the Single Fee Discount Program, and about 65,700 additional customers joined the new program before January 15, 2019, at a time when the Authority offered an early enrollment option for is Single Fee Discount Program allowing enrollees to pay $24 (plus a $13 transponder fee) for unlimited use of the Turnpike for nearly three years, until January 1, 2022. Since January 15, 2019, when the early enrollment period expired, the number of passengers enrolling in the Single Fee Discount Program has slowed considerably, totaling just over 25,000 and averaging just over 1,000 per month. As of February 2021, approximately 160,000 accounts have enrolled in the Single Fee Discount Program.

The toll increases approved by the Authority in June of 2018 accounted for projected amounts necessary to pay Operation and Maintenance Expenses, meet projected debt service on the Bonds to be issued under the Indenture, including the Series 2021 Bonds, fund Renewal and Replacement Costs necessary to maintain the Turnpike and fund capital needs of the Authority.

The Authority's Tolling Policy and Toll Rate Schedule is set forth on the following page.

TOLLING POLICY AND TOLL RATE SCHEDULE
Effective January 15, 2019

			ALL MAINLINE TOLL PLAZAS			NORTH BECKLEY PLAZA		
Toll Class	**Axles**	**Vehicle Type**	**WV *E-ZPass*® Personal Account Rate**			**WV *E-ZPass*® Personal Account Rate**		
1	2	Single Fee Discount Program	$0.00 with valid Single Fee Discount Plan			$0.00 with valid Single Fee Discount Plan		
Toll Class	**Axles**	**Vehicle Type**	**Cash Rate**	**WV *E-ZPass*® Commercial Rate**	**Non-WV *E-ZPass*® Rate**	**Cash Rate**	**WV *E-ZPass*® Commercial Rate**	**Non-WV *E-ZPass*® Rate**
1	2	Passenger Cars/Pickup Trucks/Motorcycles and Passenger Vans (under 7’6")	$4.00	$2.60	$4.00	$0.75	$0.52	$0.80
Toll Class	**Axles**	**Vehicle Type**	**Cash Rate**	**WV *E-ZPass*® Personal PrePaid Account & Commercial Rate**	**Non-WV *E-ZPass*® Rate**	**Cash Rate**	**WV *E-ZPass*® Personal PrePaid Account & Commercial Rate**	**Non-WV *E-ZPass*® Rate**
2	3+	Passenger Cars/Pickup Trucks with a trailer (under 7’6")	$5.00	$3.25	$5.00	$1.50	$1.04	$1.60
3	2 – 3	Motor Home	$5.00	$3.25	$5.00	$1.50	$1.04	$1.60
4	3+	Motor Home with a trailer	$6.50	$4.22	$6.50	$2.50	$1.56	$2.40
Toll Class	**Axles**	**Vehicle Type**	**Cash Rate**	**WV *E-ZPass*® Commercial Rate**	**Non-WV *E-ZPass*® Commercial Rate**	**Cash Rate**	**WV *E-ZPass*® Commercial Rate**	**Non-WV *E-ZPass*® Commercial Rate**
5	2	2 axle Trucks	$6.50	$5.20	$5.66	$1.50	$1.28	$1.40
6	3	3 axle Trucks	$9.00	$7.20	$7.84	$2.50	$1.92	$2.08
7	4	4 axle Trucks	$13.00	$10.40	$11.32	$3.25	$2.56	$2.78
8	5	5 axle Trucks	$13.50	$10.80	$11.74	$3.25	$2.56	$2.78
9	6+	6+ axle Trucks	$19.00	$15.20	$16.54	$4.75	$3.84	$4.18
10		Oversize Trucks	$24.00	$19.20	$20.88	$14.50	$11.52	$12.52

Automatic Adjustment: (i) Beginning on January 1, 2022, the toll rate schedule set forth above shall be subject to an automatic increase of 1.60% per year; provided, that the amount of any resulting increased rate shall be rounded to the nearest $0.25 for the Cash Rate at each Mainline Toll Plaza and the North Beckley Plaza, (ii) the corresponding WV *E-ZPass*® Rates and Non-WV *E-ZPass*® Rates thus shall also be subject to the automatic increase of 1.60% per year, (iii) the annual automatic increases described in this paragraph shall be calculated from the pre-rounded Cash Rates, not the rounded Cash Rates, and (iv) beginning on January 1, 2022, in accordance with the Act, the $25 fee charged for the Single Fee Discount Program shall be automatically increased by 5.00% and then shall be automatically increased by 5.00% every three years thereafter (that is, on the January 1st that is the third anniversary of the previous automatic 5.00% increase) without further action of the Authority. **Single Fee Discount Program:** Beginning on January 15, 2019, a customer driving a Toll Class 1 passenger motor vehicle (i.e., two axle passenger vehicles weighing less than 8,000 pounds and under 7’6" for personal - non-commercial use) may obtain (upon submission of a complete application, payment of applicable fees and receipt of a special transponder from the West Virginia Parkways Authority) unlimited travel on the West Virginia Turnpike for one year (from the month of purchase) for that vehicle for an annual fee of $25 per year per vehicle (subject to the subsequent 5.00% increases as provided above), plus applicable costs of issuing a special transponder for that vehicle (See “Single Fee Discount Program”). **Non-Commercial Vehicles in Toll Class II, III and IV – Discount Plan for West Virginia *E-ZPass*® Customers**: Customers with vehicles in Class II, III and IV (i.e. Vehicles greater than 7’6” in height or Class 1 vehicles towing trailers) having a WV *E-ZPass*® will continue to receive a 35% discount off of the pre-rounded Cash Rates at each toll plaza on the West Virginia Turnpike; provided, however, that the applicable Cash Rate at each Mainline Toll Plaza and the North Beckley Toll Plaza shall be rounded to the nearest $0.25. **Commercial Discount Plan #A**: There is a $25.00 charge for the purchase of each *E-ZPass*® transponder (non-refundable). Rates are based on the West Virginia Toll Rates table above under the column “WV *E-ZPass*® Rate.” **Commercial Discount Plan #B**: Accounts are opened and managed by other *E-ZPass*® agencies, so there is no paperwork, account maintenance, or charge for transponders. Rates are based on the West Virginia Toll Rates table above under the column “Non-WV *E-ZPass*® Rate”.

Implementation of Future Toll Changes

The Authority has the ability under the Act to increase tolls further, beyond the automatic increases that are part of its existing toll rate schedule, including additional increases that may be required to satisfy the Toll Rate Covenant in the Indenture. See "SOURCES OF PAYMENT AND SECURITY FOR THE SENIOR LIEN BONDS – Toll Rate Covenant" herein and "APPENDIX A – MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE."

The Act establishes a process the Authority must follow in order to raise tolls, charges, and/or fees (i.e., changing the toll rate schedule). The process includes providing public notice, holding public meetings in the four counties in which the Turnpike is located, and providing opportunity for public comment, as provided in Section 13a of the Act. Future toll increases, excluding the various automatic annual increases to begin in 2022 that have already been approved as part of the Authority's current toll rate schedule, would require majority consent from the Authority's Board, but would not require any additional legislative approval.

SUMMARY OF HISTORICAL OPERATIONS

Historical Traffic Trends and Toll Revenue

Since fiscal year 2000, the Authority's toll revenues have grown by 180%. During the past decade, the Authority enjoyed stable traffic growth from fiscal year 2011 to fiscal year 2019, but then experienced a decline of approximately 11.8% in its transactions in 2020 due to reduced volume caused by the COVID-19 pandemic. Between 2011 and 2019, total transactions grew by 8.0% and gross toll revenues increased by over 59.7% during that same period. From fiscal year 2018 to fiscal year 2020, toll revenues grew by a total of 62.1%, from \$95.3 million to \$154.5 million, reflecting the doubling of toll rates that occurred half-way through fiscal year 2019. Despite the decline in transactions in 2020, gross toll revenues still increased by 18% compared to fiscal year 2019, due primarily to a combination of the increase in the toll rate schedule that took effect on January 15, 2019 and fairly stable commercial traffic despite the COVID-19 pandemic.

In fiscal year 2020, passenger vehicles accounted for 75% of total transactions and 44% of total toll revenues, while commercial vehicles accounted for 25% of total transactions and 56% of total toll revenues. In fiscal year 2018, commercial vehicles had accounted for 23% of total transactions and 48% of total toll revenues, respectively.

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The following table summarizes the Authority's transactions for fiscal years 2000 through 2020.

Transactions (000's)

Fiscal Year	Passenger Vehicles	Commercial Vehicles	Total
2000	25,883	7,697	33,580
2001	25,182	7,767	32,949
2002	26,864	7,625	34,489
2003	26,809	7,607	34,416
2004	27,544	7,866	35,410
2005	27,078	8,308	35,386
2006	26,745	8,437	35,182
2007	26,960	8,265	35,225
2008	26,413	8,018	34,431
2009	26,511	7,098	33,609
2010	27,043	7,329	34,372
2011	27,140	7,328	34,468
2012	27,549	7,515	35,064
2013	26,934	7,462	34,396
2014	27,154	7,621	34,775
2015	28,006	7,890	35,896
2016	28,924	8,057	36,981
2017	29,146	8,250	37,396
2018	28,966	8,484	37,450
2019	28,526	8,709	37,235
2020	24,487	8,342	32,829

Source: West Virginia Parkways Authority.

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The following table summarizes the Authority's toll revenues for fiscal years 2000 through 2020.

Toll Revenues ($ 000's)

Fiscal Year	Passenger Vehicles	Commercial Vehicles	Total
2000	$26,473	$28,683	$55,156
2001	24,984	28,647	53,631
2002	26,670	28,269	54,939
2003	26,616	28,141	54,757
2004	27,388	29,466	56,854
2005	27,165	30,834	57,999
2006	27,856	34,002	61,858
2007	26,908	31,257	58,165
2008	26,831	30,182	57,013
2009	26,584	26,757	53,341
2010	40,685	39,186	79,871(1)
2011	42,066	39,894	81,960
2012	43,280	40,627	83,907
2013	43,429	40,090	83,519
2014	44,032	40,875	84,907
2015	46,309	42,388	88,697
2016	50,333	43,246	93,579
2017	48,847	43,892	92,739
2018	49,766	45,522	95,288
2019	64,925	65,985	130,910(2)
2020	68,727	85,741	154,468

Source: West Virginia Parkways Authority.
(1) Toll rate increase went into effect on August 1, 2009.
(2) Toll rate increase went into effect on January 15, 2019.

Recent Developments Related to the COVID-19 Pandemic

Because of the public health crisis created by the COVID-19 pandemic, and as a result of stay-at-home orders and other measures put in place by Governor Justice and the leaders of surrounding states, traffic counts have declined on the Turnpike. In fiscal year 2020, the number of passenger vehicle transactions declined by 14% while commercial transactions declined by 4.2%, with total transactions down by 11.8% from fiscal year 2019. Additionally, in the first nine months of fiscal year 2021, total passenger vehicle transactions are down 13.0%, while total commercial transactions are up by 3.5%.

With the end of stay-at-home orders, the easing of other public health safety measures and the increased distribution of vaccines, transactions on the Turnpike have improved in recent months. Further, despite the decline in total transactions in fiscal year 2020, the Authority experienced an 18% increase in toll revenues in fiscal year 2020 due to the doubling of toll rates for all classes of vehicles that went into effect on January 15, 2019.

The following table shows comparisons of monthly toll revenues during calendar years 2018, 2019 and 2020, as well as for the first five months of 2021.

West Virginia Parkways Authority

Historical Monthly Toll Revenues
(in Thousands)

Month	2018	2019*	2020	2021	%Change (2019 vs. 2018)	Month over Month %Change (2020 vs. 2019)	%Change (2021 vs. 2020)
January	$ 5,837.80	$ 8,494.47	$ 10,697.31	$10,548.79	45.5%	25.9%	-1.4%
February	5,651.93	10,182.45	9,996.44	9,266.77	80.2%	-1.8%	-7.3%
March	7,228.26	13,169.88	11,263.19	12,901.98	82.2%	-14.5%	14.5%
April	7,253.75	13,109.33	8,160.66	13,354.16	80.7%	-37.7%	63.6%
May	7,871.83	14,041.73	10,558.05	13,890.24	78.4%	-24.8%	31.6%
June	8,463.56	15,003.64	13,026.04	-	77.3%	-13.2%	-
July	8,666.94	15,593.42	13,944.62	-	79.9%	-10.6%	-
August	8,334.70	14,773.29	13,124.22	-	77.3%	-11.2%	-
September	6,925.04	12,655.05	12,517.77	-	82.7%	-1.1%	-
October	7,316.91	13,434.61	13,135.02	-	83.6%	-2.2%	-
November	6,913.64	11,884.62	11,659.54	-	71.9%	-1.9%	-
December	6,394.01	12,167.80	11,386.29	-	90.3%	-6.4%	-
Total	**$ 86,858.35**	**$154,510.29**	**$139,469.16**	**$59,961.94**			

* Toll rate increase took effect on January 15, 2019.
Represents unaudited monthly revenues, excluding certain additional fees collected by the Authority.
This information is derived from interim reports prepared for management's use. It is prepared on a modified cash basis and has not been audited, nor should it be deemed final.
Source: West Virginia Parkways Authority

The following table shows comparisons of monthly transactions on the Turnpike during calendar years 2018, 2019 and 2020, as well as for the first five months of 2021.

West Virginia Parkways Authority

Historical Monthly Toll Transactions
(in Thousands)

Month	2018	2019	2020	2021	%Change (2019 vs. 2018)	Month over Month %Change (2020 vs. 2019)	%Change (2021 vs. 2020)
January	2,320.28	2,413.63	2,383.35	2,183.32	4.0%	-1.3%	-8.4%
February	2,248.63	2,290.47	2,238.45	1,916.51	1.9%	-2.3%	-14.4%
March	3,046.61	3,073.74	2,378.08	2,784.38	0.9%	-22.6%	17.1%
April	3,050.71	3,104.87	1,481.48	3,012.55	1.8%	-52.3%	103.3%
May	3,318.63	3,320.72	2,293.10	3,221.66	0.1%	-30.9%	40.5%
June	3,675.67	3,601.80	2,955.78	-	-2.0%	-17.9%	-
July	3,824.53	3,797.34	3,210.82	-	-0.7%	-15.4%	-
August	3,586.08	3,523.34	2,959.44	-	-1.7%	-16.0%	-
September	2,945.64	2,953.18	2,769.06	-	0.3%	-6.2%	-
October	3,143.72	3,096.96	2,880.59	-	-1.5%	-7.0%	-
November	3,061.21	2,802.35	2,559.35	-	-8.5%	-8.7%	-
December	2,869.34	2,925.27	2,432.38	-	1.9%	-16.8%	-
TOTAL*	**37,091.08**	**36,903.65**	**30,541.87**	**13,118.43**			

* Totals may not add due to rounding.
This information is derived from interim reports prepared for management's use. It is prepared on a modified cash basis and has not been audited, nor should it be deemed final.
Source: West Virginia Parkways Authority

Management's Discussion and Analysis of Operating Results

Fiscal Year 2021 Year-to-Date Results

During the first nine months of fiscal year 2021, passenger car traffic volume decreased by 10.3% and commercial traffic volume increased by 3.1% compared to the first nine months of fiscal year 2020. The substantial decrease in passenger car traffic is related to the COVID-19 pandemic and the widening project along the Turnpike at Beckley, West Virginia, which has caused local traffic to utilize alternate routes. A significant portion of the local traffic utilizes the Authority's Single Fee Discount Program, which minimizes any negative impact on toll revenues. Toll revenues increased by $1.4 million, or 1.1%, due to strong commercial traffic despite the COVID-19 pandemic. Total operating expenses increased by $2.9 million, or 8.3%, for the first nine months of fiscal year 2021 compared to the first nine months of fiscal year 2020. The increase in total operating expenses is attributable mainly to generally increased activity, extra supplies and materials related to COVID-19 virus prevention, and additional snow and ice removal costs due to harsher winter weather.

Fiscal Year 2020 Results

As a result of the COVID-19 pandemic, in fiscal year 2020, passenger car traffic volume decreased by 14.2% while commercial traffic volume decreased by 4.2% compared to 2019. However, due to the implementation of the new toll rate schedule that took effect on January 15, 2019, toll revenues increased by 18% from fiscal year 2019. Passenger car toll revenues increased by 5.85% and large commercial toll revenues increased by approximately 30% compared to fiscal year 2019. For fiscal year 2020, total operating expenses increased by $3.4 million, or 3.6%, from fiscal year 2019, mainly due to an increase in depreciation expense related to an increase in infrastructure projects placed into service during the fiscal year. Excluding depreciation, operating expenses increased $655,000, or 1.3%, from fiscal year 2019.

Fiscal Year 2019 Results

During fiscal year 2019, passenger car traffic volume decreased 1.5% and large commercial traffic volume increased by 2.7%. Due to increase in toll rates that took effect mid-way through the fiscal year, passenger car toll revenues increased 19.7% and large commercial vehicle toll revenues increased by 47.9% from fiscal year 2018. Total net toll revenues and other recoveries, mostly from toll enforcement collections, increased approximately $35.6 million or 37.4%. For fiscal year 2019, total operating expenses increased $7.1 million or 8.1%. Depreciation expense increased $3.1 million due to the increasing number of infrastructure projects placed into service. Toll collection expenses rose 23.7% due largely to the purchase of supplies, such as *E-ZPass*® transponders, and other costs related to implementation of the Single Fee Discount Program. General and administrative expenses also increased during fiscal year 2019 by 16.4% due mainly to administrative and professional costs associated with the issuance of the Series 2018 Bonds.

Fiscal Year 2018 Results

Passenger car traffic volume decreased 0.6% and large commercial traffic volume increased by 2.8% during fiscal year 2018. Passenger car toll revenues decreased 1.2% and large commercial toll revenues increased by 1.6% during fiscal year 2018. Total net toll revenues and other recoveries increased approximately $2.0 million or 2.2%. For fiscal year 2018, total operating expenses increased 1.3% or $1.1 million, with depreciation expense increasing by $3.3 million, offset in part by a $2.0 million decrease in operating expenses related to a reduction in guardrail replacement and other maintenance expenses.

Fiscal Year 2017 Results

During fiscal year 2017, passenger car traffic volume increased by 0.8% and large commercial traffic volume increased by 2.4% compared to fiscal year 2016. Passenger car toll revenues increased by 0.4% and large commercial toll revenues increased by 1.5% compared to fiscal year 2016. Total net toll revenues including an increase in the utilization of available discount programs and results of toll enforcement collections programs resulted in a decrease in toll revenue of approximately $840,000 or 0.9%, from fiscal year 2016. For fiscal year 2017, total operating expenses decreased 0.5% or $446,000 from fiscal year 2016. Excluding depreciation, operating expenses decreased $835,000 or 1.71% from fiscal year 2016. Decreases in expenditures related to salt, damage claims and recoveries, guardrail replacement, and other maintenance expenses.

The following table sets forth the Authority's historical revenues, expenses and debt service coverage for fiscal years 2016 to 2020.

West Virginia Parkways Authority

Historical Revenue, Expenditure and Debt Service Coverage
Dollars in Thousands

	2016	2017	2018	2019	2020
Pledged Revenues					
Toll Revenue	$93,223	$92,436	$95,215	$130,910	$154,468
				1,905	2,187
Total Pledged Revenues	**93,223**	**92,436**	**95,215**	**132,815**	**156,655**
Expenses Paid from Pledged Revenues					
Maintenance	22,090	22,515	19,726	22,418	24,113
Toll	9,566	9,857	9,369	14,143	13,875
Traffic Control (State Police)	3,172	3,231	2,888	3,967	4,074
Administration	4,295	6,018	5,466	3,421	1,966
Total Expenses Paid from Pledged Revenues	**39,123**	**41,621**	**37,449**	**43,949**	**44,028**
Net Revenues Available for Debt Service	**54,100**	**50,815**	**57,766**	**88,866**	**112,627**
Senior Lien Debt Service Requirements					
Senior Lien Debt Service	10,755	10,760	10,140	9,025	10,280
Total Senior Lien Debt Service Requirements	**10,755**	**10,760**	**10,140**	**9,025**	**10,280**
Net Revenues Available after Debt Service	**43,345**	**40,055**	**47,626**	**79,841**	**102,347**
Renewal and Replacement Fund					
Projected Annual Budget Amounts	13,952	12,553	13,184	16,988	18,800
Remaining Cash Flow After Debt Service and R&R	**$29,393**	**$27,502**	**$34,442**	**$62,853**	**$83,547**
Debt Service Coverage Ratio					
Senior Lien Debt Service Coverage	**5.03**	**4.72**	**5.70**	**9.85**	**10.96**
Senior Lien Debt Service and R&R Coverage Ratio	**2.19**	**2.18**	**2.48**	**3.42**	**3.87**

Source: West Virginia Parkways Authority.

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The below table shows a comparison of the Authority's revenues, expenses and debt service coverage for the first nine months of fiscal years 2020 and 2021 (unaudited).

West Virginia Parkways Authority

Historical Revenue, Expenditure and Debt Service Coverage (for Previously Completed 9 Months)
Dollars in Thousands

	Nine Months Ended:	
	3/31/2020	**3/31/2021**
Pledged Revenues		
Flat Fee Revenues	$531	$634
Toll Revenue	120,056	121,482
Other Operating Revenues or Other Adjustments	2,161	775
Total Pledged Revenues	**122,748**	**122,891**
Expenses Paid from Pledged Revenues		
Maintenance	15,054	16,017
Toll Collection	10,688	11,669
Traffic Control (including State Police and Communication)	3,127	3,534
General and Administration	5,646	6,164
Total Expenses Paid from Pledged Revenues	**34,515**	**37,384**
Net Revenues Available for Debt Service	**88,233**	**85,507**
Senior Lien Debt Service Requirements		
Exisiting Debt Service*	7,710	8,068
Total Senior Lien Debt Service Requirements	**7,710**	**8,068**
Net Revenues Available after Debt Service	**80,523**	**77,439**
Renewal and Replacement Fund		
Projected Annual Budget Amounts	12,077	14,103
Remaining Cash Flow After Debt Service and R&R	**$68,446**	**$63,336**
Debt Service Coverage Ratio		
Senior Lien Debt Service Coverage	**11.44**	**10.60**
Senior Lien Debt Service and R&R Coverage Ratio	**4.46**	**3.86**

*Debt service represents pro-rata portion of debt service due during the first 9 months of each fiscal year shown.
Source: West Virginia Parkways Authority

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Personnel, Retirement Plan and Other Post-Employment Benefits

As of June 30, 2020, the Authority had 368 permanent employees and 52 temporary employees assigned to the Turnpike. Additionally, as of June 30, 2020, there were 30 members of the State Police and the West Virginia Public Service Commission assigned to the Turnpike. As of June 30, 2020, Tamarack, which is owned and operated by the Authority, had 105 employees.

All full-time employees of the Authority are eligible to participate in the State of West Virginia Public Employees' Retirement Plan (PERS), a cost-sharing multiple-employer public employee retirement system. Benefits are provided through PERS using a two-tiered system. PERS provides retirement, disability and death benefits to plan members and beneficiaries. The West Virginia Consolidated Public Retirement Board issues a publicly available financial report that includes financial statements and required supplementary information for PERS. The most recent report is available at https://www.wvretirement.com/Forms/2020-CAFR.pdf

In accordance with State law, the Authority is currently required to contribute 10% of employee compensation for fiscal year 2021 to PERS. The Authority's total contributions to PERS for fiscal year 2020 was $1,701,000. As of June 30, 2020, the Authority reported net pension liablity of $2,294,000. For more information on the Authority's pension liability, see Note 7– Pension Plan, set forth in its Comprehensive Annual Financial Report set forth herein in "APPENDIX B – FINANCIAL STATEMENTS OF THE AUTHORITY."

The Authority participates in the West Virginia Other Post-employment Benefit Plan (OPEB Plan) of the West Virginia Retiree Health Benefit Trust Fund (RHBT), a cost-sharing multiple-employer defined benefit post-employment healthcare plan administered by the West Virginia Public Employees Insurance Agency. The OPEB Plan provides retiree post-employment health care benefits for participating state and local government employers.

GASB Statement No. 75, *Accouting and Financial Reporting for Postemployment Benefits Other Than Pensions* was adopted by the Authority as of July 1, 2017. This statement reclassified some items previously reported as expenses as deferred outflows of resources and deferred inflows of resources. This staetment also changed the valuation methodology used to record the net OPEB liability. The Authority's net OPEB liablity was $6,785,000, $8,725,000 and $9,253,000 for the fiscal years ended June 30, 2020, 2019 and 2018, respectivly. The Authority's annual statutorily required contributions were $763,000, $880,000 and $904,000 for fiscal years ended June 30, 2020, 2019 and 2018, respectively. For more information on the Authority's OPEB liability, see Note 8 – Other Post-Employment Benefits in its Comprehensive Annual Financial Report set forth herein in "APPENDIX B – FINANCIAL STATEMENTS OF THE AUTHORITY."

SUMMARY OF PROJECTED OPERATIONS

Summary of Consulting Engineers' Report

The Authority's Consulting Engineers, HNTB Corporation, prepared a report issued on June 2, 2021, including its recommendations based on a study of the Turnpike's needs for estimated operating expenses, renewal and replacement requirements and capital costs (the "***Consulting Engineers' Report***"). See "APPENDIX E – CONSULTING ENGINEER'S REPORT." The Consulting Engineers' Report provides an assessment of the current physical condition of the Turnpike, the financial condition of the Authority, current projects in progress on the Turnpike and the adequacy or inadequacy of the current maintenance programs and capital needs.

The Consulting Engineers develop a ten-year program to address certain capital needs of the Turnpike including paving needs, bridge approaches, embankments and cuts, drainage facilities, guardrail and fencing, bridge maintenance, toll collection and recording system and other miscellaneous operations and maintenance needs such as, among other things, signage, lighting, pavement markings, toll plazas, rest areas, travel plazas, tourist information and welcome centers. They also prepare a thirty-year estimate of operating expenses incurred by the Authority to operate, maintain and service the Turnpike and carry out its other duties.

Operating Expenses. Based on its review of all relevant information, and certain assumptions included in their report, the Consulting Engineers estimate that the Authority will have operating expenses of approximately $49.8 million in fiscal year 2022, increasing to approximately $59.5 million in fiscal year 2031.

Renewal and Replacement ("R&R") Costs. The Consulting Engineers also estimated in their report, based on information reviewed by them and certain assumptions set forth in their report, that the Authority's renewal and replacement requirements will be approximately $20.6 million in fiscal year 2022, increasing to approximately $31.2 million in fiscal year 2031.

Capital Needs. The Consulting Engineers' Report also provides recommendations on projected capital needs over the 10-year forecast period. In their report, the Consulting Engineers' project that the Authority will need to fund capital needs of approximately $54.0 million in fiscal year 2022, up from approximately $28.7 million in fiscal year 2021, as the Authority begins several major capital projects including upgrades to its toll collection system, painting of the Yeager Bridges and replacing the Beckley Travel Plaza. The Authority's capital needs vary from year to year. See "THE WEST VIRGINIA TURNPIKE – Capital Improvement Plan" herein.

Summary of Traffic Consultant's Report

CDM Smith was retained by the Authority to conduct a detailed traffic and toll revenue projection study. On April 23, 2021, CDM Smith issued its Traffic and Revenue Study to produce estimates of transactions and toll revenues through 2050. The Traffic and Revenue Study was revised to account for negative impacts on transactions and toll revenues, and corresponding recovery due to the COVID-19 pandemic. Table 8 from the Traffic and Revenue Study provides a summary of CDM Smith's transactions and toll revenue projections through 2050.

CDM Smith estimates that annual transactions will grow from about 36.8 million in 2019 to 41.8 million in 2050. The overall compound annual growth rate over the forecasted period is 0.42% per year, with the commercial vehicle transactions growing slightly faster than overall traffic at 0.68%. Transaction growth rates are expected to be the highest in the near-term and taper off over time primarily due to the trend in the econometric forecast that shows decreasing growth over time, with some fluctuations due to toll rate and Single Fee Discount Program fee escalations. The share of commercial vehicle transactions is expected to increase from 23.5% in 2019 to 25.5% in 2050.

CDM Smith projects that approximately 21% of transactions in the near term will be from customers that opted for the Single Fee Discount Program early enrollment and those expected to join the program during the balance of 2021. In 2022, CDM Smith projects that annual Single Fee Discount Program transactions will decrease to approximately 17% of all transactions since the early enrollment option coverage ends and fewer customers are expected to choose to stay in the program at the cost of $26.25 ($25.00 plus 5% escalation). Customers leaving this program in 2022 also contribute to increasing tolled transactions. Starting in 2023, the Single Fee Discount Program share of transactions progressively increases to approximately 23% by 2050, reflecting the attractiveness of the discount despite the escalation every three years of the annual fee.

The Authority's annual toll revenues are projected to increase from about $156 million in calendar year 2019 to $298 million in calendar year 2050. The overall annual growth rate over the forecast period is 2.12%, with commercial vehicle revenue growing slightly faster than overall revenue at 2.32%. The share of commercial vehicle revenue is expected to increase from 56% in 2019 to 60% in 2050.

In 2022, CDM Smith projects that the Authority will experience a noticeable increase in toll revenues when some existing early enrollees in the Single Fee Discount Program elect not to re-enroll at the higher annual fee of $26.25. Those customers will then have to pay the higher cash toll rates to travel on the Turnpike. Also, toll revenue is predicted to increase in 2022 due to escalating toll rates for commercial vehicles.

From 2023 to 2050, annual growth in total toll revenue is expected to decrease, consistent with the transaction trend.

For a more detailed discussion of the assumptions and methodology used by CDM Smith in connection with its forecast summarized above, see "APPENDIX D – TRAFFIC AND REVENUE STUDY" herein.

Projected Operating Results

The table on the following page shows estimated annual revenues, expenses and debt service coverage for the fiscal years ending 2021 through 2031. Reference is made to the Traffic and Revenue Study and the Consulting Engineers' Report for the data and assumptions on which the projections of the Authority's revenues are based. Both studies should be read in their entirety for a description of the specific and overall assumptions made in making these projections. See "OUTSTANDING BONDS AND ANNUAL DEBT SERVICE REQUIREMENTS," "APPENDIX D – TRAFFIC AND REVENUE STUDY" and "APPENDIX E – CONSULTING ENGINEER'S REPORT" herein.

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West Virginia Parkways Authority

Projected Revenue, Expenditure and Debt Service Coverage
Dollars in Thousands

	2021 (Budget)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Pledged Revenues											
Flat Fee Revenues	$305	$1,565	$3,015	$3,190	$3,250	$3,315	$3,440	$3,600	$3,660	$3,685	$3,880
Toll Revenue	148,850	163,175	170,230	174,095	177,770	181,325	185,500	190,100	193,970	197,645	202,360
Other Operating Revenues or Other Adjustments	775	783	791	798	806	815	823	831	839	848	856
Total Pledged Revenues	**149,930**	**165,523**	**174,036**	**178,083**	**181,826**	**185,455**	**189,763**	**194,531**	**198,469**	**202,178**	**207,096**
Expenses Paid from Pledged Revenues											
Maintenance	19,225	20,523	20,933	21,352	21,779	22,215	22,659	23,112	23,574	24,046	24,527
Toll Collection	15,025	15,881	16,199	16,523	16,853	17,190	17,534	17,885	18,242	18,607	18,979
Traffic Control (including State Police and Communica	4,726	4,758	4,853	4,950	5,049	5,150	5,253	5,358	5,465	5,575	5,686
General and Administration	7,869	8,654	8,827	9,004	9,184	9,367	9,555	9,746	9,941	10,140	10,342
Total Expenses Paid from Pledged Revenues	**46,845**	**49,816**	**50,812**	**51,829**	**52,865**	**53,922**	**55,001**	**56,101**	**57,223**	**58,367**	**59,535**
Net Revenues Available for Debt Service	**103,085**	**115,707**	**123,223**	**126,255**	**128,961**	**131,532**	**134,762**	**138,430**	**141,246**	**143,810**	**147,561**
Senior Lien Debt Service Requirements											
Series 2018 A Net Debt Service	10,282	10,283	10,282	10,283	10,282	10,283	10,280	10,283	10,282	10,282	10,281
Series 2021 Net Debt Service		20,481	20,477	20,479	20,477	20,481	20,480	20,478	20,480	20,480	20,477
Total Senior Lien Debt Service Requirements	**10,282**	**30,764**	**30,759**	**30,762**	**30,759**	**30,764**	**30,760**	**30,761**	**30,762**	**30,762**	**30,758**
Net Revenues Available after Debt Service	**92,803**	**84,943**	**92,465**	**95,493**	**98,202**	**100,768**	**104,002**	**107,669**	**110,484**	**113,049**	**116,804**
Renewal and Replacement Fund											
Projected Annual Budget Amounts	20,264	20,571	21,583	21,763	22,836	23,028	24,036	24,235	26,972	27,278	31,222
Remaining Cash Flow After Debt Service and R&R	**$72,539**	**$64,372**	**$70,882**	**$73,730**	**$75,366**	**$77,741**	**$79,966**	**$83,434**	**$83,512**	**$85,771**	**$85,582**
Capital Fund Balance - Beginning of Year	106,591	150,418	160,769	157,051	186,550	215,349	239,843	276,471	305,163	349,818	395,504
Remaining Cash Available for Capital	72,539	64,372	70,882	73,730	75,366	77,741	79,966	83,434	83,512	85,771	85,582
Deposit from Bond Proceeds											
On-Turnpike Traditional Capital Costs (PAYGO)	(14,312)	(20,621)	(34,900)	(14,630)	(12,667)	(13,047)	(13,439)	(25,842)	(14,257)	(14,685)	(15,125)
On-Turnpike Major Capital Needs (PAYGO)	(14,400)	(33,400)	(39,700)	(29,600)	(33,900)	(40,200)	(29,900)	(28,900)	(24,600)	(25,400)	(26,100)
Capital Fund Balance - End of Year	**150,418**	**160,769**	**157,051**	**186,550**	**215,349**	**239,843**	**276,471**	**305,163**	**349,818**	**395,504**	**439,861**
Debt Service Coverage Ratio											
Senior Lien Debt Service Coverage	**10.03**	**3.76**	**4.01**	**4.10**	**4.19**	**4.28**	**4.38**	**4.50**	**4.59**	**4.67**	**4.80**
Senior Lien Debt Service and R&R Coverage Ratio	**3.37**	**2.25**	**2.35**	**2.40**	**2.41**	**2.45**	**2.46**	**2.52**	**2.45**	**2.48**	**2.38**

Revenue based on projections by CDM Smith. O&M, R&R, and Capital Cost Estimates based on projections by HNTB Corporation. See “APPENDIX D – TRAFFIC AND REVENUE STUDY” and “APPENDIX E – CONSULTING ENGINEER’S REPORT.”
Source: West Virginia Parkways Authority.

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Pro-Forma Debt Service Coverage

The table below provides projected debt service coverage after the issuance of the Series 2021 Bonds.

(In Thousands)

Year Ending June 30	Projected Gross Toll Road Revenues(1)	Projected Operating Expenses(2)	Projected Net Toll Road Revenues	Senior Lien Bonds Debt Service(3)	Projected Senior Lien Bonds Debt Service Coverage
2022	$165,523	$49,816	$115,707	$30,764	3.8x
2023	174,036	50,812	123,223	30,759	4.0x
2024	178,083	51,829	126,255	30,762	4.1x
2025	181,826	52,865	128,961	30,759	4.2x
2026	185,455	53,922	131,532	30,763	4.3x
2027	189,763	55,001	134,762	30,760	4.4x
2028	194,531	56,101	138,430	30,762	4.5x
2029	198,469	57,223	141,246	30,763	4.6x
2030	202,178	58,367	143,810	30,762	4.7x
2031	207,096	59,535	147,561	30,758	4.8x
2032	212,085	60,725	151,359	30,760	4.9x
2033	215,888	61,940	153,948	30,760	5.0x
2034	220,557	63,179	157,378	30,762	5.1x
2035	225,341	64,442	160,899	30,760	5.2x
2036	229,435	65,731	163,704	30,762	5.3x
2037	234,309	67,046	167,263	30,761	5.4x
2038	239,063	68,387	170,676	30,756	5.5x
2039	243,117	69,754	173,363	30,757	5.6x
2040	247,906	71,150	176,757	30,759	5.7x
2041	252,681	72,573	180,108	30,760	5.9x
2042	256,840	74,024	182,816	30,761	5.9x
2043	261,795	75,504	186,290	30,760	6.1x
2044	266,819	77,015	189,805	30,757	6.2x
2045	271,134	78,555	192,579	30,759	6.3x
2046	276,049	80,126	195,923	30,760	6.4x
2047	281,379	81,728	199,650	30,760	6.5x
2048	286,119	83,363	202,756	30,760	6.6x
2049	291,164	85,030	206,134	20,478	10.1x
2050	296,594	86,731	209,863	20,480	10.2x
2051	301,795	88,465	213,330	20,478	10.4x
Total	**$6,987,029**	**$2,020,939**	**$4,966,089**	**$891,960**	

Source: West Virginia Parkways Authority.
(1) As projected by CDM Smith Inc.
(2) As projected by HNTB Corporation.
(3) Includes Series 2018 Bonds and Series 2021 Bonds.

Actual operating results and debt service coverage may vary from the projections in the tables shown above due to several factors. These factors include, but are not limited to, fluctuating economic conditions, revised traffic and revenue projections, and other factors which may impact future Net Toll Road Revenues and debt issuance. Accordingly, there may be material variances between the above referenced projections and actual results during the forecast periods shown.

RISK FACTORS

Purchase of the Series 2021 Bonds involves certain investment risks, which are discussed throughout this Official Statement. Certain of these risks are described below. Accordingly, each prospective purchaser of the Series 2021 Bonds must make an independent evaluation of all of the information presented in this Official Statement, including the risk factors described below, in order to make an informed investment decision. This discussion of certain risks is not intended to be comprehensive or exhaustive. The order in which these risks are presented is not intended to reflect either the likelihood that a particular event will occur or the relative significance of such an event. These risk factors should be read in conjunction with this entire Official Statement including the Appendices hereto. There may be other risks associated with an investment in the Series 2021 Bonds in addition to those set forth in this Official Statement.

Traffic and Revenue Study

As the Traffic and Revenue Consultant for the Authority, CDM Smith was requested by the Authority to prepare a traffic and toll revenue projection study presenting its analyses and findings relative to projected traffic and revenues with respect to the Turnpike based on its current toll rate schedule and Single Fee Discount Program, as described in "THE WEST VIRGINIA TURNPIKE – Toll Rates" herein. See also "APPENDIX D – TRAFFIC AND REVENUE STUDY." The revenue forecasts contained in the Traffic and Revenue Study are based upon certain assumptions and limits set forth or incorporated therein which should be reviewed by potential investors to assure an understanding of some of the risks inherent in such estimates and projections. While CDM Smith used currently-accepted professional practices and procedures in the development of its estimates, differences between forecasted and actual results may occur as a result of future events or circumstances beyond the control of CDM Smith. The estimates and projections in the Traffic and Revenue Study may not be indicative of actual or future values and are subject to substantial uncertainty. CDM Smith makes no guarantee or warranty of any estimate or projection contained in its study, which may be affected by future developments which cannot be predicted with certainty. Further, the estimates, projections and assumptions in the Traffic and Revenue Study are inherently subject to significant economic and competitive uncertainties and contingencies, many of which are beyond the control of the Authority. Failure to achieve or realize any of the assumptions listed in the Traffic and Revenue Study may have a materially adverse effect upon the revenues actually realized by the Authority.

Consulting Engineers' Report

The Authority's Consulting Engineers, HNTB, prepare a report each year which contains its 10-year funding recommendations for the Authority's operating expenses, renewal and replacement requirements and future capital needs. The Consulting Engineers' projections of the Authority's future operating expenses, renewal and replacement requirements and capital needs are based on data currently available and current construction and cost of living trends. However, differences between forecasted and actual results may occur as a result of future events or circumstances beyond the control of the Authority or HNTB, including increases in labor and materials costs or changes in construction bidding methods. HNTB makes no guarantee or warranty of any estimate or projection contained in its annual report. Unexpected increases in the Authority's operating expenses could reduce its net revenues available to pay debt service on the Series 2021 Bonds, while increases in its renewal and replacement costs or capital costs could have a negative impact on the Authority's ability to maintain the Turnpike in good repair. See "APPENDIX E – CONSULTING ENGINEER'S REPORT."

General Factors Affecting Authority Revenues

The actual amount of future toll revenues collected by the Authority depends on a number of factors including, but not limited to, the toll rates charged by the Authority, economic conditions in West Virginia and its surrounding states, adverse weather conditions, the price and availability of motor fuel, events effecting motor vehicle travel, and the level and composition of the traffic on the Turnpike, among others. Many of these factors are beyond the control of the Authority and should they occur, could have a negative impact on its revenues. Further, some operators of bridge and toll facilities have encountered difficulty at times during recent years in obtaining adequate and affordable insurance protection for such facilities. Also, the development of any mass transportation facilities or freeways providing transportation alternatives to the Authority's facilities could have a negative impact on the Authority's revenues. Finally, although the Authority has no knowledge of any facilities contemplated to be constructed that would compete with the Authority's facilities, there can be no assurance that a bridge, tunnel or road facility competing with the Authority's facilities will not be opened in the future.

Additionally, as discussed above, the estimates and projections in the reports of both the Traffic and Revenue Consultant and the Consulting Engineers contain estimates and projections that are based largely on factors beyond the control of the Authority and such estimates and projections, if not achieved, could have a negative impact on the Authority's revenues.

COVID-19 Pandemic's Impact on Authority Revenues

Federal, state and local measures to control the COVID-19 pandemic, including Governor Justice's executive orders, have altered the behavior of businesses and people in a manner that have negatively impacted the number of monthly toll transactions occurring on the Turnpike and its toll revenues, which have been offset by the increase in toll rates that took effect on January 15, 2019. See "SUMMARY OF HISTORICAL OPERATIONS - Recent Developments Related to the COVID-19 Pandemic" herein. The extent to which the COVID-19 pandemic may impact the Authority's future operations and financial condition will depend on future developments, including but not limited to, continued job losses and high levels of unemployment which may deter motorists from traveling, the timeframe for mass distribution of vaccines to combat the disease, the efficacy of the vaccines including against COVID-19 variants, and possible future waves of the virus, which are uncertain and cannot be predicted with confidence.

Decline in Toll Revenues

The information provided with respect to toll revenues collected by the Authority is based on historical data. The amount of future toll revenues to be collected by the Authority depends upon a number of factors, some of which are not in the control of the Authority. Some of these factors include a decline in traffic on the Turnpike due to the COVID-19 pandemic or future outbreaks or pandemics, general economic conditions, severe weather conditions, diversion of traffic to alternative non-toll routes, increased fuel costs, availability of alternate forms of travel and shipping, and government regulations, such as Clean Air Act requirements, increased mileage standards or higher fuel taxes, which could significantly restrict motor vehicle use. Although the Authority has covenanted in the Indenture to establish, charge and collect tolls for the privilege of traveling on the Turnpike at rates sufficient in each fiscal year to meet Operation and Maintenance Expenses and produce Net Toll Road Revenues of at least (i) 125% of the Annual Debt Service with respect to the Series 2021 Bonds and all other Outstanding Senior Lien Bonds issued under the Indenture, and (ii) 100% of the sum of (a) Annual Debt Service with respect to all Outstanding Bonds issued under the Indenture, (b) the amounts, if any, necessary to restore the amount on deposit in any Debt Service Reserve Fund to the applicable Series, as applicable, aggregate or composite Debt Service Reserve Requirement and (c) the Renewal and Replacement Reserve Fund Requirement, there can be no assurance that the traffic on the Turnpike will continue to be sufficient for the Authority to generate the necessary revenues to meet its obligations under the Indenture.

Forward-Looking Statements

The statements contained in this Official Statement, and in other information provided by the Authority, that are not purely historical, are forward-looking statements, including statements regarding the Authority's expectations, plans or strategies regarding the future and the projections in the reports of the Traffic and Revenue Consultant and the Consulting Engineers included in Appendices D and E, respectively, hereto. All forward-looking statements included in this Official Statement and the appendices hereto are based on information available to the Authority on the date hereof, and the Authority assumes no obligation to update any such forward-looking statements.

The forward-looking statements herein are necessarily based on various assumptions and estimates that are inherently subject to numerous risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and, therefore, there can be no assurance that the forward-looking statements included in this Official Statement will prove to be accurate.

Technological and Other Risk Factors

The Authority is dependent on technology to conduct general business operations, including toll collection and customer account services which are dependent on the ability to process, record and monitor a large number of electronic transactions generated by equipment located through the Turnpike system which record transponder and license plate information on vehicles. See "THE WEST VIRGINIA TURNPIKE – Tolling Collection" herein. If the Authority's financial, accounting, or other data processing systems fail or have other significant shortcomings, the Authority could be materially adversely affected. The Authority is similarly dependent on its employees and contractors. It could be materially adversely affected if one or more of its employees/contractors cause a significant operational breakdown or failure, either as a result of human error or purposeful sabotage or fraudulent manipulation of one or more systems. In addition, as the Authority changes processes or introduces new services, the Authority may not fully appreciate or identify new operational risks that may arise from such changes. Any of these occurrences could diminish the Authority's ability to operate or result in potential liability.

The Authority may be subject to disruptions of its operating systems arising from events that are wholly or partially beyond the Authority's control, which may include, for example, security breaches; electrical or telecommunications outages; failures of computer services or other damage to the Authority's property or assets; natural disasters; or events arising from local or larger scale political events, including terrorist acts. While the Authority believes that its current resiliency plans are both sufficient and adequate, there can be no assurance that such plans will fully mitigate all potential business continuity risks. Any failures or disruptions of the Authority's systems or operations could cause reputational damage and/or give rise to losses or liability that may require the Authority to expend significant resources to correct the failure or disruption, as well as expose the Authority to litigation or losses not covered by insurance.

Computer hacking, cyber-attacks or other malicious activities could disrupt services. Further, security breaches such as leakage or loss of confidential or proprietary data and failure or distribution of information technology systems could materially and adversely affect the Authority's reputation, which could lead to significant outlays and decreased performance that insurance may not cover.

Although the Authority regularly upgrades its systems and processes that are designed to protect the security of its computer systems, software, networks and other technology assets and the confidentiality, integrity and availability of information belonging to customers, there is no assurance that all of these security measures will provide absolute security. These risks may increase in the future as the Authority continues to increase its mobile-payment and other internet-based applications both internally and externally.

In addition, the Authority is also a member of the *E-ZPass*® Group, a consortium of toll collection agencies from various states across the country that relies on technology to collect tolls, which technology is subject to similar risks. See "THE WEST VIRGINIA TURNPIKE – Tolling Collection" herein.

Additional factors which may affect the financial condition of the Authority and the future operation of the Turnpike include the following:

- Increased and/or unanticipated costs of operating the Turnpike;
- Complete or partial destruction or temporary closure of the Turnpike for extended periods of time; and
- Increased pension costs, unfunded healthcare and other non-pension postemployment benefits.

Ratings of the Series 2021 Bonds Could be Lowered or Withdrawn

S&P and Fitch have assigned credit ratings to the Series 2021 Bonds. The ratings of the Series 2021 Bonds are not a recommendation to purchase, hold or sell the Series 2021 Bonds, and the ratings do not comment on the market price or suitability of the Series 2021 Bonds for a particular investor. The ratings of the Series 2021 Bonds may not remain for any given period of time and may be lowered or withdrawn depending on, among other things, each rating agency's assessment of the Authority's financial strength. See "RATINGS" herein.

Certain Matters Relating to Enforceability of Obligations

The remedies available to owners of the Series 2021 Bonds upon an event of default under the Indenture are in many respects dependent upon regulatory and judicial actions which often are subject to discretion and delay. Under existing constitutional and statutory law and judicial decisions, the remedies specified by the Indenture may not be readily available or may be limited. The various legal opinions to be delivered concurrently with the issuance of the Series 2021 Bonds will be qualified, as to the enforceability of the various legal instruments, by limitations imposed by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors generally.

Bankruptcy Risk

The rights and remedies of owners of Series 2021 Bonds could be limited by the provisions of the Federal Bankruptcy Code, as now or hereafter enacted (the "***Bankruptcy Code***") or by other law or legal or equitable principles which may affect the enforcement of creditors' rights. Chapter 9 of the Bankruptcy Code permits, under prescribed circumstances, a political subdivision or public agency or instrumentality of a state, such as the Authority, to commence a voluntary bankruptcy proceeding and to file a plan of adjustment in the repayment of its debts, if such entity is generally not paying its debts as they become due. Under the Bankruptcy Code, an involuntary petition cannot be filed against a political subdivision, public agency or instrumentality of a state.

In order to proceed under Chapter 9 of the Bankruptcy Code, state law must authorize the political subdivision, public agency or instrumentality to file a petition under the Bankruptcy Code. The Act currently authorizes the Authority to file a petition under the Bankruptcy Code. In any bankruptcy of the Authority, if its toll revenues are determined to be “special revenues” under the Bankruptcy Code, then such revenues collected after the date of the bankruptcy filing should be subject to the Indenture. “Special revenues” are defined to include, among other things, receipts derived from the ownership or operation of projects or systems that are intended to be primarily used to provide transportation services. While the Authority’s toll revenues appear to satisfy this definition, if a court were to find otherwise, the lien on toll revenues under the Indenture would no longer be effective. If the Authority files for bankruptcy protection, the holders of the Series 2021 Bonds may be prohibited from taking any action to collect any amounts from the Authority or to enforce any of its obligations unless permission is granted by the court. These same restrictions may also prevent the Trustee from making payments to the holders of the Series 2021 Bonds from funds in its possession. The Authority, as a debtor in bankruptcy, may be able to borrow additional money that is secured by a lien on any of its property (including its toll revenues) which could have priority over the lien of the Indenture, or cause some toll revenues to be released to it, free and clear of the lien of the Indenture, in each case provide that the bankruptcy court determines that the rights of the Trustee and the holders of the Series 2021 Bonds will be adequately protected. The Authority may also be able, without the consent and over the objection of the Trustee and the holders of the Series 2021 Bonds, to alter the priority, interest rate, payment terms, collateral, maturity dates, payment sources, covenants and other terms and provisions of the Indenture and the Series 2021 Bonds, provided that the bankruptcy court determines that such modifications are fair and equitable.

There could be delays in payments on the Series 2021 Bonds while the bankruptcy court considers any of these issues. There may be other possible effects of a bankruptcy of the Authority that could result in delays or reductions in the payments on the Series 2021 Bonds, or result in losses to the holders thereof, or could have an adverse effect on the liquidity and value of the Series 2021 Bonds.

Changes in Federal Tax Law

Current and future legislative proposals, if enacted into law, could cause some or all of the interest on the Series 2021 Bonds to be subject, directly or indirectly, to federal income taxation, or to be subject to or not be exempted from state income taxation, or otherwise prevent the owners of the Series 2021 Bonds from realizing the full current benefit of the tax status of such interest. The introduction and/or enactment of any such legislative proposals may also affect the market price for, or marketability of, the Series 2021 Bonds. Prospective purchasers of the Series 2021 Bonds should consult their own tax advisors regarding any pending or proposed purchasers of the Series 2021 Bonds should consult their own tax advisors regarding any pending or proposed federal tax legislation, as to with Bond Counsel will express no opinion. See “TAX MATTERS” herein.

Legislative Action

Legislation is introduced from time to time in the State Legislature which, if adopted, may affect the Authority and/or the Turnpike. The Authority cannot predict whether or not these bills will be enacted into law or how such legislation may affect the Authority and its ability to pay debt service on the Series 2021 Bonds.

INDEPENDENT AUDITORS’ REPORT

The audited financial statements of the Authority for the fiscal years ended June 30, 2020 and 2019, included in APPENDIX B to this Official Statement have been audited by Suttle & Stalnaker, PLLC, Independent Auditors, for the periods stated in their report, as stated in their report. The independent auditors have reviewed this Official Statement and have given the Authority consent to attach the general purpose financial statements of the Authority for the fiscal years ended June 30, 2020 and June 30, 2019 and the related independent auditors’ reports as APPENDIX B to this Official Statement. The independent auditors performed no procedures relating to the information in this Official Statement and are therefore not associated with the issuance of the Series 2021 Bonds.

STATE OF WEST VIRGINIA NOT LIABLE ON THE SENIOR LIEN BONDS

The Series 2021 Bonds are obligations of the Authority payable solely from the Trust Estate. The Series 2021 Bonds shall not be deemed to be a debt or liability of the State or any political subdivision thereof or a pledge of the faith, credit or taxing power of the State or of any such subdivision, and are payable solely from the Trust estate. The Authority has no taxing power.

LITIGATION

There is no pending litigation of any nature restraining or enjoining or seeking to restrain or enjoin the issuance, sale or delivery of the Series 2021 Bonds, or in any manner contesting or affecting the validity of the Series 2021 Bonds, or the proceedings taken with respect to the authorization, issuance and sale thereof.

From time to time, the Authority is a defendant in legal proceedings pertaining to matters incidental to its operations. Currently, there is one case pending against the Authority, filed against the Authority on July 30, 2020, after completion of the fiscal year 2021 audit. Specifically, the plaintiff, Blazine Monaco, filed a complaint seeking certification for a class action against the Authority in the United States District Court for the Southern District of West Virginia (the "***District Court***"), alleging that the Authority is not legally authorized by State law to impose administrative fees in connection with the collection of unpaid tolls related to travel along the Turnpike. While the District Court dismissed the plaintiff's complaint for failure to state a claim upon which relief can be granted, the plaintiff has appealed the case to the United States Court of Appeals for the Fourth Circuit, and such appeal is currently pending.

LEGAL MATTERS

The authorization and issuance of the Series 2021 Bonds are subject to the approval of legality by Bowles Rice LLP, Charleston, West Virginia, Bond Counsel. Bond Counsel will render opinions in substantially the same form set forth in "APPENDIX C – FORM OF OPINION OF BOND COUNSEL" to this Official Statement. Certain legal matters will be passed upon for the Authority by its counsel, Abrams & Byron, Beckley, West Virginia, and for the Underwriters by their counsel, Jackson Kelly PLLC, Charleston, West Virginia. Certain legal matters will be passed upon by Spilman Thomas & Battle, PLLC, Charleston, West Virginia, as disclosure counsel to the Authority.

TAX MATTERS

General

The following discussion of "Tax Matters" is a brief discussion of certain income tax matters with respect to the Series 2021 Bonds under existing applicable law. It does not purport to deal with all aspects of taxation that may be relevant to the owner of a bond. Prospective investors, particularly those who may be subject to special rules, are advised to consult their own tax advisors regarding the tax consequences of owning and disposing of the Series 2021 Bonds. The following discussion is not binding on the Internal Revenue Service (the "***IRS***"), any state or municipal tax authority, or any court. It represents Bond Counsel's legal judgment as to the excludability of interest on the Series 2021 Bonds from gross income for federal income tax purposes, but is not a guarantee of that conclusion.

Federal Income Tax Exemption of the Series 2021 Bonds

In the opinion of Bowles Rice LLP, Bond Counsel, under existing laws, regulations, rules and published rulings and judicial decisions of the United States of America, as presently written and applied, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 2021 Bonds is excludable from gross income of the owners thereof for federal income tax purposes pursuant to Section 103 of the Internal Revenue Code of 1986, as amended (the "***Code***"), and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals, upon the conditions and subject to the limitations set forth herein. A complete copy of the opinion of Bond Counsel for the Series 2021 Bonds is set forth in "APPENDIX C – FORM OF OPINION OF BOND COUNSEL" herein.

Assumed Compliance with Certain Covenants and Federal Tax Requirements

The opinion on federal tax matters with respect to the Series 2021 Bonds is based on the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the Authority contained in the transcript of proceedings and which are intended to evidence and assure the foregoing, including that the Series 2021 Bonds are and will remain obligations the interest on which is excludable from gross income for federal income tax purposes. The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Series 2021 Bonds. The Authority has covenanted to comply with certain restrictions designed to ensure that interest on the Series 2021 Bonds will not be included in federal gross income. Failure to comply with these covenants may result in interest on the Series 2021 Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the Series 2021 Bonds. The opinion of Bond Counsel assumes compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring) after the date of issuance of the Series 2021 Bonds may adversely affect the value of, or the tax status of interest on, the Series 2021 Bonds. Further, no assurance can be given that pending or future legislation or amendments to the Code, if enacted into law, or any proposed legislation or amendments to the Code, will not adversely affect the value of, or the tax status of interest on, the Series 2021 Bonds. Prospective purchasers of Series 2021 Bonds are urged to consult their own tax advisors with respect to proposals to restructure the federal income tax.

The tax status of the Series 2021 Bonds could be affected by post-issuance events. There are various requirements of the Code that must be observed or satisfied after the issuance of the Series 2021 Bonds in order for the Series 2021 Bonds to qualify for, and retain, tax-exempt status. These requirements include those relating to use of the proceeds of the Series 2021 Bonds, use of the facilities financed by the Series 2021 Bonds, investment of bond proceeds, and the rebate of so-called excess arbitrage earnings. Compliance with these requirements is the responsibility of the Authority.

The IRS conducts an audit program to examine compliance with the requirements regarding tax-exempt status. If the Series 2021 Bonds become the subject of an audit, under current IRS procedures, the Authority would be treated as the taxpayer, and the owners of the Series 2021 Bonds would have limited rights to participate in the audit process. The initiation of an audit with respect to the Series 2021 Bonds could adversely affect the market value and liquidity of the Series 2021 Bonds, even though no final determination about the tax-exempt status would have been made. If an audit were to result in a final determination that the Series 2021 Bonds do not qualify as tax-exempt obligations, such a determination could be retroactive in effect to the date of issuance of the Series 2021 Bonds.

Certain requirements and procedures contained or referred to in the Indenture and other relevant documents may be changed and certain actions (including, without limitation, defeasance of the Series 2021 Bonds) may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such documents. Bond Counsel expresses no opinion as to any obligations, or the interest thereon, if any such change occurs or action is taken or omitted upon the advice or approval of bond counsel other than Bowles Rice LLP.

Original Issue Premium

Series 2021 Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (***"Premium Bonds"***) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excludable from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a beneficial owner's basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocated to such beneficial owner. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium Bond, the owner's tax basis in the Premium Bond is reduced by the amount of bond premium that is amortized during the period of ownership. As a result, an owner may realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium Bond for an amount equal to or less than the amount paid by the owner for that Premium Bond. A purchaser of a Premium Bond in the initial public offering at the price for that Premium Bond stated on the inside cover of this Official Statement who holds that Premium Bond to maturity (or, in the case of a callable Premium Bond, to its earlier call date that results in the lowest yield on that Premium Bond) will realize no gain or loss upon the retirement of that Premium Bond. ***Beneficial owners of the Series 2021 Bonds should consult their own tax advisors with respect to the tax consequences of ownership of Series 2021 Bonds with bond premium, including the treatment of beneficial owners who do not purchase such Series 2021 Bonds in the original offering to the public at the first price at which a substantial amount of such Series 2021 Bonds is sold to the public.***

Information Reporting and Backup Withholding

As a result of the enactment of the Tax Increase Prevention and Reconciliation Act of 2005, interest on tax-exempt obligations such as the Series 2021 Bonds is subject to information reporting in a manner similar to interest paid on taxable obligations. A recipient not otherwise exempt from information reporting who fails to satisfy the information reporting requirements will be subject to "backup withholding," which means that the payor is required to deduct and withhold a tax from the interest payment, calculated in the manner set forth in the Code. For the foregoing purpose, a "payor" generally refers to the person or entity from whom a recipient receives its payments of interest or who collects such payments on behalf of the recipient. In any event, backup withholding does not affect the excludability of the interest on the Series 2021 Bonds from gross income for federal income tax purposes. Any amounts withheld pursuant to the backup withholding should be allowed as a refund or a credit against any owner's federal income tax once the required information is furnished to the IRS.

State Income Tax Exemption

In the opinion of Bond Counsel, under the Act, as presently written and applied, the Series 2021 Bonds, their transfer and the income therefrom (including any profit made on the sale thereof) shall at all times be free from taxation within the State.

Individual Circumstances

Although Bond Counsel is of the opinion that interest on the Series 2021 Bonds is excludable from gross income for federal income tax purposes, the ownership or disposition of, or the accrual or receipt of interest on, the Series 2021 Bonds may otherwise affect an owner's federal liability. The nature and extent of these other tax consequences will depend upon the particular tax status of the owner or the owner's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Please be advised that, except as set forth above, Bond Counsel's opinion does not address, and Bond Counsel expresses no opinion with respect to, certain collateral federal income tax consequences to certain taxpayers, including, without limitation, corporations subject to the branch profits tax, financial institutions, certain insurance companies, certain S corporations, individual recipients of Social Security or Railroad Retirement benefits and taxpayers who may be deemed to have incurred (or continued) indebtedness to purchase or carry the Series 2021 Bonds. Prospective purchasers of the Series 2021 Bonds should consult their own tax advisors as to such consequences.

Tax Changes

Legislation has been proposed in the past, and may be proposed again in the future, to eliminate the tax-exempt status of governmental bonds issued to finance public facilities or to limit the extent of the current tax advantages available for tax exempt bonds or to limit the use of tax-exempt bonds. Any such limitation could reduce the Authority's ability to finance future capital needs of the Authority. The effect on the Authority of proposed laws and regulations and future changes in federal and state laws and policies cannot be fully or accurately determined at this time.

Current and future legislative proposals, if enacted into law, or clarification of the Code or court decisions may cause interest on the Series 2021 Bonds to be subject, directly or indirectly, to federal income taxation or cause the interest on the Series 2021 Bonds to be subject to or not exempted from state income taxation, or otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals, clarification of the Code or court decisions may also affect the market price for, or marketability of the Series 2021 Bonds. Prospective purchasers of the Series 2021 Bonds should consult their own tax advisors regarding any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the Series 2021 Bonds for federal income tax purposes. It is not binding on the IRS or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the Authority or about the effect of future changes in the Code, the application or regulations, the interpretation thereof or the enforcement thereof by the IRS. The Authority has covenanted, however, to comply with the requirements of the Code.

Bond Counsel Obligations

Bond Counsel's engagement with respect to the Series 2021 Bonds ends with the issuance of the Series 2021 Bonds and, unless separately engaged, Bond Counsel is not obligated to defend the Authority or the beneficial owners regarding the tax-exempt status of the Series 2021 Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the Authority and its appointed counsel, including the beneficial owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of the Series 2021 Bonds would be difficult, obtaining an independent review of IRS positions with which the Authority legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the Series 2021 Bonds for audit, or the course or result of such audit, or an audit of tax-exempt obligations presenting similar tax issues may affect the market price for, or the marketability of, the Series 2021 Bonds, and may cause the Authority or the beneficial owners to incur significant expense.

Bond Counsel's opinions represent its legal judgment based in part upon the representations and covenants referenced therein and its review of existing law, but are not a guarantee of result or binding on the IRS or the courts. Bond Counsel assumes no duty to update or supplement its opinions to reflect any facts or circumstances that may come to Bond Counsel's attention after the date of its opinions or to reflect any changes in law or the interpretation thereof that may occur or become effective after such date.

TRAFFIC CONSULTANT

The Authority engaged CDM Smith to conduct a study to estimate traffic statistics and toll revenues based on a proposed increase in its toll rates. Their study is attached hereto as "APPENDIX D – TRAFFIC AND REVENUE STUDY."

CONSULTING ENGINEERS

The Authority engages HNTB to conduct annual studies of the physical condition and operations of the Turnpike and to prepare a report of the results of their study. The latest report of the Consulting Engineers is attached hereto as "APPENDIX E – CONSULTING ENGINEER'S REPORT."

FINANCIAL ADVISOR

Public Resources Advisory Group, Media, Pennsylvania, is serving as Financial Advisor in connection with the issuance of the Series 2021 Bonds. The Financial Advisor is an independent advisory firm and is not engaged in the business of underwriting, trading, or distributing municipal securities or other public securities. The Financial Advisor is not obligated to undertake to make an independent verification of, or to assume responsibility for the accuracy, completeness or fairness of the information contained in the Official Statement.

UNDERWRITING

Wells Fargo Bank, National Association, on behalf of itself and the Underwriters identified on the cover page of this Official Statement have agreed to purchase the Series 2021 Bonds at an aggregate purchase price of $422,881,498.60 (par amount of $333,630,000.00 less an Underwriters' discount of $751,634.50 plus original issue premium of $90,003,133.10), pursuant to a bond purchase agreement between the Authority and Wells Fargo Bank, National Association, on behalf of itself and the Underwriters identified on the cover page of this Official Statement. The Underwriters may offer and sell the Series 2021 Bonds to certain dealers (including dealers depositing such Series 2021 Bonds into investment trusts) and others at prices lower than the public offering price stated on the cover page hereof. The Underwriters will purchase all the Series 2021 Bonds if any are purchased. The public offering price set forth on the cover page hereof may be changed after the initial offering by the Underwriters.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activated may involve securities and instruments of the Authority.

Wells Fargo Securities is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association, which conducts its municipal securities sales, trading and underwriting operations through the Wells Fargo Bank, NA Municipal Finance Group, a separately identifiable department of Wells Fargo Bank, National Association, registered with the Securities and Exchange Commission as a municipal securities dealer pursuant to Section 15B(a) of the Securities Exchange Act of 1934.

Wells Fargo Bank, National Association, acting through its Municipal Finance Group ("***WFBNA***"), the senior underwriter of the Series 2021 Bonds, has entered into an agreement (the "***WFA Distribution Agreemen***t") with its affiliate, Wells Fargo Clearing Services, LLC (which uses the trade name "***Wells Fargo Advisors***") ("***WFA***"), for the distribution of certain municipal securities offerings, including the Series 2021 Bonds. Pursuant to the WFA Distribution Agreement, WFBNA will share a portion of its underwriting compensation with respect to the Series 2021 Bonds with WFA. WFBNA has also entered into an agreement (the "***WFSLLC Distribution Agreement***") with its affiliate Wells Fargo Securities, LLC ("***WFSLLC***"), for the distribution of municipal securities offerings, including the Series 2021 Bonds. Pursuant to the WFSLLC Distribution Agreement, WFBNA pays a portion of WFSLLC's expenses based on its municipal securities transactions. WFBNA, WFSLLC, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

J.P. Morgan Securities LLC (***"JPMS"***), one of the Underwriters of the Series 2021 Bonds, has entered into negotiated dealer agreements (each, a ***"Dealer Agreement"***) with each of Charles Schwab & Co., Inc. (***"CS&Co."***) and LPL Financial LLC (***"LPL"***) for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL may purchase Series 2021 Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any Series 2021 Bonds that such firm sells.

RATINGS

S&P Global Ratings, a division of Standard & Poor's Financial Services LLC ("S&P") and Fitch Ratings, Inc. ("Fitch") have assigned ratings of "AA-" and "AA-", respectively, each with a stable outlook, with respect to the Series 2021 Bonds. Any desired explanation of the significance of such ratings should be obtained from S&P or Fitch, respectively. Certain information and materials, including information and materials not included in this Official Statement, were furnished by the Authority and the State to S&P and Fitch. Generally, S&P and Fitch base their respective rating on the information and materials so furnished and on their respective investigations, studies and assumptions.

There is no assurance that a particular rating will be maintained for any given period of time and that it will not be lowered or withdrawn entirely if, in the judgment of S&P or Fitch, as the case may be, circumstances so warrant. The Underwriters have undertaken no responsibility either to bring to the attention of the Owners of the Series 2021 Bonds any proposed revision or withdrawal of any rating of the Series 2021 Bonds or to oppose any such proposed revision or withdrawal. Any such change in or withdrawal of such rating could have an adverse effect on the market price or the marketability of the Series 2021 Bonds. See "RISK FACTORS" herein.

CONTINUING DISCLOSURE

To comply with the requirements of Rule 15c2-12 (the "***Rule***") promulgated by the Securities and Exchange Commission, the Authority will enter into a Disclosure Dissemination Agent Agreement (the "Continuing Disclosure Agreement") with Digital Assurance Certification, L.L.C. ("DAC"), as the dissemination agent on behalf of the Authority, for the benefit of the registered and beneficial owners of the Series 2021 Bonds, pursuant to which the Authority will covenant to provide to DAC (a) certain annual financial information of the Authority not later than December 31 of the calendar year following the end of each fiscal year of the State, commencing with the report for the fiscal year ending June 30, 2021 (which is due December 31, 2021), and (b) notice of certain events within ten (10) business days of the occurrence of any of the events. DAC will file such annual financial information and such notices with the Municipal Securities Rulemaking Board (the "MSRB"), which operates the Electronic Municipal Markets Access ("EMMA") system for municipal securities disclosures. The information to be provided on an annual basis, the events which will be noticed on an occurrence basis and the other terms of the Continuing Disclosure Agreement are set forth in "APPENDIX F – FORM OF CONTINUING DISCLOSURE AGREEMENT."

The sole remedy for a breach or default under the Continuing Disclosure Agreement is an action to compel specific performance of the parties' obligations under the Continuing Disclosure Agreement. A breach or default under the Continuing Disclosure Agreement shall not constitute a default on the Series 2021 Bonds, an Event of Default under the Indenture, or a default under any other document relating to the Series 2021 Bonds.

The Authority has failed to comply with certain of its existing annual disclosure requirements in connection with its $44,205,000 Parkway Refunding Revenue Bonds, Series 2002 (the "Series 2002 Bonds"). Under the Authority's continuing disclosure agreement entered into in connection with its Series 2002 Bonds, the remaining maturities of which were legally defeased on July 18, 2018, the Authority was obligated to file its annual financial information within 150 days of its fiscal year end. Its annual financial information consists of its audited financial statements or its unaudited financial statements if its annual audited financial statements are not available at the time of the reporting deadline. The Authority failed to timely file its annual financial information for its fiscal years ended June 30, 2017 and 2016. The Authority filed its annual financial information for its fiscal year ended June 30, 2016, on January 9, 2017. On March 15, 2018 the Authority filed on EMMA a notice of failure to timely file its annual financial information for the fiscal year ended June 30, 2017, and also filed its annual financial information on EMMA that same day. On July 13, 2018, the Authority filed on EMMA notices of failure to timely file its annual financial information for fiscal year 2016, among other years. Additionally, under its continuing disclosure agreement related to the 2002 Bonds, the Authority failed to file a notice of a ratings downgrade of the insurer of its 2002 Bonds, National Public Finance Guarantee Corporation (as assignee of MBIA Inc.), when the ratings were downgraded by S&P on June 26, 2017.

To ensure full compliance in the future with all of its continuing disclosure undertakings, the Authority has adopted its Debt and Capital Planning Management Policy (see "THE AUTHORITY – Financial Policies and Guidelines" herein), and also adopted separate written continuing disclosure compliance policies and procedures on August 9, 2018, which require the Authority to comply with all applicable securities laws and satisfy in a timely manner all contractual obligations undertaken pursuant to continuing disclosure agreements or otherwise. The policy requires the Authority to identify key personnel responsible for ensuring timely and complete filings are made with EMMA and will address training and document retention related to continuing disclosure obligations.

MISCELLANEOUS

So far as any statements made in this Official Statement involve matters of opinion or estimates, whether or not expressly stated, they are set forth as such and not as representations of fact, and no representation is made that any of such statements will be realized. Neither this Official Statement nor any statement, which may have been made orally or in writing, is to be construed as a contract with the owners of the Series 2021 Bonds.

Copies in reasonable quantity of the Indenture and other documents referenced herein may be obtained during the offering period from the Authority at 3310 Piedmont Road, Charleston, West Virginia 25306, Attn: Finance Director, or by calling (304) 926-1900 for more information.

WEST VIRGINIA PARKWAYS AUTHORITY

By /s/ James C. Justice, II
Its Chairman

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APPENDIX A

MASTER TRUST INDENTURE AND FORM OF SECOND SUPPLEMENTAL INDENTURE

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Master Trust Indenture

by and between

West Virginia Parkways Authority

and

United Bank,
as Trustee

authorizing and securing

Turnpike Toll Revenue Bonds

Dated as of August 1, 2018

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Page

MASTER TRUST INDENTURE

This MASTER TRUST INDENTURE (this "***Indenture***"), dated as of August 1, 2018, by and between the West Virginia Parkways Authority (the "***Authority***"), a public body corporate and politic and instrumentality of the State of West Virginia created and existing under the Constitution and Laws of West Virginia, and United Bank (the "***Trustee***"), a Virginia banking corporation having the powers of a trust company and having a corporate trust office in Charleston, West Virginia, as Trustee, under the circumstances summarized in the following recitals. Capitalized terms used but not defined in the recitals and granting clauses shall have the meanings given to such capitalized terms in Section 101 hereof.

WHEREAS, Article 16A, Chapter 17 of the Code of West Virginia, 1931, as amended (the "***Act***"), empowers the Authority to construct, reconstruct, improve, maintain, repair, and operate parkway projects within the State and empowers the Authority to issue bonds to provide for the costs of paying all or any part of any one or more such projects;

WHEREAS, under Section 5 of the Act, "parkway projects" include existing or new projects to be constructed, reconstructed, improved, maintained, repaired, and operated by the Authority during the term of this Indenture, either on the Turnpike ("***On-Turnpike Authority Projects***") or as special Authority projects, as well as certain projects to be constructed, reconstructed, improved, maintained, repaired, and operated by the West Virginia Division of Highways, a division of the West Virginia Department of Transportation ("***WVDOH***") that are located (a) off the Turnpike and (b) in ten specific counties identified in the Act that include the four counties through which the Turnpike runs and six counties contiguous to said four counties, to the extent allowed under the Act and applicable federal laws ("***Off-Turnpike WVDOH Projects***," and collectively with On-Turnpike Authority Projects and special Authority projects, "***Parkway Projects***");

WHEREAS, this Indenture is being adopted for the purposes of: (A) providing for the issuance by the Authority of Turnpike Toll Revenue Bonds in one or more Series, from time to time, on the terms set forth herein (collectively, the "***Bonds***") for the purpose of financing Parkway Projects, to pay the costs of issuance of any such Bonds, to fund applicable reserve requirements, and to fund or pay for any other costs or expenses permitted under the Act; (B) pledging the Net Toll Road Revenues and any other such revenues as are permitted by the Act for the payment of the Bonds; (C) pledging such funds and accounts created and held pursuant to the Indenture and any supplemental indenture as are identified as being pledged for the payment of the Bonds and are subjected to the lien of this Indenture; (D) providing the manner in which such other revenues as are now or hereafter permitted by the Act to be so pledged, may be pledged for the payment of the Bonds; and (E) making other covenants and agreements and providing other details with respect to the Bonds, subject to and in accordance with the terms hereof;

WHEREAS, pursuant to the Act, the Authority on June 7, 2018 adopted a Resolution that, among other things, authorized this Authority to enter into this Indenture and to issue the initial series of Bonds under this Indenture; and

WHEREAS, additional terms of each Series of Bonds will be specified in a Supplemental Indenture adopted as provided herein in connection with the issuance of such Series.

NOW, THEREFORE, THIS INDENTURE WITNESSETH: In consideration of the premises, the acceptance by the Trustee of the trusts hereby created, and of the purchase and acceptance of each Series of Bonds by the Holders thereof, and for the purpose of fixing and declaring the general terms and conditions upon which the Bonds are to be issued, authenticated, delivered, secured and accepted by all persons who shall from time to time be or become Holders thereof, and to secure the payment of each Series of Bonds at any time issued and Outstanding hereunder and the interest and premium, if any, thereon according to their tenor, purport and effect, and to grant certain rights to the applicable Credit Providers, if any (but only if, and to the extent, provided in a Supplemental Indenture granting such rights to applicable Credit Providers) and to secure the performance and observance of all of the covenants, agreements and conditions contained therein and herein or in any Reimbursement Agreement (but only if, and to the extent, provided in a Supplemental Indenture relating to any Reimbursement Agreement), the Authority does hereby grant and confirm a security interest in, and does confirm, assign, transfer, pledge and grant and convey unto the Trustee and its successors and assigns forever, for the benefit of the Bondholders and each Credit Provider, if any (but only if, and to the extent, provided in a Supplemental Resolution granting such rights to applicable Credit Providers), until the applicable credit enhancement or liquidity support is no longer outstanding and no amounts are due under the applicable Reimbursement Agreement (but only if, and to the extent, provided in a Supplemental Indenture relating to any Reimbursement Agreement), the following property:

A. Amounts constituting Net Toll Road Revenues;

B. Amounts on deposit from time to time in the Funds and the Accounts created pursuant hereto and expressly made subject to the pledge of this Indenture under Article IV, including the earnings thereon, subject to the provisions of this Indenture permitting the application thereof for the purposes and on the terms and conditions set forth herein, provided, however, that there expressly is excluded from any pledge, assignment, lien or security interest created by this Indenture (i) amounts in the Operation and Maintenance Account within the Operation and Maintenance Fund, (ii) amounts in the Arbitrage Rebate Fund, and (iii) amounts in the General Fund (though such General Fund monies may be expended by the Authority to restore deficiencies in any funds or accounts created under the Indenture); and

C. Any and all other property of any kind from time to time hereafter by delivery or by writing of any kind specifically conveyed, pledged, assigned or transferred, as and for additional security hereunder for the Bonds, by the Authority or by anyone on its behalf or with its written consent in favor of the Trustee, which is hereby authorized to receive any and all such property at any and all times and to hold and apply the same subject to the terms hereof (collectively, the "***Trust Estate***").

TO HAVE AND TO HOLD all such properties pledged, assigned and conveyed by the Authority hereunder, including all additional property which by the terms hereof has or may become subject to the encumbrance hereof, unto the Trustee and its successors in trust and its assigns forever, subject, however, to the rights reserved hereunder.

IN TRUST NEVERTHELESS, for the equal and proportionate benefit and security of the Holders from time to time of all Bonds issued, authenticated, delivered and outstanding hereunder, without preference, priority or distinction as to lien or otherwise of any of such Bonds over any other such Bonds, except to the extent otherwise provided in Section 103.

PROVIDED, HOWEVER, that if the Authority shall pay fully and promptly when due all liabilities, obligations and sums at any time secured hereby or provide for the payment thereof in accordance with the provisions hereof, and shall promptly, faithfully and strictly keep, perform and observe or cause to be kept, performed and observed all of its covenants, warranties and agreements contained herein and in each Reimbursement Agreement, if any, then and in such event, except for the provisions of Article IX hereof, as applicable, this Indenture shall be and become void and of no further force and effect; otherwise, the same shall remain in full force and effect, and upon the trusts and subject to the covenants and conditions hereafter set forth.

THIS INDENTURE FURTHER WITNESSETH: It is expressly declared that all Bonds are to be issued, authenticated and delivered and all said property, rights, and interest, including, without limitation, the revenues and other amounts hereby assigned and pledged are to be dealt with and disposed of under, upon and subject to the terms, conditions, stipulations, covenants, agreements, trusts, uses, and purposes as hereinafter expressed, and the Authority has agreed and covenanted, and does hereby agree and covenant with the Trustee and with the respective Holders of the Bonds, and as provided herein for the benefit of applicable Credit Providers, if any (but only if, and to the extent, provided in a Supplemental Resolution granting such rights to applicable Credit Providers), and to secure further the performance and observance of all of the covenants, agreements and conditions contained therein and herein or in any Reimbursement Agreement (but only if, and to the extent, provided in a Supplemental Indenture relating to any Reimbursement Agreement), and has further agreed and covenanted, and does hereby further agree and covenant, as follows:

ARTICLE I
DEFINITIONS; RULES OF CONSTRUCTION

Section 101. Definitions.

In addition to terms elsewhere defined in this Indenture, the following terms, for all purposes of this Indenture, shall have the following meanings unless a different meaning clearly applies from the context:

"**Account**" means any account or subaccount created in any Fund created hereunder or under a Supplemental Indenture.

"**Accreted Value**" means (a) with respect to any Capital Appreciation Bonds, as of any date of calculation, the sum of the amount set forth in a Supplemental Indenture as the amount representing the initial principal amount of such Capital Appreciation Bonds plus the interest accumulated, compounded and unpaid thereon as of the most recent compounding date, the Accreted Value shall be determined in accordance with the provisions of the Supplemental Indenture authorizing the issuance of such Capital Appreciation Bonds.

"**Act**" means Chapter 17, Article 16A, of the Code of West Virginia, 1931, as amended.

"**Agency Obligations**" means senior debt obligations, including bonds, notes and other evidences of indebtedness, of U.S. government-sponsored agencies, corporations, and enterprises that are not backed by the full faith and credit of the U.S. government, including, but not limited to, Federal Home Loan Mortgage Corporation debt obligations, Farm Credit System consolidated system wide bonds and notes, Federal Home Loan Banks consolidated debt obligations, Federal National Mortgage Association debt obligations, Student Loan Marketing Association debt obligations, Tennessee Valley Authority debt obligations, Resolution Funding Corporation debt obligations (including principal and interest strips), and U.S. Agency for International Development guaranteed notes (including stripped securities).

"**Annual Budget**" means for any Fiscal Year the annual budget adopted by the Authority under Section 508 as may be amended from time to time as permitted by Section 508, which annual budget shall set forth, at a minimum, (a) the estimated Toll Road Revenues, (b) Operation and Maintenance Expenses, (c) the Annual Debt Service (identifying principal and interest components thereof), and (d) the Renewal and Replacement Reserve Fund Requirement, respectively, for such Fiscal Year under Section 508, **provided, however**, that, without limitation of the requirements of Section 508, such annual budget and any amended annual budget shall include and provide for amounts that, in the judgment of the Consulting Engineers, are necessary to be included in and spent on (a) Operation and Maintenance Expenses and (b) Renewal and Replacement Costs, respectively, for such Fiscal Year, which shall be memorialized in a certificate to be provided by the Consulting Engineers to the Authority as part of the annual budget-making process as required by Section 508, which certificate shall be included with and be made a part of the Annual Budget.

"**Annual Debt Service**" means for any Annual Period and with respect to Outstanding Bonds, or all Senior Lien Bonds or Subordinate Lien Bonds, respectively, (i) the principal amount and interest paid (except at the option of the Authority) or payable with respect to such Bonds in such Annual Period, plus (ii) Credit Facility Payment Obligations paid or payable in such Annual Period, plus (iii) the net amount (which may be negative) of (x) all Regularly Scheduled Hedge Payments in such Annual Period, less (y) all Regularly Scheduled Hedge Receipts in such Annual Period, minus (iv) all amounts that are deposited to the credit of a debt service fund or account for the payment of capitalized interest or the payment of principal due or to be due and interest due in such Annual Period on Bonds that are used or scheduled to be used to pay interest on such Bonds during any Annual Period, and minus (v) any portion or all of the interest on or principal of the Bonds that has been irrevocably committed by the Authority to be paid from funds on hand other than Toll Road Revenues, including without limitation, (A) any security deposited and pledged for such purpose by the terms of an escrow deposit agreement or similar agreement, (B) any supplemental security pledged for such purpose by the terms of a Supplemental Indenture, or (C) other supplemental security irrevocably pledged in any other manner for such purpose; provided that if there is a balance in a Series Account for a Series of Bonds, or a balance in a composite Account, within the Debt Service Reserve Fund, then in calculating Annual Debt Service as to the Annual Period in which the final maturity or maturities of such Bonds will occur, such balance shall be subtracted from such stated maturity amount(s).

The following shall be used to calculate the Annual Debt Service for any Annual Period:

(a) Except as otherwise provided below, in determining the principal amount paid or payable with respect to Bonds or Credit Facility Payment Obligations in each Annual Period, payment shall be deemed to be made in accordance with any amortization schedule established for such Obligations to which the Authority is legally committed, including amounts paid or payable pursuant to any mandatory redemption schedule for such Bonds or Credit Facility Payment Obligations;

(b) If any of the Bonds constitute Balloon Indebtedness Bonds or Short-Term/Demand Obligations, then such amounts shall be treated as if such Bonds or Short-Term/Demand Obligations, are refunded through the issuance of Long Term Obligations on the date of the earliest permitted exercise of the put feature, stepped up interest rate and call feature or similar obligation or right to refund a series of Balloon Indebtedness Bonds, or if no such feature exists, then on the final maturity date of such Balloon Indebtedness Bonds or Short-Term/Demand Obligations. Such Long-Term Obligations shall be assumed to bear interest at a fixed interest rate estimated by the Authority's Financial Advisor or underwriter to be the estimated rate of interest for a series of such Long-Term Obligations issued to accomplish such refunding if issued on such terms on the date of such estimate;

(c) Notwithstanding subsections (b) or (f) of this definition of "Annual Debt Service," to the extent required by a Supplemental Indenture, if any of the Bonds are authorized to be issued under a direct purchase note program, such amounts shall be treated as if all of the Obligations committed to be purchased under a note purchase agreement are outstanding as of the date of calculation and continuously refinanced under such note purchase agreement until the termination date of the commitment to purchase notes under a note purchase agreement, at which time it shall be assumed that the commitment shall be amortized in the manner set forth in subsection (b), above.

(d) Notwithstanding subsections (b) or (f) of this definition of "Annual Debt Service," to the extent required by a Supplemental Indenture, if any of the Bonds are authorized to be issued pursuant to a commercial paper program, Annual Debt Service shall be computed on the assumption that the principal amount shall continuously be refinanced under such program and remain outstanding until the first Annual Period for which interest on such Bonds has not been capitalized or otherwise provided for in such commercial paper program, at which time (which shall not be beyond the term of such program) it shall be assumed that the outstanding principal amount shall be amortized in the manner provided in subsection (b), above.

(e) As to any Annual Period prior to the date of any calculation, such requirements shall be calculated solely on the basis of Bonds that were Outstanding in such period, and as to any future Annual Period such requirements shall be calculated solely on the basis of Bonds Outstanding as of the date of calculation plus any Bonds then proposed to be issued;

(f) If any of the Bonds or proposed Bonds constitute Variable Rate Bonds, then, if the actual rate of interest borne thereby in any future Annual Period cannot be ascertained at the time of the calculation and subject to subsection (b) of this definition and the following proviso, interest in future Annual Periods shall be assumed to be the Assumed Variable Rate; provided, however, if the Authority has entered into a Hedge Facility with respect to a Series of Bonds constituting Variable Rate Bonds that provides for the Authority to pay a fixed interest rate thereunder and to receive a variable rate that is expected to approximate the rate of such Variable Rate Bonds during any future period, the fixed interest rate payable by the Authority under the Hedge Facility during such future period shall be assumed to be the interest rate on such Variable Rate Bonds if the notional amount under the Hedge Facility is equal to or greater than the Outstanding principal amount of the Variable Rate Obligations and reduces in the amounts and on the dates that such Bonds mature, but if such conditions are not met (for example, if the notional amount under the Hedge Facility is less than the Outstanding principal amount of the Variable Rate Obligations), then for the unhedged portion the fixed interest rate payable by the Authority on the Variable Rate Bonds during such future period shall be assumed to be the Assumed Variable Rate; and

(g) Collateral postings and termination or similar payments under a Hedge Facility shall not be taken into account in any calculation of Annual Debt Service.

(h) With respect to Outstanding Capital Appreciation Bonds, (i) in determining the amount of principal to be funded in each year payments shall (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization), be assumed to be made on such Outstanding Bonds in accordance with any amortization schedule or amortization calculations established by the governing documents setting forth the terms of such Bonds, including, as a principal payment, the Accreted Value of any Capital Appreciation Bonds maturing or scheduled for redemption in such year; and (ii) in determining the amount of interest to be funded in each year (except to the extent any other subsection of this definition applies) interest payable at a fixed rate shall be assumed to be made at such fixed rate and on the required funding dates.

(i) Notwithstanding any other provision of this definition of "Annual Debt Service," with respect to any Balloon Indebtedness Bonds, any Variable Rate Bonds, any Short-

Term/Demand Obligations, any commercial paper program obligations, any Optional Tender Bonds, and any direct purchase bonds, if there is delivered to the Trustee a certificate of an Authority Authorized Officer stating (A) that the Authority intends to refinance such Bonds or obligations or any maturity thereof, (B) the probable terms of such refinancing and (C) that the debt capacity of the Authority is sufficient to successfully complete such refinancing then, upon the receipt of such certificate, such Balloon Indebtedness Bonds, Variable Rate Bonds, Short-Term/Demand Obligations, commercial paper program obligations, Optional Tender Bonds, and any direct purchase bonds, as the case may be, shall be assumed to be refinanced in accordance with the probable terms set out in such certificate and such terms shall be used for purposes of calculating Annual Debt Service; provided, that such assumption shall not result in an interest rate lower than the Assumed Variable Rate and shall be amortized over a term of not more than thirty (30) years from the expected date of refinancing.

"**Annual Period**" means a Fiscal Year or any other consecutive twelve-month period, where it shall mean either the most recent Fiscal Year or any other twelve consecutive calendar month period that ends not more than 90 days prior to the date of the then-proposed indebtedness or the date of a calculation contemplated by this Indenture or any Supplemental Indenture.

"**Arbitrage Rebate Fund**" means the Arbitrage Rebate Fund created pursuant to Section 401.

"**Assumed Variable Rate**" means the rate defined in a Supplemental Indenture authorizing the Series of Bonds in question based on a reasonable estimate of such rate, or if no such rate is defined, then "Assumed Variable Rate" shall mean:

(a) in the case of Outstanding Variable Rate Bonds, the average interest rate on such Variable Rate Bonds for the most recently completed Annual Period or if such Bonds have not been outstanding for a complete 12-month period, then an interest rate estimated by the Authority's Financial Advisor or underwriter to be the fixed rate of interest at which the Variable Rate Bonds could be refinanced and amortized over a period that corresponds with the useful life of the improvements financed with the proceeds of such Variable Rate Bonds, but not longer than thirty (30) years; or

(b) in the case of proposed Variable Rate Bonds, the interest rate estimated by the Authority's Financial Advisor or underwriter to be the fixed rate of interest at which the Variable Rate Bonds could be financed and amortized over a period that corresponds with the useful life of the improvements financed with the proceeds of such Variable Rate Bonds, but not longer than thirty (30) years.

Notwithstanding the foregoing, in no event shall the Assumed Variable Rate be in excess of the lesser of the maximum legal rate or the highest interest rate allowed by the documents pursuant to which such Variable Rate Bonds were issued.

"**Authenticating Agent**" means, with respect to each Series of Bonds, the entity or entities designated as such for such Series of Bonds in the applicable Supplemental Indenture.

"**Authority Authorized Officer**" means the Chairman, Vice Chairman, and General Manager of the Authority and, in the case of any act to be performed or duty to be discharged, any other member, officer, or employee of the Authority then authorized under then-current resolutions of the Authority to perform such act or discharge such duty, or such other person(s) as may be designated to act on behalf of the Authority by written certificate furnished to the Trustee containing the specimen signature(s) of such designated person(s) and signed on behalf of the Authority by the Chairman, Vice Chairman, or General Manager.

"**Authorized Depositary**" means any trust company or bank, or national banking association, which is eligible under the laws of the State to receive deposits of public funds, selected by the Authority as a depositary of moneys or securities, or both, qualified to do and do banking or trust business within or without the State and having an officially reported combined capital, surplus, undivided profits and reserves aggregating at least $50,000,000, if there is such an institution willing, qualified and able to accept deposits of moneys or securities, or both, upon reasonable or customary terms, and may, but need not, be the Trustee or any paying agent designated as such in any Supplemental Indenture.

"**Balloon Indebtedness Bonds**" means Bonds with 25% or more of the principal of which matures in a single Annual Period on the same date, which portion of the principal is not required by the documents governing the issuance of such Bonds to be amortized by payment or redemption prior to such date. If any issue of Bonds consists partially of Variable Rate Bonds and partially of Bonds bearing interest at a fixed rate, the portion constituting Variable Rate Bonds and the portion bearing interest at a fixed rate shall be treated as separate issues for purposes of determining whether any such Bonds constitute Balloon Indebtedness Bonds. For the avoidance of doubt, commercial paper, bond anticipation notes, Optional Tender Bonds, direct purchase notes, or other Short-Term/Demand Obligations that meet the preceding definition shall constitute and be treated as Balloon Indebtedness Bonds.

"**Beneficial Owners**" means, so long as the Bonds are registered in the name of the Securities Depository, the persons for whom the Participants acquire and hold interests in the Bonds as nominees and register such interests with the Securities Depository. At any time when there is no Securities Depository holding the Bonds, the Beneficial Owners shall be the registered owners.

"**Board**" means the governing board consisting of the members of the Authority.

"**Bond**" or "**Bonds**" means any of the Bonds to be authenticated and delivered pursuant to this Indenture or any Supplemental Indenture.

"**Bond Authorizing Resolution**" means a resolution adopted by the Authority authorizing the issuance of one or more Series of Bonds under this Indenture, authorizing the execution and delivery on behalf of the Authority of the related Supplemental Indenture or Supplemental Indentures and other related agreements and approving, or duly delegating the authority to approve on behalf of the Authority, the terms and details of such Series of Bonds. The term includes any resolution or other formal action taken on behalf of the Authority by any person, committee or other entity acting pursuant to a delegation from the Authority.

"**Bond Counsel**" means an attorney or firm or firms of attorneys of national recognition experienced in the field of municipal bonds whose opinions are generally accepted by purchasers of municipal bonds selected or employed by the Authority and reasonably acceptable to the Trustee.

"**Bond Fund**" means any Senior Lien Bond Fund and any bond fund established pursuant to any Supplemental Indenture.

"**Bond Payment Date**" means, with respect to each Series of Bonds, each date set forth in the applicable Supplemental Indenture with respect to such Series of Bonds on which interest is payable.

"**Bond Purchase Contract**" means the contract of purchase, with respect to a Series of Bonds, between the Authority and the Original Purchaser pertaining to the sale of such Series of Bonds.

"**Bondholder**" or "**Holder**" means the registered owner of any Senior Lien Bond or Subordinate Lien Bond.

"**Business Day**" means any day of the week other than Saturday, Sunday or a day which shall be, in the State of West Virginia, the State of New York or in the jurisdiction in which the Designated Office of the Trustee or the Registrar is located, a legal holiday or a day on which banking corporations are authorized or obligated by law or executive order to close.

"**Capital Appreciation Bonds**" means Bonds with all or a portion of the interest on which is compounded and accumulated at the Accreted Value and on the dates set forth in a Supplemental Indenture and is payable only upon redemption of such Bonds, the conversion date of such Bonds (if such Bonds are convertible), or on the maturity date of such Bonds.

"**Capital Costs**" means costs that are capitalized under the Authority's internal policies and procedures governing capital expenditures and are incurred for or in connection with the (a) acquisition or construction of assets of the Authority having an anticipated useful life of greater than one year, or (b) improvements that extend the anticipated useful life of assets by more than one year.

"**Chair**" means the Chair, or the Chair's designee, of the Board of the Authority.

"**Code**" means the Internal Revenue Code of 1986, as amended, including applicable Treasury Regulations, rulings and procedures promulgated thereunder or under the Internal Revenue Code of 1954, as amended.

"**Consulting Engineers**" means an independent engineer or engineering firm or corporation having a nationwide and favorable reputation for skill and experience in performing and carrying out the duties imposed on the Consulting Engineers by this Indenture and selected by the Authority for the purpose of performing and carrying out such duties.

"**Credit Facility**" or "**Credit Facilities**" means, with respect to a Series of Bonds, the letter of credit, line of credit, standby bond purchase agreement or other similar form of credit enhancement and/or liquidity support, if any, and may, without limitation, include direct purchase obligations, for such Series of Bonds, provided for in the applicable Supplemental

Indenture, including (i) any alternate Credit Facility with respect to such Series of Bonds delivered in accordance with provisions of the Supplemental Indenture providing for the issuance of such Series of Bonds and (ii) any related reimbursement agreement entered into with a Credit Provider, unless provided otherwise in the applicable Supplemental Indenture.

"**Credit Facility Payment Obligations**" means for any Annual Period the amounts of any payments the Authority is required to make to Credit Providers pursuant to Reimbursement Agreements with Credit Providers to reimburse such Credit Providers for debt service payments made, and to pay credit enhancement or liquidity support fees, in each case to the extent secured by this Indenture as specifically provided by a Supplemental Indenture, scheduled to come due within such Annual Period.

"**Credit Provider**" means, with respect to a Series of Bonds, the provider of a Credit Facility, including letter of credit, line of credit, standby bond purchase agreement or other form of credit enhancement and/or liquidity support, if any, for such Series of Bonds specified in the applicable Supplemental Indenture or Reimbursement Agreement.

"**Debt Service Reserve Fund**" means the Debt Service Reserve Fund for a given Series or lien level of Bonds, and therefore means, for Senior Lien Bonds, the Senior Lien Debt Service Reserve Fund created pursuant to Section 401, and means, for Subordinate Lien Bonds, such Debt Service Reserve Fund as may be created with respect to Bonds issued pursuant to a Supplemental Indenture.

"**Debt Service Reserve Requirement**" means the amount, if any, required to be on deposit in a Series or composite Account in the Senior Lien Debt Service Reserve Fund, Subordinate Lien Debt Service Reserve Fund, or any other Debt Service Reserve Fund, as applicable, which amount may be provided by means of a DSRF Credit Facility, all as specified in the Supplemental Indenture governing the issuance of and securing the related Series of Bonds.

"**DSRF Credit Facility**" means a letter of credit, surety bond or similar credit enhancement facility acquired by the Authority from, or reimbursement agreement entered into by the Authority with, a financial institution (including, without limitation, any bank, trust company, insurance company, or broker-dealer) with a long-term credit rating at the time of issuance of such facility in the third highest rating category or higher by any Rating Agency, to substitute for cash or investments required to be held in a Debt Service Reserve Fund for any Series of Bonds pursuant to the Supplemental Indenture relating to and governing the issuance of such Series of Bonds.

"**DSRF Credit Provider**" means the financial institution providing, and qualified under the definition of, a DSRF Credit Facility.

"**DTC**" means The Depository Trust Company, New York, New York.

"**Event of Default**" means any one or more of those events set forth in Section 601.

"**Financial Advisor**" means a firm experienced in, and having a favorable national reputation for, providing financial advisory services to issuers of tax-exempt municipal bonds, that has been engaged by the Authority to provide independent financial advisory services to the Authority and serve as an independent advisor.

"**Fiscal Year**" means the fiscal year of the Authority ending as of June 30 of each year or such other date as may be designated from time to time in writing by the Authority to the Trustee.

"**Fitch**" means Fitch Ratings, Inc., a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and if such corporation shall no longer perform the functions of a municipal securities rating agency, "Fitch" means any other nationally recognized municipal securities rating agency designated by the Authority.

"**Fund**" means any fund created hereunder or under a Supplemental Indenture.

"**Funding Date**" means the last Business Day immediately preceding any Interest Payment Date or Principal Payment Date.

"**General Manager**" means the General Manager of the Authority.

"**Government Obligations**" means direct, general obligations of, or obligations the timely payment of principal and interest on which are unconditionally guaranteed by, the United States of America.

"**Hedge Facility**" means any rate swap transaction, basis swap transaction, cap transaction, floor transaction, collar transaction, currency swap transaction, forward payment conversion agreement, or similar transaction, which is intended to convert or limit the interest rate payable with respect to any Bonds, and which (a) is designated in writing to the Trustee by an Authority Authorized Officer as a Hedge Facility to relate to all or part of one or more Series of Bonds; (b) is with a Qualified Hedge Provider or an entity that has been a Qualified Hedge Provider, in either instance identified in writing to the Trustee, within the 60 day period preceding the date on which the calculation of Annual Debt Service or Maximum Annual Debt Service is being made; and (c) has a term not greater than the term of the designated Bonds or a specified date for mandatory tender or redemption of such designated Bonds.

"**Hedge Termination Payment**" means an amount payable by the Authority or a Qualified Hedge Provider, in accordance with a Hedge Facility, to compensate the other party to the Hedge Facility for any losses and costs that such other party may incur as a result of an event of default or the early termination of the obligations, in whole or in part, of the parties under such Hedge Facility.

"**Indenture**" means this Master Trust Indenture, and when amended or supplemented, such Indenture, as amended or supplemented from time to time.

"**Interest Account**" means any interest account for a Series of Bonds created in the Senior Lien Bond Fund pursuant to Section 401 or other Series of Bonds created pursuant to any Supplemental Indenture.

"**Long-Term Obligations**" means Bonds or other indebtedness that is amortized over a 30-year period, or such other period for level annual payments of principal and interest or such other period and payment structure as set forth in a Supplemental Indenture, not to exceed in any case the maximum period permitted by law.

"**Maximum Annual Debt Service**" means (a) when used with reference to a Series of Bonds, the maximum Annual Debt Service with respect to the specified Series of Bonds for any Annual Period during the term of such indebtedness, and (b) when used with reference to all Outstanding Bonds, or all Outstanding Bonds of a particular lien position, the maximum Annual Debt Service with respect to all the applicable Outstanding Bonds.

"**Memorandum of Understanding**" means a Memorandum of Understanding referenced, and further defined, in a Supplemental Indenture authorizing a Series of Bonds, that is entered into by and between the Authority, the Trustee, the Treasurer of the State of West Virginia, and WVDOH, establishing procedures for the Authority's use of (and the ultimate expenditure by WVDOH of) proceeds of such Series of Bonds that are proceeds designated by the Authority (with input of WVDOH) to be deposited into that certain special revenue account in the State Treasury (which special revenue account is not part of the State's General Revenue Fund) known as the "State Road Construction Account" created pursuant to Section 17-16A-11 of the Act and held in the State Treasury to be expended ultimately by WVDOH for the construction, maintenance and repair of Off-Turnpike WVDOH Projects as provided in the Act.

"**Moody's**" means Moody's Investors Service, Inc., a corporation existing under the laws of the State of Delaware, its successors and assigns, and, if such corporation shall no longer perform the functions of a municipal securities rating agency, "Moody's" shall mean any other nationally recognized municipal securities rating agency designated by the Authority.

"**Net Toll Road Revenues**" means Toll Road Revenues less Operation and Maintenance Expenses.

"**Operation and Maintenance Account"** means the Operation and Maintenance Account created, within the Operation and Maintenance Fund, under Section 401(a) to be used and administered as provided in Section 405 and to be funded as further provided in Article IV including without limitation Section 414.

"Operation and Maintenance Expenses" means expenses for operation, maintenance, repairs, ordinary acquisition of equipment, and any other current expenses or obligations required to be paid by the Authority under or pursuant to the provisions of this Indenture, any Supplemental Indenture, or by law, all to the extent properly and directly attributable to the operation of the Turnpike, but not any costs or expenses for new construction or any allowance for depreciation. Operation and Maintenance Expenses may include, without limitation (but subject to the preceding sentence, including but not limited to the condition that such expenses are properly and directly attributable to the operation of the Turnpike): (a) salaries, supplies, equipment, utilities, labor, travel and rent; (b) fees and expenses for data processing, policing, insurance, legal, accounting, engineering, consulting and banking services; and (c) payments to pension, retirement, health and hospitalization funds for Authority employees. Without limitation of the foregoing, Operation and Maintenance Expenses shall include costs of toll collection and enforcement, including without limitation the costs of purchasing transponders for use in the toll collection system for the Turnpike and the costs of issuing transponders to customers of the Turnpike.

"Operation and Maintenance Fund" means the Operation and Maintenance Fund created under Section 401(a) to be used and administered as provided in Section 405 and to be funded as provided in Article IV including without limitation Section 414.

"Operation and Maintenance Reserve Account" means the Operation and Maintenance Reserve Account created, within the Operation and Maintenance Fund, under Section 401(a) to be used and administered as provided in Section 405 and to be funded as provided in Article IV including without limitation Section 414.

"Operation and Maintenance Reserve Account Requirement" means one-sixth (1/6th) of the Operation and Maintenance Expenses for the Turnpike set forth in the Authority's current Fiscal Year budget.

"**Opinion of Bond Counsel**" means a written opinion of Bond Counsel.

"**Opinion of Counsel**" means a written opinion of an attorney or firm or firms of attorneys acceptable to the Trustee and the Authority, and who (except as otherwise expressly provided herein) may be either counsel for the Authority or for the Trustee.

"**Optional Tender Bonds**" means any Bond required to be purchased or redeemed at the option of its owner if the purchase or redemption price thereof is payable from the Toll Road Revenues or by a Credit Facility Provider or by a liquidity facility provider.

"**Original Issue Discount Bonds**" means Bonds which are sold at an initial public offering price of less than face value and which are specifically designated as Original Issue Discount Bonds by the Supplemental Indenture under which such Bonds are issued.

"**Original Purchaser**" means the person or entity designated in each Bond Purchase Contract as the initial purchaser or purchasers of a Series of Bonds or, if so designated in such Bond Purchase Contract, the representatives or lead or managing underwriters of such initial purchasers.

"**Outstanding**" when used with reference to a Series of Bonds means, as of any date of determination, all Bonds of such Series theretofore authenticated and delivered except: (a) Bonds of such Series theretofore cancelled by the Trustee or delivered to the Trustee for cancellation; (b) Bonds of such Series which are deemed paid and no longer Outstanding as provided in this Indenture; (c) Bonds of such Series in lieu of which other Bonds of such Series have been issued pursuant to the provisions of this Indenture relating to Bonds destroyed, stolen or lost, unless evidence satisfactory to the Trustee has been received that any such Bond is held by a bona fide purchaser; (d) after any tender date as may be provided for in the applicable Supplemental Indenture, any Bond of such Series held by a Bondholder who has given a tender notice or was required to tender such Bond in accordance with the provisions of the applicable Supplemental Indenture and which was not so tendered and for which sufficient funds for the payment of the purchase price of which have been deposited with the Trustee or the Paying Agent, if any, or any tender agent appointed under such Supplemental Indenture; and (e) for purposes of any consent or other action to be taken under this Indenture by the Holders of a specified percentage of principal amount of Bonds of a Series or all Series, Bonds held by or for the account of the Authority.

"**Parkway Projects**" has the meaning provided in the Act.

"**Parkway Projects Fund**" means the Parkway Project Fund created pursuant to Section 401.

"**Participant**" or "**Participants**" means the participating underwriters, securities brokers or dealers, banks, trust companies, closing corporations or other persons for which the Securities Depository holds the Bonds.

"**Paying Agent**" means, with respect to each Series of Bonds, the banks or trust companies, if any, and their successors designated in the applicable Supplemental Indenture as the paying agent for such Series of Bonds.

"**Paying Agent Agreement**" means the agreement entered into by and between the Trustee and the Paying Agent pursuant to Section 713.

"**Payment of a Series of Bonds**" means payment in full of all principal of, purchase price of, if applicable, premium, if any, and interest on a Series of Bonds.

"**Permitted Investments**" means and includes any of the following, if and to the extent, the same are at the time legal for the investment of the Authority's money:

(a) Government Obligations, including (in the case of direct, general obligations) evidences of ownership of proportionate interests in future interest or principal payments of such obligations. Investments in such proportionate interests must be limited to circumstances wherein (i) a bank or trust company acts as custodian and holds the underlying Government Obligations; (ii) the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor of the underlying Government Obligations; and (iii) the underlying Government Obligations are held in a special subaccount, segregated from the custodian's general assets, and are not available to satisfy any claim of the custodian, any person claiming through the custodian, or any person to whom the custodian may be obligated;

(b) Agency Obligations;

(c) Bonds, notes and other evidences of indebtedness of the State of West Virginia and securities unconditionally guaranteed as to the timely payment of principal and interest by the State of West Virginia;

(d) Bonds, notes and other evidences of indebtedness that are direct general obligations of any county, city, town, district, authority or other public body of the State of West Virginia upon which there is no default, and revenue bonds issued by agencies or authorities of the State of West Virginia or its political subdivisions upon which there is no default, which in either case are rated "Aaa" by Moody's, "AAA" by Standard & Poor's or "AAA" by Fitch;

(e) Time deposits, certificates of deposit or other interest-bearing accounts of any commercial bank within the State of West Virginia that is approved for the deposit of funds of the State of West Virginia or any political subdivision thereof, provided that such investments are fully insured by the Federal Deposit Insurance Corporation or any successor Federal agency;

(f) Savings accounts and certificates of savings and loan associations which are under the supervision of the State of West Virginia and are approved for the deposit of funds of the State of West Virginia or any political subdivision thereof, or Federal associations organized under the laws of the United States of America which are under Federal supervision that are approved for deposit of funds of the State of West Virginia or any political subdivision thereof, provided that such investments are fully insured by the Savings Association Insurance Fund of the Federal Deposit Insurance Corporation or any successor Federal agency;

(g) Investments in the West Virginia Board of Treasury Investments investment pool, provided that such fund is rated, at the time of purchase in the highest two rating categories by S&P, Moody's or Fitch ratings;

(h) Investments in a money market fund rated "Aaa" by Moody's or "AAAm" or "AAAm-G" or better by S&P, including those for which the Trustee or an affiliate receives and retains a fee for services provided to the fund, whether as a custodian, transfer agent, investment advisor or otherwise; and

(i) Any other investment authorized for investment of public sinking funds under the laws of the State.

Any investments described in subsections (a) and (b) of this definition may be held directly or in the form of securities of any open-end or closed-end management company or investment trust registered under the Investment Company Act of 1940, as amended, provided that the portfolio of such investment company or investment trust is limited to evidences of such types of investments.

"**Person**" or "**person**" means and includes an association, an unincorporated organization, a corporation, a partnership, a joint venture, a business trust, a government or an agency or a political subdivision thereof, or any other public or private entity, or a natural person.

"**Principal Account**" means any principal account for a Series of Bonds created in the Senior Lien Bond Fund pursuant to Section 401 or other Series of Bonds created pursuant to any Supplemental Indenture.

"**Projected Toll Rate Schedule**" means the projection of future Tolls used by the Traffic and Revenue Consultant to develop an estimate of Toll Road Revenues, which Tolls have been presented to the Board for review and approval.

"**Purchase Fund**" means, with respect to a Series of Bonds, the Fund of that name as may be created in the related Supplemental Indenture as provided in Section 418.

"**Qualified Hedge Provider**" means an entity whose senior long-term debt obligations, or whose obligations under any Hedge Facility are (a) guaranteed by a financial institution, or subsidiary of a financial institution, whose senior long-term debt obligations, at the time the Hedge Facility is first placed into effect, are rated at least in the third highest rating category or higher by any Rating Agency, or (b) fully secured by obligations described in items (a) or (b) of the definition of Permitted Investments which are (i) valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at all times at least equal to 105% (or such lower percentage as shall be acceptable to the Rating Agencies) of the "notional amount" as defined in the Hedge Facility, together with the interest accrued and unpaid thereon, (ii) held by the Trustee (who shall not be the provider of the collateral) or by any Federal Reserve Bank or a depository acceptable to the Trustee, (iii) subject to a perfected first lien on behalf of the Trustee, and (iv) free and clear from all third-party liens.

"**Toll Rate Covenant**" means the covenant of the Authority to set and adjust Tolls to satisfy the requirements set forth in Section 512(a).

"**Rating Agency**" or "**Rating Agencies**" means, with respect to a Series of Bonds, Fitch, Moody's or Standard & Poor's (or, if such entities are no long in existence, by comparable services) or any other nationally-recognized credit rating agencies specified in the related Supplemental Indenture; provided, that any such rating agency shall, at the time in question, be maintaining a rating on such Series of Bonds at the request of the Authority.

"**Rebate Requirement**" has the meaning assigned to it in the Tax Certificate.

"**Record Date**" means fifteen days prior to each Bond Payment Date, or, if a different record date is provided in a Supplemental Indenture with respect to a particular Series of Bonds, then the record date for such particular Series of Bonds shall be the record date set forth in such Supplemental Indenture.

"**Redemption Account**" means any redemption account for a Series of Bonds created in the Senior Lien Bond Fund pursuant to Section 401 or other Series of Bonds created pursuant to any Supplemental Indenture.

"**Register**" means, with respect to each Series of Bonds, the registration books of the Authority kept to evidence the registration and registration of transfer of such Series of Bonds.

"**Registrar**" means the entity set forth with respect to a Series of Bonds in the applicable Supplemental Indenture, serving as keeper of the Register for such Series of Bonds.

"**Regularly Scheduled Hedge Receipts**" means for any Annual Period the aggregate regularly scheduled amounts payable to the Authority in such Annual Period under the terms of a Hedge Facility, which are due absent any termination, default or dispute in connection with such Hedge Facility (excluding collateral postings, Hedge Termination Payments, and similar payments).

"**Regularly Scheduled Hedge Payments**" means, for any Annual Period, the aggregate regularly scheduled payments due or paid by the Authority under the terms of a Hedge Facility which are due absent any termination, default or dispute in connection with such Hedge Facility (excluding collateral postings, Hedge Termination Payments, and similar payments).

"**Reimbursement Agreement**" means, with respect to a Series of Bonds, any agreement or agreements in each case between a Credit Provider or Credit Providers and the Authority under or pursuant to which a Credit Facility for such Series of Bonds is issued, and any agreement that replaces such original agreement that sets forth the obligations of the Authority to such Credit Provider or Credit Providers and the obligations of such Credit Provider or Credit Providers to the Authority.

"**Remarketing Agent**" means, with respect to a Series of Bonds, the placement or remarketing agent or agents, if any, at the time serving as such under the Remarketing Agreement and designated in a Supplemental Indenture as the Remarketing Agent with respect to such Series of Bonds for purposes of this Indenture.

"**Remarketing Agreement**" means the remarketing agreement, if any, with respect to a Series of Bonds, between the Authority and the Remarketing Agent as from time to time amended and supplemented, or if such remarketing agreement shall be terminated, then such other agreement which may from time to time be entered into with any Remarketing Agent with respect to the remarketing or placement of such Series of Bonds.

"**Renewal and Replacement Costs**" means all costs and expenses that, in the judgment of the Consulting Engineers, are necessary or appropriate to be expended by the Authority in an Annual Period that are not incurred on any annual or seasonal basis and are necessary in keeping the Turnpike open to public travel or use, but shall not include any cost which, in the judgment of the Consulting Engineers is to be treated as Operation and Maintenance Expenses in the current Annual Period and, in reliance on such judgment, have been included in the Authority's Annual Budget for such Annual Period. The judgment of the Consulting Engineers as to the costs and expenses that are to be included in (a) "Renewal and Replacement Costs" and (b) "Operation and Maintenance Expenses", respectively, shall be memorialized in a certificate to be provided by the Consulting Engineers to the Authority as part of the annual budget-making process as required by Section 508.

"**Renewal and Replacement Reserve Fund**" means the Renewal and Replacement Reserve Fund created pursuant to Section 401.

"**Renewal and Replacement Reserve Fund Requirement**" means the amount recommended by the Consulting Engineers as the Renewal and Replacement Costs for a Fiscal Year, which shall be included in the Annual Budget and shall be memorialized in a certificate to be provided by the Consulting Engineers to the Authority during the annual budget-making process, which certificate is to be included in the Annual Budget, as required by Section 508.

"**Responsible Officer**" means an officer of the Trustee assigned to the Trustee's corporate trust department, including, without limitation, any Vice-President, any Assistant Vice-President, any Trust Officer, or any other officer performing functions similar to those performed by the persons who at the time shall be such officers and also means any other officer of the Trustee to whom any corporate trust matter is referred because of his knowledge of and familiarity with the particular subject.

"**Revenue Fund**" means the Revenue Fund created pursuant to Section 401.

"**Secretary**" means the Secretary of the Board of the Authority.

"**Securities Depository**" means DTC or its successor, if any, appointed pursuant to Section 217.

"**Senior Lien Bonds**" means the Authority's revenue bonds or other indebtedness or obligations secured by the Senior Lien Bond Fund. The term "Senior Lien Bonds" may include bonds, notes, bond anticipation notes, commercial paper, Optional Tender Bonds, and other Short-Term/Demand Obligations, Regularly Scheduled Hedge Payments and other securities, contracts or obligations incurred through lease, installment purchase or other agreements or certificates of participation therein, in each case to the extent secured by the Senior Lien Bond Fund pursuant to a Supplemental Indenture.

"**Senior Lien Bond Fund**" means the Senior Lien Bond Fund created pursuant to Section 401.

"**Senior Lien Debt Service Reserve Fund**" means the Senior Lien Debt Service Reserve Fund created pursuant to Section 401.

"**Series**" or "**Series of Bonds**" or "**Bonds of a Series**" means a series of Bonds issued pursuant to this Indenture and the terms of a Supplemental Indenture.

"**Short-Term/Demand Obligations**" means each Series of Bonds issued pursuant to this Indenture, the payment of principal of which is either (a) payable on demand by or at the option of the Holder at a time sooner than a date on which such principal is deemed to be payable for purposes of computing Annual Debt Service, or (b) scheduled to be payable within one year from the date of issuance and is contemplated to be refinanced for a specified period or term either (i) through the issuance of additional Short-Term/Demand Obligations, or (ii) through the issuance of Long-Term Obligations.

"**Special Project**" or "**Special Projects**" means any property, improvement or project owned and/or operated by the Authority (or by the Authority's lessees, contractual operators, and/or concessionaires), or to be acquired, constructed, owned and/or operated, by the Authority (or by the Authority's lessees, contractual operators, and/or concessionaires) (A) under legal authority provided in the Act and (B) for any new Special Project created on or after the date of this Indenture, as to which the Authority, by adoption of a resolution, as to which the Authority has determined that such property, improvement or project is not part of the Turnpike for travel by motor vehicles, including air rights, if any. Existing Special Projects include, without limitation, (i) the service plazas adjacent to the Turnpike, and the operations selling fuel, food and other products and services at those service plazas, (ii) the facility known as Tamarack located in Beckley, Raleigh County, West Virginia, located at Exit 45 of the Turnpike, including without limitation the Caperton Center at such facility, and (iii) the Tourist Information Center located in Princeton, West Virginia near Exit 9 on Interstate 77 in Mercer County, West Virginia.

"**Special Project Bonds**" means bonds, notes, loans or other obligations or arrangements that are not issued pursuant to this Indenture, but are issued or entered into in connection with Special Projects. Special Project Bonds are not Bonds.

"**Standard & Poor's**" or "**S&P**" means Standard & Poor's Corporation, a corporation organized and existing under the laws of the State of New York, and its successors and assigns and, if such corporation shall no longer perform the functions of a municipal securities rating agency, Standard & Poor's shall mean any other nationally recognized municipal securities rating agency designated by the Authority.

"**State**" means the State of West Virginia.

"**State Road Construction Account**" means that certain special revenue account in the State Treasury (which special revenue account is not part of the State's General Revenue Fund) created pursuant to Section 17-16A-11 of the Act and held in the State Treasury to be expended ultimately by WVDOH for the construction, maintenance and repair of Off-Turnpike WVDOH Projects as provided in the Act and in the Memorandum of Understanding.

"**Subordinate Lien Bond Fund**" means the Subordinate Lien Bond Fund created pursuant to Section 401.

"**Subordinate Lien Bonds**" means the Authority's revenue bonds or other indebtedness or obligations with a priority below Senior, including, without limitation refunding bonds or obligations, which are secured by the Subordinate Lien Bond Fund. The term "Subordinate Lien Bonds" shall include bonds, notes, bond anticipation notes, commercial paper and other Short-Term/Demand Obligations, Regularly Scheduled Hedge Payments and other securities, contracts or obligations incurred through lease, installment purchase or other agreements or certificates of participation therein, in each case to the extent secured by the Subordinate Lien Bond Fund pursuant to a Supplemental Indenture.

"**Subordinate Lien Debt Service Reserve Fund**" means the Subordinate Lien Debt Service Reserve Fund created pursuant to Section 401.

"**Supplemental Indenture**" means an indenture supplemental to or amendatory of this Indenture entered into by the Authority and the Trustee in accordance with Article VIII.

"**Tax Certificate**" means a Tax Certificate concerning certain matters pertaining to the use of proceeds of the Bonds and other tax matters as may be required by Bond Counsel, executed and delivered by the Authority, including any and all exhibits attached thereto.

"**Tax-Exempt Bonds**" means any Bond, the interest on which is excludable from gross income of the holder for purposes of federal income tax.

"**Toll Rate Schedule**" means the schedule of Tolls approved by the Authority as part of the regulatory process established for setting Tolls.

"**Toll Road Consultant**" means a firm or firms of national recognition with expertise and experience regarding the operation, management and financing of, and the collection of revenues from, toll roads, selected and employed by the Authority from time to time.

"**Toll Road Revenues**" means the sum of (a) Tolls, (b) any interest income on, and any profit realized from, the investment of moneys in any Fund or Account, excluding, however, any interest income on, and any profit realized from, the investment of moneys in the Arbitrage Rebate Fund, (c) all proceeds of insurance payable to or received by the Authority with respect to the Turnpike (whether by way of claims, return of premiums, ex gratia settlements or otherwise), including proceeds from business interruption insurance and loss of advance profits insurance, except for proceeds of fire and other casualty insurance, (d) the proceeds of any condemnation awards with respect to the Turnpike and (e) all other amounts derived from or with respect to the operation of the Turnpike, plus (f) any additional revenues added to the Turnpike as provided in Section 216, ***but excluding, however***, any concession revenues, and other revenues derived from the operation or use of service plazas and tourist and information centers, including without limitation Tamarack, the proceeds of any sale of land, buildings or equipment; and any other amounts which are not deemed to be revenues in accordance with generally accepted accounting principles or which are restricted as to their use. Unless otherwise provided in a Supplemental Indenture, there also shall be excluded from the term "Toll Road Revenues" any Hedge Termination Payments received by the Authority. To the extent that the Authority shall adopt a resolution and enter into a Supplemental Indenture that identify a new source of revenues and pledge such new source of revenues for the repayment of, and as security for, Senior Lien Bonds issued under and secured by this Indenture, then such revenues shall also be included in "Toll Road Revenues".

"**Tolls**" means all tolls, fares, incomes, receipts, and charges and all returns or moneys of an income nature derived by or for the benefit of the Authority from motor vehicle travelers of any part of the Turnpike, including without limitation any moneys received in consideration of issuing EZ-Pass® transponders to travelers who establish an EZ-Pass® account with the Authority, but *excluding, however*, any concession revenues, and other revenues derived from the operation or use of service plazas and tourist and information centers, including without limitation Tamarack.

"**Traffic and Revenue Consultant**" means an independent firm or corporation having a nationwide and favorable reputation for skill and experience in performing and carrying out the duties imposed on the Traffic and Revenue Consultant by this Indenture and selected by the Authority for the purpose of performing and carrying out such duties.

"**Treasurer**" means the Treasurer of the Board of the Authority.

"**Tripartite Agreement**" means the Agreement, dated December 13, 1988, between the Authority, as successor to the West Virginia Turnpike Commission, WVDOT, as successor to WVDOH, and the Federal Highway Administration, as amended by the Amended and Restated Agreement, dated June 1, 2018, and as the same may be further amended from time to time, but only if the Authority has provided written notification of such further amendment to the Trustee and to any Rating Agency then rating the Bonds prior to the effective date therefor pursuant to its terms.

"**Trustee**" means United Bank, a Virginia banking corporation, and any successor to its duties under this Indenture.

"**Turnpike**" means the West Virginia Turnpike as currently administered by the Authority from Charleston, West Virginia to the intersection of Interstate 77 and U.S. Route 460 near Princeton, West Virginia and any extensions, additions, removals, or enhancements thereto permitted pursuant to the Act and the Tripartite Agreement, and may include any Parkway Project, but shall exclude Special Projects except to the extent that the Authority has made such Special Projects part of the West Virginia Turnpike as provided in Section 216.

"**Turnpike Capital Improvement Fund**" means the Turnpike Capital Improvement Fund created pursuant to Section 401.

"**Variable Rate Bond**" means any Bond the interest rate on which is not established at a single numerical rate for the entire remaining term of the Bond.

"**Vice Chairman**" means the Vice Chairman of the Board of the Authority.

"**WVDOH**" means the State of West Virginia Department of Transportation, Division of Highways.

Section 102. Rules of Construction.

Unless the context clearly indicates to the contrary, the following rules shall apply to the construction of this Indenture:

(a) Any reference herein to the Authority, the Board thereof or any officer thereof shall include any persons or entities succeeding to their functions, duties or responsibilities pursuant to or by operation of law or who are lawfully performing their functions.

(b) The use of the neuter, masculine or feminine gender is for convenience only and shall be deemed to mean and include the neuter, masculine and feminine gender.

(c) Words importing the singular number shall include the plural number and vice versa.

(d) Words importing the redemption or calling for redemption of Bonds shall not be deemed to refer to or connote the payment of Bonds at their stated maturity.

(e) All references herein to particular articles or sections are references to articles or sections of this Indenture.

(f) The headings and Table of Contents herein are solely for convenience of reference and shall not constitute a part of this Indenture nor shall they affect its meaning, construction or effect.

(g) All references to terms such as herein, hereunder, hereto, etc. refer to this Indenture, as amended or supplemented.

(h) All references herein to payment of Bonds are references to payment of principal of, purchase price of, if applicable, premium, if any, and interest on Bonds.

(i) All references herein to the time of day shall mean Charleston, West Virginia time.

Section 103. Parity as to Net Toll Road Revenues; Bonds of a Series Equally and Ratably Secured.

(a) All Bonds issued hereunder and at any time Outstanding that are of the same lien priority level shall be equally and ratably secured, with the same right, lien and preference with respect to the Trust Estate, including the Net Toll Road Revenues, with all other outstanding Bonds of the same lien priority level, without preference, priority or distinction on account of the date or dates or the actual time or times of the issuance or maturity of the Bonds. The Subordinate Lien Bonds shall in all respects be junior and subordinate to the Senior Lien Bonds, and, if and to the extent provided in the Supplemental Indenture providing for the issuance of a Series of Subordinate Lien Bonds may also be, if and as so provided, subordinate to the Senior Lien Bonds and to one or more Series of Subordinate Lien Bonds.

(b) All Bonds of a particular Series shall in all respects be equally and ratably secured and shall have the same right, lien and preference hereunder established for the benefit of such Series of Bonds, including, without limitation, any related Series Account in the applicable Bond Fund and any related Series Account in the applicable Debt Service Reserve Fund; provided that nothing herein shall be construed to preclude the creation of separate reserve funds or the obtaining of separate surety bonds, insurance policies and other Credit Facilities for any Series of Bonds, which may or may not be pledged toward the payment of other Series of Bonds. Amounts drawn under a Credit Facility with respect to a particular Series and all other amounts held in accounts or funds established with respect to such Series pursuant to the provisions of Article IV hereof and the Supplemental Indenture providing for the terms of such Series shall be applied solely to make payments on such Series of Bonds.

Section 104. Priority of Lien.

There is hereby created an irrevocable lien upon the Trust Estate for the benefit of holders of the Bonds authorized herein. The pledge hereby made shall be valid and binding from and after the time of the delivery of the first Bond authenticated and delivered under this Indenture. Pursuant to the Act, the security so pledged and then or thereafter received by the Authority shall immediately be subject to the lien of such pledge and the obligation to perform the contractual provisions hereby made shall have priority over any or all other obligations and liabilities of the Authority with regard to the Trust Estate, to the extent provided herein, and the lien of such pledge shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the Authority irrespective of whether such parties have notice thereof.

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ARTICLE II
TERMS OF BONDS

Section 201. Issuance.

The Authority may issue Bonds from time to time in one or more Series as hereinafter provided, and as permitted by the Act, without limitation as to amount, except as may be limited by the Bond Authorizing Resolution or the Act. Unless otherwise provided in the Supplemental Indenture providing for the issuance of a Series of Bonds, the Bonds shall be designated "Turnpike Toll Revenue Bonds" and shall bear an appropriate lien (Senior Lien or Subordinate Lien, as appropriate) and Series designation.

Section 202. Terms.

Each Series of Bonds shall bear the terms provided herein and in the Supplemental Indenture providing for the issuance thereof.

Section 203. Medium and Place of Payment.

(a) The principal of, purchase price of, if applicable, premium, if any, and interest on the Bonds shall be payable in currency of the United States of America which, at the respective dates of payment thereof, is legal tender for the payment of public and private debts. The principal of, purchase price of, if applicable, premium, if any, and interest on a Series of Bonds shall be payable in the manner and at the place specified in the Supplemental Indenture providing for the issuance of such Series of Bonds.

(b) In the event of a default by the Authority in the payment of interest due on a Bond on any Bond Payment Date, such defaulted interest will be payable to the person in whose name such Bond is registered at the close of business on a special record date for the payment of such defaulted interest established by notice mailed by the Registrar for such Bond to the registered owner thereof not less than 10 days preceding such special record date.

(c) So long as the registered owner of any Bond is the Securities Depository or a nominee therefor, the Securities Depository shall disburse any payments received, through its Participants or otherwise, to the Beneficial Owners. Neither the Authority nor the Paying Agent shall have any responsibility or obligation for the payment to any Participant, any Beneficial Owner or any other person or entity (except a registered owner of Bonds) of the principal of, purchase price of, if applicable, premium, if any, and interest on the Bonds. Notwithstanding any other provision of this Indenture to the contrary, so long as the Bonds are registered in the name of Cede & Co., as nominee for the Securities Depository, all payments with respect to principal of, purchase price of, if applicable, premium, if any, and interest on the Bonds shall be made in the manner provided in the Authority's letter of representations to DTC.

(d) Subject to the foregoing provisions of this Section 203, each Bond delivered under this Indenture upon transfer of or exchange for or in lieu of any other Bond shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Bond.

Section 204. Mutilated, Destroyed, Lost and Stolen Bonds.

(a) If any Bond shall become mutilated, lost, stolen, or destroyed, the affected Bondholder shall be entitled to the issuance of a substitute Bond only as follows:

(i) in the case of a destroyed, lost, or stolen Bond, the Bondholder shall provide notice of the loss to the Authority within a reasonable time after the Bondholder receives notice of the loss;

(ii) in the case of a destroyed, lost or stolen Bond, the Bondholder shall request the issuance of a substitute Bond before the Authority receives notice of the transfer of the original Bond to a bona fide purchaser for value without notice;

(iii) in all cases, the Bondholder shall provide indemnity against any and all claims arising out of or otherwise related to the issuance of substitute Bonds pursuant to this Section satisfactory to the Trustee and the Authority;

(iv) in the case of a mutilated Bond, the Bondholder shall surrender the Bond to the Trustee for cancellation; and

(v) in the case of a destroyed, lost or stolen Bond, the Bondholder shall provide evidence, satisfactory to the Authority and the Trustee, of the ownership and the destruction, loss or theft of the affected Bond.

Upon compliance with the foregoing, a new Bond of like tenor and denomination, executed by the Authority, shall be authenticated by the Trustee and delivered to the Bondholder, all at the expense of the Bondholder to whom the substitute Bond is delivered. Notwithstanding the foregoing, the Trustee shall not be required to authenticate and deliver any substitute for a Bond which has been called for redemption or which has matured or is about to mature and, in any such case, the principal or redemption price then due or becoming due shall be paid by the Trustee in accordance with the terms of the mutilated, destroyed, lost or stolen Bond without substitution therefor.

(b) Every substituted Bond issued pursuant to this Section 204 shall constitute an additional contractual obligation of the Authority and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Bonds duly issued hereunder unless the Bond alleged to have been mutilated, destroyed, lost, or stolen shall be at any time enforceable by a bona fide purchaser for value without notice. In the event the Bond alleged to have been destroyed, lost, or stolen shall be enforceable by anyone, the Authority may recover the substitute Bond from the Bondholder to whom it was issued or from anyone taking under the Bondholder except a bona fide purchaser for value without notice.

(c) All Bonds shall be held and owned upon the express condition that the foregoing provisions are exclusive with respect to the replacement or payment of mutilated, destroyed, lost, or stolen Bonds, and shall preclude any and all other rights or remedies, notwithstanding any law or statute existing or hereafter enacted to the contrary with respect to the replacement or payment of negotiable instruments or investment or other securities without their surrender.

Section 205. Execution and Authentication of Bonds.

All Bonds shall be executed for and on behalf of the Authority by the Chair and attested by the Secretary and Treasurer. The signatures of the Chair, the Secretary and the Treasurer may be mechanically or photographically reproduced on the Bonds. If any officer of the Authority whose signature appears on any Bond ceases to be such officer before delivery thereof, such signature shall remain valid and sufficient for all purposes as if such officer had remained in office until such delivery. Each Bond shall be authenticated manually by an authorized officer of the Authenticating Agent, without which authentication no Bond shall be entitled to the benefits hereof.

Section 206. Exchange of Bonds.

Bonds, upon presentation and surrender thereof to the Registrar together with written instructions satisfactory to the Registrar, duly executed by the registered Holder or his attorney duly authorized in writing, may be exchanged for an equal aggregate principal amount of fully registered Bonds of the same Series and tenor.

Section 207. Negotiability and Transfer of Bonds; Book-Entry System.

(a) All Bonds issued under this Indenture shall be negotiable, subject to the provisions for registration and registration of transfer thereof contained herein or in the Bonds.

(b) The Authority shall cause the Register, with respect to each Series of Bonds, to be maintained at the offices of the Registrar therefor and shall provide for the registration and registration of transfer of any Bond of such Series under such reasonable regulations as the Authority or the Registrar may prescribe. The Registrar with respect to each Series of Bonds shall maintain the Register for purposes of exchanging and registering Bonds in accordance with the provisions hereof.

(c) Each Bond of a Series shall be registered or registered for transfer only upon the Register maintained by the Registrar, by the Holder thereof in person or by his attorney duly authorized in writing, upon presentation and surrender thereof together with a written instrument of transfer satisfactory to the Registrar duly executed by the registered Holder or his duly authorized attorney. Upon surrender for registration of transfer of any such Bond, the Authority shall cause to be executed and the Authenticating Agent shall authenticate and deliver, in the name of the transferee, one or more new Bonds of the same Series, interest rate, maturity, principal amount and date as the surrendered Bond, as fully registered Bonds only.

(d) The Trustee, as Registrar, hereby designates its principal corporate trust office as the location where it will maintain the Register for the Bonds. If the Registrar is replaced, the Authority shall cause any replacement Registrar to designate, by a written notification to the Trustee, a specific office location (which may be changed from time to time, upon similar notification) at which the Register will be kept.

(e) The Registrar for the Bonds shall, in any case where it is not also the Trustee in respect of the Bonds, forthwith following each Record Date in respect of the Bonds and at any other time as reasonably requested by the Trustee for the Bonds, certify and furnish to the

Trustee, and to any Paying Agent for the Bonds as the Trustee shall specify, the names, addresses, and holdings of Bondholders and any other relevant information reflected in the Bond Register, and the Trustee and any such Paying Agent shall for all purposes be fully entitled to rely upon the information so furnished to it and shall have no liability or responsibility in connection with the preparation thereof.

(f) The Bonds shall be registered upon original issuance and upon subsequent transfer or exchange as provided in this Indenture. Unless otherwise provided in a Supplemental Indenture, each Bond shall be registered in the name of the Securities Depository or a nominee therefor. Purchases by Beneficial Owners of the Bonds shall be made in book-entry form, and the Beneficial Owners shall not receive certificates evidencing their interests in the Bonds. Except as hereinafter provided, all of the Bonds shall continue to be registered in the name of the Securities Depository or a nominee therefor. To the extent that printed Bonds, rather than typewritten Bonds, are to be delivered, such modifications to the form of Bond as may be necessary or desirable in such case are hereby authorized and approved.

(g) A single certificate shall be issued and delivered to the Securities Depository for each maturity of the Bonds. The actual purchasers of the Bonds, herein referred to as the Beneficial Owners, will not receive physical delivery of Bond certificates except as may be provided in a Supplemental Indenture. So long as there exists a Securities Depository as provided herein, all transfers of beneficial ownership interests in the Bonds shall be made by book-entry only, and no person purchasing, selling or otherwise transferring beneficial ownership interests in the Bonds will be permitted to receive, hold, or deliver any Bond certificate. The Authority and the Trustee shall treat the Securities Depository or its nominee as the sole and exclusive Bondholder for all purposes, including payments of principal of, purchase price of, if applicable, premium, if any, and interest on the Bonds, notices and voting.

(h) With respect to Bonds registered in the name of Cede & Co., the Authority and the Trustee shall have no responsibility or obligation to any Participant or to any Beneficial Owner. Without limiting the immediately preceding sentence, the Authority and the Trustee shall have no responsibility or obligation with respect to (i) the accuracy of the records of DTC, Cede & Co. or any Participant with respect to any beneficial ownership interest in the Bonds, (ii) the delivery to any Participant, Beneficial Owner or other person, other than DTC, of any notice with respect to the Bonds, including any notice of redemption, (iii) the payment to any Participant, Beneficial Owner or other person, other than DTC, of any amount with respect to the principal, purchase price or redemption price of, or any interest on, the Bonds, or (iv) any consent given or other action taken by DTC as owner of the Bonds. The Trustee shall pay the principal, purchase price or redemption price of, and interest on, all Bonds only to or upon the order of DTC, and all such payments shall be valid and effective to fully satisfy and discharge the Authority's obligations with respect to such principal or redemption price, and interest, to the extent of the sum or sums so paid.

(i) The Authority and the Trustee covenant and agree, so long as DTC shall continue to serve as Securities Depository for the Bonds, to meet the requirements of DTC with respect to required notices and other provisions of the Authority's letter of representations to DTC. Whenever Bonds remain Outstanding and the beneficial ownership thereof must be determined by the books of the Securities Depository, the requirements in this Indenture for holding, delivering, tendering, or transferring Bonds shall be deemed modified to require the appropriate person to meet the requirements of the Securities Depository with respect to such actions to produce the same effect. Any provision hereof permitting or requiring delivery of Bonds shall, while the Bonds are in the Book-Entry System, be satisfied by notation on the books of the Securities Depository in accordance with state law.

(j) The Trustee and the Authority may from time to time appoint a successor Securities Depository pursuant to Section 217 and enter into any agreement with such Securities Depository to establish procedures with respect to the Bonds not inconsistent with the provisions of this Indenture.

(k) The Authority and the Trustee may conclusively rely upon (i) a certificate of the Securities Depository as to the identity of the Participants in the Book-Entry System with respect to the Bonds and (ii) a certificate of any such Participant as to the identity of, and the respective principal amount of Bonds beneficially owned by, the Beneficial Owners.

(l) Neither the Authority nor the Trustee shall have any responsibility or obligation to any Securities Depository, any Participant in the Book-Entry System or the Beneficial Owners with respect to: (i) the accuracy of any records maintained by the Securities Depository or any Participant; (ii) the payment by the Securities Depository or by any Participant of any amount due to any Beneficial Owner in respect of the principal amount (including premium) or redemption or purchase price of, or interest on, any Bonds; (iii) the delivery of any notice by the Securities Depository or any Participant; (iv) the selection of the Beneficial Owners to receive payment in the event of any partial redemption of the Bonds; or (v) any other action taken by the Securities Depository or any Participant in connection with the Bonds.

(m) Unless otherwise provided in a Supplemental Indenture, Bond certificates shall be delivered to and registered in the name of Beneficial Owners only under the following circumstances:

(i) The Securities Depository determines to discontinue providing its service with respect to the Bonds and no successor Securities Depository is appointed as described in Section 217. Such a determination may be made at any time by the Securities Depository's giving reasonable notice to the Authority or the Trustee and discharging its responsibilities with respect thereto under applicable law.

(ii) The Authority determines not to continue the Book-Entry System through any Securities Depository.

Section 208. Persons Deemed Owners.

Except as provided in the applicable Supplemental Indenture, as to any Bond, the person in whose name such Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of principal of, purchase price of, if applicable, premium, if any, and interest on any Bond shall be made, as provided in the applicable Supplemental Indenture, only to or upon the written order of the registered Holder thereof. Such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the amount so paid.

Section 209. Provisions with Respect to Transfers and Exchanges.

(a) All Bonds surrendered in any exchange or registration of transfer of Bonds shall forthwith be cancelled by the Registrar.

(b) In connection with any such exchange or registration of transfer of Bonds, the Holder requesting such exchange or registration of transfer shall as a condition precedent to the exercise of the privilege of making such exchange or registration of transfer remit to the Registrar an amount sufficient to pay any service charge, tax or other governmental charge required to be paid with respect to such exchange or registration of transfer.

(c) Except with respect to Bonds of a Series that are subject to optional tender or are purchased, paid or held by a Credit Provider, neither the Authority nor the Registrar shall be obligated to register the transfer or exchange of any Bond which has been or is being called for redemption in whole or in part.

(d) Upon surrender for transfer of any Bond at the office of the Registrar, the Authority shall execute and the Trustee (or Authenticating Agent) shall authenticate and deliver in the name of the designated transferee or transferees one or more new Bonds of any authorized denomination of a like aggregate principal amount.

(e) At the option of the Beneficial Owner, Bonds may be exchanged for other Bonds of any authorized denomination, of a like Series, maturity, interest rate and aggregate principal amount, upon surrender of the Bonds to be exchanged at any such office. Whenever any Bonds are so surrendered for exchange, the Authority shall execute, and the Trustee (or Authenticating Agent) shall authenticate and deliver in the name of the Beneficial Owner requesting such exchange, one or more new Bonds of any authorized denomination of a like Series, maturity, interest rate and aggregate principal amount.

(f) All Bonds presented for transfer, exchange, redemption, or payment (if so required by the Authority, the Registrar or the Trustee), shall be accompanied by a written instrument or instruments of transfer or authorization for exchange, in form and with guaranty of signature reasonably satisfactory to the Trustee, duly executed by the Beneficial Owner or by his duly authorized attorney in fact.

(g) New Bonds delivered upon any transfer or exchange shall be valid obligations of the Authority, evidencing the same debt as the Bonds surrendered, shall be secured by this Indenture and entitled to all of the rights, remedies and security hereunder to the same extent as the Bonds surrendered.

(h) Neither the Authority nor the Registrar shall have any responsibility or obligation with respect to the accuracy of the records of the Securities Depository or a nominee therefor or any Participant regarding any ownership interest in the Bonds or transfers thereof, or the delivery to any Participant, Beneficial Owner or any other person (except a registered owner of Bonds) of any notice with respect to the Bonds.

Section 210. Conditions for Delivery of Bonds.

Upon the execution and delivery of a Supplemental Indenture providing for the issuance of a Series of Bonds, the Authority shall execute and deliver such Series of Bonds to the Trustee, the Trustee shall deliver such Series of Bonds to the Authenticating Agent for authentication and delivery to or for the account of the Original Purchaser as directed by the Authority Authorized Officer, and the Authenticating Agent shall authenticate such Series of Bonds; provided, however, that, prior to delivery by the Trustee of such Series of Bonds, there shall be delivered to the Trustee the following:

(a) A certified copy of the applicable Bond Authorizing Resolution.

(b) Executed or true counterparts of this Indenture, such Supplemental Indenture, such Bond Purchase Contract, such Hedge Facility, if any, such Reimbursement Agreement, if any, and the executed Credit Facility issued pursuant thereto and such Remarketing Agreement, if any.

(c) A request and authorization by the Authority to the Authenticating Agent to authenticate and deliver the Series of Bonds, describing such Bonds, designating the Original Purchaser to whom such Bonds are to be delivered upon payment therefor and stating the amount to be paid therefor to the Trustee for the account of the Authority.

(d) The amounts specified in the Supplemental Indenture for deposit to the credit of the applicable Funds and Accounts created hereunder.

(e) A certificate of the Consulting Engineers setting forth its opinions as to (i) the Turnpike's being in good repair, and, except with respect to refunding Bonds, (ii) the estimated amount of Operation and Maintenance Expenses for each of the Annual Periods through the next five (5) years or, if such Bonds are being issued to construct a new Parkway Project, then at least five (5) years of operation after completion of such Parkway Project.

(f) Except with respect to refunding Bonds, a certificate of the Traffic and Revenue Consultant setting forth its opinion as to the aggregate estimated amount of Toll Road Revenues which the Authority should derive from the operation of the Turnpike under the Toll Rate Schedule or the Projected Toll Rate Schedule referred to, set forth in, or attached to, the certificate, for each of the Annual Periods through the repayment of all Outstanding Bonds and all other obligations issued by the Authority and payable from Toll Road Revenues including the additional non-refunding Bonds proposed to be issued.

(g) Any other items required by the Supplemental Indenture pursuant to which such Series of Bonds is being issued.

(h) Such other closing documents as the Authority or the Trustee reasonably may specify.

(i) If the Series of Bonds are additional Bonds, the documents and certificates required by Section 213.

Section 211. Form of Bonds.

The definitive Bonds of each Series shall be in substantially the form set forth as an exhibit to the Supplemental Indenture providing for the issuance of such Series of Bonds.

Section 212. Temporary Bonds.

(a) Until definitive Bonds are prepared, the Authority may execute and, upon request by the Authority, the Authenticating Agent shall authenticate and deliver temporary Bonds which may be typewritten, printed or otherwise reproduced in lieu of definitive Bonds subject to the same provisions, limitations and conditions as definitive Bonds. The temporary Bonds shall be dated as provided in the applicable Supplemental Indenture, shall be in such denomination or denominations and shall be numbered as prepared and executed by the Authority, shall be substantially of the tenor of the definitive Bonds of such Series, but with such omissions, insertions and variations as the Authority Authorized Officers executing the same may determine, may only be issued in fully registered form, and may be issued in the form of a single Bond.

(b) Without unreasonable delay after the issuance of temporary Bonds, if any, the Authority shall cause the definitive Bonds to be prepared, executed and delivered to the Authenticating Agent. The definitive Bonds of such Series shall be prepared in such fashion as is acceptable to the Original Purchaser. Any temporary Bonds issued shall be exchangeable for definitive Bonds of such Series upon surrender to the Registrar at its principal corporate trust office (or such other location as may be designated by it) of any such temporary Bond or Bonds, and, upon such surrender, the Authority shall execute and, upon delivery of a certificate of an Authority Authorized Officer, the Authenticating Agent shall authenticate and deliver to the Holder of the temporary Bond or Bonds, in exchange therefor, a like face amount of definitive Bonds of such Series in authorized denominations. Until so exchanged, the temporary Bonds shall in all respects be entitled to the same benefits as definitive Bonds of such Series authenticated and issued pursuant hereto.

(c) Interest on temporary Bonds, when and as payable, shall be paid to the Holders thereof.

(d) All temporary Bonds surrendered in exchange for a definitive Bond or Bonds shall forthwith be cancelled by the Registrar.

Section 213. Additional Bonds.

The Authority may issue one or more Series of additional Bonds to pay costs of the Parkway Projects, to refund all or a portion of a Series of Bonds, to pay costs of issuance, or for any combination of such purposes. Each Series of additional Bonds shall be issued pursuant to a Supplemental Indenture. If such Series of additional Bonds are Senior Lien Bonds, they shall be equally and ratably secured under this Indenture with all other Senior Lien Bonds, without preference, priority or distinction of any Senior Lien Bonds over any other Senior Lien Bonds. If such Series of additional Bonds are Subordinate Lien Bonds, they shall be equally and ratably secured under this Indenture with all other Subordinate Lien Bonds, without preference, priority or distinction of any Subordinate Lien Bonds over any other Subordinate Lien Bonds, except that, to the extent provided in the Supplemental Indenture providing for the issuance of a particular Series of Subordinate Lien Bonds, a Series of Subordinate Lien Bonds may be subordinate to both Senior Lien Bonds and to one or more Series of Subordinate Lien Bonds. If such Series of additional Bonds are Subordinate Lien Bonds having a particular degree of subordination and priority, they shall be equally and ratably secured under this Indenture with all other Subordinate Lien Bonds having the same degree of subordination and priority, without preference, priority or distinction of any such Subordinate Lien Bonds over any other such Subordinate Lien Bonds.

The Trustee shall authenticate and deliver such additional Bonds, but only upon receipt by the Trustee of, among other things, the following:

(a) A certificate of the Authority, dated as of the date of delivery of such additional Bonds, stating that, as of the date of such certificate, no event or condition has happened or existed, or is happening or existing, that continues, or that, with notice or lapse of time or both, would constitute an Event of Default by the Authority under this Indenture;

(b) A certificate of the Authority, dated as of the date of delivery of such additional Bonds, stating that, with respect to all then Outstanding Bonds, all applicable Toll Rate Covenants were met in the prior Annual Period and the Authority is current in all deposits into the various Funds and Accounts and in all payments theretofore required to have been deposited or made by it under the provisions of the Indenture as to all Senior Lien Bonds;

(c) If such additional Bonds are Senior Lien Bonds:

(i) and such additional Bonds are being issued to provide funding for Parkway Projects, then either:

(A) a certificate of an Authority Authorized Officer certifying that the Net Toll Road Revenues (adjusted to reflect any authorized and to be implemented within six months adjustment in tolls, fees and charges, as if such adjustment had been in effect since the beginning of the period described herein) for (1) the most recent Annual Period for which audited statements are available or (2) a 12-consecutive-month period in the immediately prior 18 months were at least 125% of the Maximum Annual Debt Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) and the additional Senior Lien Bonds proposed to be issued; or

(B) a certificate of the Authority stating that, based upon the report of the Consulting Engineers and Traffic and Revenue Consultant, the projected Net Toll Road Revenues (adjusted to reflect any authorized adjustment in tolls, fees and charges, provided that such adjustment is to be implemented within six months, as if such adjustment had been in effect since the beginning of the period described herein) for the current and each of the Annual Periods through the fifth Annual Period following the issuance of the additional Senior Lien Bonds are at least 135% of

Annual Debt Service for each such year and projected Net Toll Road Revenues in the fifth such year equaled or exceeded 135% of the Maximum Annual Debt Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) and the additional Senior Lien Bonds proposed to be issued.

(ii) and such additional Senior Lien Bonds are refunding Bonds, a certificate demonstrating compliance with clause (i), clause (ii) or clause (iii) of Section 213(d).

(d) If additional Bonds are being issued for the purpose of refunding all or a portion of one or more Series of Bonds, a certificate of the Authority certifying that either (i) the Maximum Annual Debt Service for all then Outstanding Senior and Subordinate Lien Bonds, after giving effect to such refunding, would not be more than the Maximum Annual Debt Service for all then Outstanding Senior and Subordinate Lien Bonds immediately prior to the issuance of such additional Bonds, (ii) as a result of the proposed refunding, savings in the aggregate Annual Debt Service savings for all then Outstanding Senior and Subordinate Lien Bonds will be achieved in each Annual Period, or (iii) if the additional Bonds are Senior Lien Bonds that are refunding Senior Lien Bonds, then, as an alternative to (i) or (ii) above, a certificate demonstrating compliance with either of the two coverage tests set forth in subsection 213(c)(i).

(e) If such additional Bonds are Subordinate Lien Bonds, then the Trustee shall authenticate and deliver such additional Bonds, upon compliance with the applicable requirements of this Section 213(a) and (b) and upon such further terms and subject to such further conditions as are provided in a Supplemental Indenture authorizing such Bonds.

Section 214. Non-Presentment of Bonds; Unclaimed Moneys.

(a) If any Bond is not presented for payment when the principal thereof becomes due (whether at maturity or call for redemption or otherwise), all liability of the Authority to the Holder thereof for the payment of such Bond shall be completely discharged if funds sufficient to pay such Bond and the interest due thereon shall be held by the Trustee for the benefit of such Bondholder, and thereupon it shall be the duty of the Trustee to hold such funds subject to subsection (b) below, without liability for interest thereon, for the benefit of such Bondholder, who shall thereafter be restricted exclusively to such funds for any claim of whatever nature under this Indenture or on, or with respect to, such Bond.

(b) Notwithstanding any provision of this Indenture to the contrary, if any Bond is not presented for payment of principal of, purchase price of, if applicable, premium, if any, and interest on the Bonds within two (2) years after delivery of such funds to the Trustee, and absent knowledge of the Trustee of any continuing Event of Default, the moneys shall, upon request in writing by the Authority, be paid to the Authority free of any trust or lien and thereafter the Holder of such Bond shall look only to the General Fund of the Authority and then only to the extent of the amounts so received by the Authority without any interest thereon. Prior to the transfer of any moneys, the Trustee shall give notice of such transfer to each affected Holder, and, while the Bonds are in the Book-Entry System, to the Securities Depository in lieu of the

Holders, and publish such notice in a newspaper of general circulation in the Charleston, West Virginia area. The Trustee shall have no further responsibility with respect to such moneys or payment of principal of, purchase price of, if applicable, premium, if any, and interest on the Bonds.

Section 215. Subordinate Lien Obligations.

(a) The Authority shall not issue additional obligations payable from Toll Road Revenues with a lien thereon prior and superior to the Senior Lien Bonds.

(b) The Authority has the power and the right to issue or enter into other bonds, notes, loans or other obligations or arrangements that are payable from and secured by the Toll Road Revenues on a basis that is junior and subordinate to the use of and the lien on the Toll Road Revenues granted to the Trustee for the benefit of the Holders of any Senior Lien Bonds. Any such subordinate obligation, and any funds or accounts established in connection therewith, may be authorized and designated as such by resolution of the Authority, by Supplemental Indenture or any other agreement or instrument of the Authority.

Section 216. Revenue Derived from Special Projects Not Included in Toll Road Revenues; Right of Authority to Add Special Projects to the Turnpike; Definitions of Certain Terms.

(a) Revenue derived from Special Projects is not included in Toll Road Revenues and shall not be subject to the lien of this Indenture, unless the Authority takes action to include such Special Projects in the Turnpike as provided in Section 216(b) below. If the Authority satisfies the requirements of Section 216(b), then the revenues from and the operation and maintenance expenses and renewal and replacement costs of Special Projects shall become Turnpike Toll Road Revenues, Operation and Maintenance Expenses, Renewal and Replacement Costs, respectively. The following capitalized terms shall have the following meanings when used in this Section 216:

> (i) "Special Projects Operation and Maintenance Expenses" means, with respect to a Special Project or Special Projects, as applicable, expenses for operation, maintenance, and repairs of a Special Project or Special Projects, ordinary acquisition of equipment, and any other current expenses or obligations required to be paid by the Authority under or pursuant to the provisions of this Indenture, any Supplemental Indenture, or by law, all to the extent properly and directly attributable to the operation of the Special Project or Special Projects, but not any costs or expenses for new construction or any allowance for depreciation. Special Project Operation and Maintenance Expenses shall be further defined as provided in the applicable indenture of trust, Supplemental Indenture, and resolution of the Authority, as applicable to such Special Project or Special Projects
>
> (ii) "Special Project Renewal and Replacement Costs" means, with respect to a Special Project or Special Projects, as applicable, all costs and expenses necessary or appropriate to be incurred by the Authority on other than an annual

or seasonal basis in keeping the Special Project or Special Projects open to public travel or use, but shall not include any cost which the Authority has budgeted as Special Project Operation and Maintenance Expenses in the current Annual Period.

(iii) "Special Project Revenues" means, with respect to a Special Project or Special Projects, as applicable, the sum of (a) all rents, fees, sales revenues, commissions, concession revenues and other charges paid to the Authority by, and collected by the Authority from, users of the Special Project and by vendors and concessionaires (or any other persons) who engage in activities at the Special Project or Special Projects that generate revenue of any sort and shall be further defined as provided in the applicable indenture of trust, Supplemental Indenture, and resolution of the Authority, as applicable to such Special Project or Special Projects.

(b) The Authority shall have the right to add one or more Special Project or Special Projects to, and, by adoption of a specific resolution of the Authority, to designate such Special Project or Special Projects as a part of, the Turnpike; provided, that the Authority has complied with the following conditions, as applicable:

(1) An Authority Authorized Officer certificate is delivered to the Trustee certifying that (A) no Event of Default exists; (B) the Authority is current in all deposits into the various Funds and Accounts and in all payments theretofore required to have been deposited or made by it under the provisions of the Indenture as to all Senior Lien Bonds; (C) the Authority is either in compliance with the covenants of the Indenture by which it or its assets are bound, or, upon the inclusion of such Special Project or Special Projects, will be in compliance with all such covenants; and (D) a true and correct copy of the Authority's resolution designating such Special Project or Special Projects as part of the Turnpike is attached to such certificate.

(2) An Authority Authorized Officer certificate is delivered to the Trustee certifying that:

(A) if the Special Project has been generating Special Project Revenues for at least one year, the actual annual Special Project Revenues generated by such Special Project or Special Projects for the most recently completed 12-month period (that is, using actual historical revenues therefrom), equaled or exceeded the sum of (i) Special Projects Operation and Maintenance Expenses for such 12-month period as certified for this purpose by the Consulting Engineers, (ii) to the extent there are Outstanding Special Project Bonds, the debt service due on such Outstanding Special Project Bonds in the prior year, and (iii) Special Projects Renewal and Replacement Costs, as certified for this purpose by the Consulting Engineers; and

(B) Special Project Revenues estimated by the Traffic and Revenue Consultant to be generated by such Special Project or Special Projects in the next five (5) years after addition of such Special Project or Special Projects (taking into account any available historical revenues therefrom, and the reasonably anticipated effects of any new or increased charges, tolls, rents or the like for such Special Project or Special Projects, shall equal or exceed the sum of (i) the Special Projects Operation and Maintenance Expenses for each such Annual Period as certified for this purpose by the Consulting Engineers, (ii) to the extent there are Outstanding Special Project Bonds, the debt service due for each of such five (5) years, and in the fifth (5th) such year, the maximum annual debt service for any Annual Period during the term of such indebtedness, and (iii) Special Projects Renewal and Replacement Costs for each such Annual Period as certified for this purpose by the Consulting Engineers.

(3) If Special Project Bonds are Outstanding, such Special Project Bonds may only be transferred into this Indenture if the applicable Special Project or Special Projects for which such Special Project Bonds were issued is transferred to the Turnpike; provided, that if such Outstanding Special Project Bonds are to be transferred into this Indenture and are to become Senior Bonds secured hereby, then such Special Project Bonds may be so transferred if there also is delivered to the Trustee an Authority Authorized Officer certificate certifying that either:

(A) the sum of Net Special Project Revenues and Net Toll Road Revenues (adjusted to reflect any authorized and to be implemented within six months adjustment in tolls, fees and charges, as if such adjustment had been in effect since the beginning of the period described herein) for (1) the most recent Annual Period for which audited statements are available or (2) a 12-consecutive-month period in the immediately prior 18 months was at least 125% of the Maximum Annual Debt Service for all then Outstanding Bonds (excluding any Senior Lien Bonds being refunded), then Outstanding Special Project Bonds associated with such Special Project or Special Projects being designated as part of the Turnpike, and additional Bonds and Special Project Bonds, if any, then proposed to be issued; **<u>or</u>**

(B) based upon the report of the Consulting Engineers and Traffic and Revenue Consultant, the sum of the projected Net Toll Road Revenues and the projected Net Special Project Revenues (adjusted to reflect any authorized and to be implemented within six months adjustment in tolls, fees and charges, as if such adjustment had been in effect since the beginning of the period described herein) for the current and each of the Annual Periods through the fifth Annual Period following the designation of such Special Project or Special Projects as part of the Turnpike is at least 135% of Annual Debt Service for each such year and projected Net Toll Road Revenues and projected net Special Project Revenues in the fifth such year equaled or exceeded 135% of the Maximum Annual Debt

Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) any additional Senior Lien Bonds proposed to be issued, and the Special Project Bonds to be transferred into this Indenture.

(c) The Authority may contribute, to the extent available for such purpose, Toll Road Revenues to support Special Projects and/or to pay debt service on Special Project Bonds.

Section 217. Resignation or Removal of Securities Depository.

(a) The Authority may remove the Securities Depository and the Securities Depository may resign by giving 60 days' prior written notice to the other of such removal or resignation. Additionally, the Securities Depository shall be removed 60 days after receipt by the Authority of written notice from the Securities Depository to the effect that the Securities Depository has received written notice from Participants having interests, as shown in the records of the Securities Depository, in an aggregate principal amount of not less than 50% of the aggregate principal amount of the then Outstanding Bonds to the effect that the Securities Depository is unable or unwilling to discharge its responsibilities or a continuation of the requirement that all of the Outstanding Bonds be registered in the name of the Securities Depository or a nominee therefor is not in the best interests of the Beneficial Owners. Upon the removal or resignation of the Securities Depository, the Securities Depository shall take such action as may be necessary to assure the orderly transfer of the computerized book-entry system with respect to the Bonds to a successor Securities Depository or, if no successor Securities Depository is appointed as herein provided, the transfer of the Bonds in certificate form to the Beneficial Owners or their designees. Upon the giving of notice by the Authority of the removal of the Securities Depository, the giving of notice by the Securities Depository of its resignation or the receipt by the Authority of notice with respect to the written notice of Participants referred to herein, the Authority may, within 60 days after the giving of such notice, appoint a successor Securities Depository upon such terms and conditions as the Authority shall impose.

(b) Any such successor Securities Depository shall at all times be a registered "clearing agency" under the Securities and Exchange Act of 1934, as amended, or other applicable statute or regulation, and in good standing thereunder.

(c) If the Authority fails to appoint a successor Securities Depository within such time period, the Bonds shall no longer be restricted to being registered in the name of the Securities Depository or a nominee therefor, but may be registered in whatever name or names owners transferring or exchanging bonds shall designate.

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ARTICLE III
REDEMPTION OF BONDS

Section 301. Right to Redeem.

The Bonds of a Series shall be subject to redemption prior to maturity at such times, to the extent and in the manner provided herein and in the applicable Supplemental Indenture.

Section 302. Sinking Fund Redemption.

Bonds of a Series shall be subject to mandatory sinking fund redemption and shall be redeemed in the amounts and on the dates and in the years set forth in the Supplemental Indenture providing for the issuance of such Bonds.

Section 303. Purchase or Cancellation in Lieu of Redemption.

Except as may be provided in the applicable Supplemental Indenture, on or before the forty-fifth (45th) day next preceding any applicable sinking fund redemption date, the Authority has the option to: (i) cause to be paid to the Trustee for deposit in the applicable subaccount of the relevant Series Redemption Account such amount, or direct the Trustee to use moneys in the applicable sinking fund account in such amount, as the Authority may determine, accompanied by a certificate signed by the Authority Authorized Officer directing the Trustee to apply such amount to the purchase of the applicable Series of Bonds, and the Trustee shall use all reasonable efforts to expend such funds as nearly as may be practicable in the purchase of such Series of Bonds, at a price not exceeding the principal amount thereof plus accrued interest to such sinking fund redemption date; or (ii) receive a credit against the sinking fund redemption obligation for the applicable Series of Bonds to the extent such Series of Bonds have been purchased by the Authority and presented to the Trustee for cancellation or redeemed (other than pursuant to the above-mentioned sinking fund requirements) and cancelled by the Trustee.

Each Series of Bonds so purchased, delivered or previously redeemed shall be credited by the Trustee as provided above at 100% of the principal amount thereof against the obligation of the Authority on the applicable sinking fund redemption date. Any excess over such obligation shall be credited as directed by the Authority against applicable future sinking fund redemption obligations, or deposits with respect thereto, and the principal amount of such Series of Bonds to be redeemed by operation of the sinking fund shall be accordingly reduced. Any funds received by the Trustee pursuant to clause (i) of the preceding paragraph, but not expended as provided therein for the purchase of a Series of Bonds on or before said forty-fifth (45th) day shall be retained in the relevant Series Redemption Account and shall thereafter be used only for the purchase of such Series of Bonds, as a credit as directed by the Authority, against future sinking fund obligations, or deposits with respect thereto as directed by the Authority.

Section 304. Notice of Redemption.

Except as may be provided otherwise in the applicable Supplemental Indenture:

(a) If less than all Bonds of a Series are to be redeemed, and subject to the provisions of subsection (b) hereof, the Bonds to be redeemed shall be identified by reference to the Series designation, date of issue, serial numbers and maturity date. Each notice of redemption shall specify: (i) the date fixed for redemption, (ii) the principal amount of Bonds or portions thereof to be redeemed, (iii) the applicable redemption price, (iv) the place or places of payment, (v) that payment of the principal amount and premium, if any, will be made upon presentation and surrender to the Trustee or Paying Agent, as applicable, of the Bonds to be redeemed, unless provided otherwise in the applicable Supplemental Indenture, (vi) that interest accrued to the date fixed for redemption will be paid as specified in such notice, (vii) that on and after such date interest on Bonds which have been redeemed will cease to accrue, and (viii) the designation, including Series, and the CUSIP and serial numbers, if any, of the Bonds to be redeemed and, if less than the face amount of any such Bond is to be redeemed, the principal amount to be redeemed. Notice of redemption of any Bonds shall be mailed at the times and in the manner set forth in subsection (b) of this Section.

(b) Except as may be provided otherwise in the applicable Supplemental Indenture, any notice of redemption shall be sent by the Trustee not less than 20 nor more than 60 days prior to the date set for redemption by first-class mail (i) to the Holder of each such Bond to be redeemed in whole or in part at his address as it appears on the Register, or while the Bonds are held in book-entry form, to the Securities Depository, (ii) to all organizations registered with the Securities and Exchange Commission as securities depositories, and (iii) to the Municipal Securities Rulemaking Board. During such period, the Trustee shall not be responsible for mailing notices of redemption to anyone other than such Securities Depository or its nominee. In preparing such notice, the Trustee shall take into account, to the extent applicable, the prevailing tax-exempt securities industry standards and any regulatory statement of any federal or state administrative body having jurisdiction over the Authority, or the tax-exempt securities industry. Failure to give any notice specified in (i), or any defect therein, shall not affect the validity of any proceedings for the redemption of any Bonds with respect to which no such failure has occurred and failure to give any notice specified in (ii), (iii) or (iv), or any defect therein, shall not affect the validity of any proceedings for the redemption of any Bonds with respect to which the notice specified in (i) is given correctly.

(c) If at the time of notice of any optional redemption of a Series of Bonds there has not been deposited with the Trustee moneys available for payment sufficient to redeem all of such Series of Bonds called for redemption, the notice shall state that it is conditional in that it is subject to the deposit of sufficient moneys by not later than the redemption date, and if the deposit is not timely made the notice shall be of no effect.

Section 305. Selection of Bonds to be Redeemed.

(a) Bonds of any Series to be called for redemption shall be selected as provided in the applicable Supplemental Indenture. Except as provided otherwise in the applicable Supplemental Indenture: (i) If less than all of the Bonds of a Series are called for mandatory sinking fund redemptions required under the terms of any Supplemental Indenture, the Authority will select the maturities of the serial bonds and portions of the amortization of the term bonds to be redeemed and will designate such selection in an Authority Authorized Officer's certificate; (ii) if less than all Bonds of a serial maturity are called for redemption, the particular Bonds of a Series of such maturity to be redeemed will be selected by DTC or any successor securities depository pursuant to its rules and procedures or, if the book entry system is discontinued, will be selected by the Trustee by lot in such manner as the Trustee at its discretion may determine; and (iii) the portion of any Bond to be redeemed shall be in the principal amount of $1,000 or some multiple thereof. In selecting Bonds for redemption, each Bond shall be considered as representing that number of Bonds which is obtained by dividing the principal amount of such Bond by $1,000. If a portion of a Bond shall be called for redemption, a new Bond in principal amount equal to the unredeemed portion thereof shall be issued to the registered owner upon the surrender thereof.

(b) The Trustee shall treat each Bond of a denomination greater than the minimum denomination authorized in the applicable Supplemental Indenture as representing the number of separate Bonds that can be obtained by dividing the Bond's actual principal amount by such minimum denominations.

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ARTICLE IV
REVENUES AND FUNDS

Section 401. Creation of Funds and Accounts.

(a) The Authority hereby establishes and creates for the Bonds the following Funds and Accounts:

(i) Parkway Projects Fund, which shall contain the following Accounts with respect to each Series of Bonds:

(A) Parkway Projects Account; and

(B) Costs of Issuance Account.

(ii) Revenue Fund.

(iii) Operation and Maintenance Fund, which shall contain the following Accounts:

(A) Operation and Maintenance Account; and

(B) Operation and Maintenance Reserve Account.

(iv) Senior Lien Bond Fund, which shall contain the following Accounts with respect to each Series of Senior Lien Bonds:

(A) Interest Account;

(B) Principal Account; and

(C) Redemption Account.

(v) Senior Lien Debt Service Reserve Fund, which shall contain an Account with respect to each Series of Senior Lien Bonds, or may have a composite Account for two or more Series of Senior Lien Bonds, as further provided in any related Supplemental Indenture(s).

(vi) Subordinate Lien Bond Fund, which shall contain the following Accounts with respect to each Series of Subordinate Lien Bonds:

(A) Interest Account;

(B) Principal Account; and

(C) Redemption Account.

(vii) Subordinate Lien Debt Service Reserve Fund, which shall contain an Account with respect to each Series of Subordinate Lien Bonds, or may have a composite

Account for two or more Series of Subordinate Lien Bonds, as further provided in any related Supplemental Indenture(s).

(viii) Arbitrage Rebate Fund, which shall contain the Accounts with respect to each Series of Bonds as set forth in the applicable Supplemental Indenture.

(ix) Renewal and Replacement Reserve Fund.

(x) Turnpike Capital Improvement Fund.

(xi) General Fund.

(b) The Funds and Accounts created hereby shall constitute trust funds and accounts for the purposes provided in this Indenture, and shall be separately accounted for by the Authority with an Authorized Depositary. The Senior Lien Bond Fund and the Accounts therein (the Principal Account, the Interest Account, and the Redemption Account), the Senior Lien Debt Service Reserve Fund, the Subordinate Lien Bond Fund and the Accounts therein (the Principal Account, the Interest Account, and the Redemption Account), the Subordinate Lien Debt Service Reserve Fund, and the Arbitrage Rebate Fund shall be held pursuant to this Indenture by the Trustee. The Parkway Projects Fund and the Accounts therein (the Parkway Projects Account and the Costs of Issuance Account), the Revenue Fund, and the Operation and Maintenance Fund and the Accounts therein (the Operation and Maintenance Account and the Operation and Maintenance Reserve Account) shall be held pursuant to this Indenture by the Authority with an Authorized Depositary.

(c) There has been created, or is being created (simultaneously with the issuance of the first Series of Bonds under this Indenture), in the Treasury of the State of West Virginia, pursuant to the Memorandum of Understanding and the Act, the State Road Construction Account.

Section 402. Application of Bond Proceeds.

All proceeds of the sale of each Series of Bonds shall be paid to the Trustee, against receipt therefor, at or prior to the delivery of such Series of Bonds and shall be deposited or delivered by the Trustee as provided by the Supplemental Indenture providing for the issuance of such Bonds. The preceding sentence shall not be construed to prohibit the Authority from having net proceeds (that is, gross proceeds less underwriters' discount) paid to the Trustee, in the Authority's discretion, and such payments and proceeds are expressly permitted. Without limitation of the preceding sentence, it is anticipated that the Supplemental Indenture for the initial Series of Bonds to be issued under this Indenture shall require that, immediately upon receipt of such proceeds, the portion of the proceeds of such Bonds relating to the Off-Turnpike WVDOH Projects shall be transferred by the Trustee to the State Road Construction Account as further provided in the Memorandum of Understanding.

Section 403. Parkway Projects Fund.

(a) All proceeds of the Bonds relating to the Parkway Projects (excluding amounts transferred by the Trustee to the State Road Construction Account pursuant to Section 402) shall be deposited into the Parkway Projects Fund, and the Costs of Issuance Account, as provided in the Supplemental Indenture relating to a Series of Bonds

(b) There also may be deposited to the credit of the Parkway Projects Fund any other moneys (including all obligations held as investments thereof and the proceeds of such investments) received from any other source for paying costs of the Parkway Projects, or for any other purpose or project authorized by law. Amounts in the Parkway Projects Fund shall be pledged to the Bondholders.

(c) Moneys in the Parkway Projects Fund shall be applied to the payment of (i) costs of issuance (from the applicable Costs of Issuance Account therein), and (ii) the cost of the On-Turnpike Authority Projects or for other projects and purposes then authorized by law (from the applicable Parkway Projects Account therein). The Authority covenants that the funds in the Parkway Projects Fund shall be applied in accordance with the provisions of this Section and the covenants contained in Section 510.

(d) Moneys, instruments and securities in the Parkway Projects Fund shall be held by the Authority, as secured party for the Holders of the Bonds. The Authority shall maintain the Parkway Projects Fund, which shall be separately accounted for, with and by an Authorized Depositary and shall execute and deliver to the Trustee an account control agreement or similar agreement with the Trustee and such Authorized Depositary reasonably sufficient, as confirmed in an Opinion of Bond Counsel, to perfect the pledge of, and security interest in, amounts in the Parkway Projects Fund under this Indenture.

(e) After payments of, and reimbursements with respect to, the Parkway Projects financed by the related Series of Bonds are completed, as certified by the Authority, and **provided that** no Event of Default has occurred and is continuing in the payment of principal of or interest on any Bonds, and **provided further** that the Authority shall have received an Opinion of Bond Counsel that such use will not affect adversely the exclusion of interest on such Bonds from gross income for federal income tax purposes and, if applicable, the non-tax preference status of such interest for federal alternative minimum income tax purposes, and the qualification of earnings on any Funds or Accounts for treatment pursuant to Section 148(f)(4)(B) of the Code as meeting the requirement of Section 148(f)(2) to rebate amounts to the United States, excess funds in the Parkway Projects Fund shall be applied (i) to eliminate any deficiency in the applicable Series Account, if any, in the Debt Service Reserve Fund, (ii) at the earliest date such Bonds are subject to optional redemption without premium or for the purchase of such Bonds, to the applicable Redemption Account for the optional redemption, if applicable, of such Bonds, or (iii) to the applicable Account in the relevant Bond Fund.

Section 404. Revenue Fund.

(a) Commencing immediately after the issuance of the first Series of Bonds pursuant to this Indenture, the Authority shall deposit all Toll Road Revenues upon receipt, and may deposit amounts from any available source, to the Revenue Fund. Amounts in the Revenue Fund shall be pledged to the Holders of such Bonds.

(b) Moneys, instruments and securities in the Revenue Fund shall be separately accounted for by the Authority with an Authorized Depositary. The Authority shall maintain the Revenue Fund, which shall be separately accounted for, with and by an Authorized Depositary and shall execute and deliver to the Trustee an account control agreement or similar agreement with the Trustee and such Authorized Depositary reasonably sufficient, as confirmed in an Opinion of Bond Counsel, to perfect the pledge of, and security interest in, amounts in the Revenue Fund under this Indenture.

Section 405. Operation and Maintenance Fund.

Amounts in the Operation and Maintenance Fund shall be separately accounted for by the Authority and shall be maintained with and by an Authorized Depositary and shall be used by the Authority to pay Operation and Maintenance Expenses.

(a) Operation and Maintenance Account. Amounts in the Operation and Maintenance Account in the Operation and Maintenance Fund shall be used by the Authority solely to pay Operation and Maintenance Expenses. The amount deposited in the Operation and Maintenance Account shall equal one-twelfth (1/12th) of the Operation and Maintenance Expenses for the current Fiscal Year, provided that the payment due for the last month of each Fiscal Year shall equal the difference between budgeted and actual expenses so that the total deposits to the Operation and Maintenance Account shall equal the actual expenses for such Fiscal Year. The monthly payments shall be increased or decreased, as necessary, to reflect amendments to the Annual Budget. Amounts in the Operation and Maintenance Account within the Operation and Maintenance Fund shall not be pledged to Bondholders.

(b) Operation and Maintenance Reserve Account. Amounts in the Operation and Maintenance Reserve Account in the Operation and Maintenance Fund shall be used by the Authority to pay Operation and Maintenance Expenses in the event that amounts on deposit in the Operation and Maintenance Account are insufficient to pay all Operation and Maintenance Expenses when due. The amount deposited in the Operation and Maintenance Reserve Account shall equal one-sixth (1/6th) of the Operation and Maintenance Expenses for the Turnpike set forth in the Authority's current Fiscal Year budget. The Authority shall execute and deliver to the Trustee an account control agreement or similar agreement with the Trustee and such Authorized Depositary reasonably sufficient, as confirmed in an Opinion of Bond Counsel, to perfect the pledge of, and security interest in, amounts in the Operation and Maintenance Reserve Account under this Indenture. Amounts in the Operation and Maintenance Reserve Account shall be pledged to Holders of the applicable Senior Lien Bonds or all Senior Lien Bonds.

Section 406. Senior Lien Bond Fund.

(a) Amounts in each Account in the Senior Lien Bond Fund shall be used by the Trustee to pay the principal of and interest on the related Series of Senior Lien Bonds when due in accordance with the terms of the Supplemental Indenture creating each Series of Senior Lien Bonds; provided, however, that while there is a Credit Facility in effect with respect to any Series of Senior Lien Bonds, amounts in the related Series Interest, Principal or Redemption Account in the Senior Lien Bond Fund may be used to reimburse the Credit Provider with respect to such Credit Facility for interest, principal or redemption payments, respectively, made to Holders of such Senior Lien Bonds with funds provided by such Credit Provider in accordance with the provisions of the applicable Supplemental Indenture with respect to such Series of Senior Lien Bonds to the extent that such reimbursement obligations of the Authority are secured by this Indenture. Amounts in the Senior Lien Bond Fund shall be pledged to Holders of such Senior Lien Bonds.

(b) In the event that on the Business Day preceding any interest payment date the amount in any Account of the Senior Lien Bond Fund shall be less than the amount required for payment of the interest on and the principal of the related Outstanding Senior Lien Bonds, and any related parity obligation due and payable on such interest payment date, the Trustee shall withdraw the amount necessary to increase the amount on deposit in such Account in the applicable Senior Lien Bond Fund to the requirement therefor from the applicable Senior Lien Debt Service Reserve Fund.

(c) When Senior Lien Bonds are redeemed or purchased, the amount, if any, in the applicable Account of the Senior Lien Bond Fund representing interest thereon shall be applied to the payment of accrued interest in connection with such redemption or purchase. Whenever the amount in an Account of the Senior Lien Bond Fund is sufficient to redeem all of the Outstanding Senior Lien Bonds of the applicable Series and to pay interest accrued to the redemption date, the Authority will cause the Trustee to redeem all such Senior Lien Bonds on the applicable redemption date specified by the Authority. Any amounts remaining in the Senior Lien Bond Fund after payment in full of the principal or redemption price, premium, if any, and interest on the applicable Senior Lien Bonds (or provision for payment thereof) and the fees, charges and expenses of the Authority, including all amounts owed to the Credit Providers, if any, the Trustee and any paying agents, shall be paid to the Authority.

(d) Moneys delivered to the Trustee in contemplation of optional or mandatory redemption or maturity of the Senior Lien Bonds shall be deposited in the related Redemption Account and shall be used by the Trustee to redeem or pay the principal of and interest on such Senior Lien Bonds (including any redemption premium thereon) in accordance with the provisions hereof. If any Series of Senior Lien Bonds is to be paid or redeemed in full, any balance in the Redemption Account for such Series may, at the option of the Authority, be applied in whole or in part to the payment or redemption of such Series or transferred to the applicable Senior Lien Bond Fund.

Section 407. Senior Lien Debt Service Reserve Fund.

(a) Subject to the provisions of Section 406, amounts in the Senior Lien Debt Service Reserve Account shall be used to pay debt service on the applicable Senior Lien Bonds or all Senior Lien Bonds, as appropriate, on the date such debt service is due when insufficient funds for that purpose are available in the applicable Accounts relating to such Outstanding Senior Lien Bonds. Amounts in the Senior Lien Debt Service Reserve Account shall be pledged to Holders of the applicable Senior Lien Bonds or all Senior Lien Bonds.

(b) In lieu of or in addition to cash or investments, at any time the Authority may cause to be deposited to the credit of the Senior Lien Debt Service Reserve Account any form of

DSRF Credit Facility, in the amount of the Senior Lien Debt Service Reserve Requirement, irrevocably payable to the Trustee as beneficiary for the Holders of the Senior Lien Bonds, provided that the Trustee has received evidence satisfactory to it that (i) at the time of issuance of such DSRF Credit Facility, the DSRF Credit Provider has a credit rating with a long-term credit rating in the third highest rating category or higher by any Rating Agency, (ii) except as provided in the next sentence of this subsection, the only condition to a drawing under the DSRF Credit Facility is insufficient amounts in the applicable Funds and Accounts held by the Trustee with respect to the Senior Lien Bonds when needed to pay debt service on such Senior Lien Bonds or the expiration of the DSRF Credit Facility, and (iii) the Authority shall notify the Trustee at least 90 days prior to expiration of the DSRF Credit Facility. If (a) the Authority receives such expiration notice and the DSRF Credit Provider does not extend the expiration date of the DSRF Credit Facility or (b) the Authority receives notice of the termination of the DSRF Credit Facility, the Authority shall (x) provide a substitute DSRF Credit Facility that meets the requirements set forth in the foregoing sentences, (y) deposit in the Senior Lien Debt Service Reserve Account, in 36 equal monthly installments the total amount needed to restore the balance in the Senior Lien Debt Service Reserve Account to, the Senior Lien Debt Service Reserve Requirement within 36 months of the termination date in the case of receipt of a termination notice, or (z) instruct the Trustee to draw on such DSRF Credit Facility in the amount necessary to meet the Senior Lien Debt Service Reserve Requirement prior to the termination date in the case of receipt of a termination notice, and deposit such drawing to the Senior Lien Debt Service Reserve Account. Amounts, if any, released from the Senior Lien Debt Service Reserve Account, upon deposit to the credit of such Senior Lien Debt Service Reserve Account of a DSRF Credit Facility pursuant to subsection (b) of this Section shall, upon designation by an Authority Authorized Officer, accompanied by an Opinion of Bond Counsel that such use will not adversely affect the exclusion from gross income of interest on the Senior Lien Bonds for federal income tax purposes and, if applicable, the non-tax preference status of such interest for federal alternative minimum income tax purposes, be transferred to the Senior Lien Principal Account or the Senior Lien Redemption Account and used to pay principal of or to redeem such Senior Lien Bonds.

(c) In the event that the Trustee shall have withdrawn moneys in the Senior Lien Debt Service Reserve Account for the purpose of paying principal and interest on such Senior Lien Bonds when due, the Trustee shall promptly notify the Authority of such withdrawal. Upon receipt of such notification, the Authority shall, on or prior to the first Business Day of each month, commencing the month after receipt of the notification from the Trustee, transfer to the Trustee for deposit in the Senior Lien Debt Service Reserve Account an amount equal to one-twelfth (1/12th) of the aggregate amount of each unreplenished withdrawal until the amount on deposit in the Senior Lien Debt Service Reserve Account is equal to the Senior Lien Debt Service Reserve Requirement.

(d) Notwithstanding anything contained herein to the contrary, the Authority may elect, by resolution adopted prior to the issuance of any Series of Bonds, to fully fund the Debt Service Reserve Account applicable to any such Series of Bonds over a period specified in such resolution not to exceed the period during which capitalized debt service and an amount sufficient to pay all principal and interest due on such Series of Bonds has been deposited with the Trustee, during which period the Authority shall make substantially equal monthly installments in order that the amounts on deposit therein and available amounts under any DSRF

Credit Facility at the end of such period shall equal the Debt Service Reserve Requirement. If the Debt Service Reserve Account applicable to any such Series of Bonds is to be funded in installments as provided in this paragraph, the deposits required to be made to the Debt Service Reserve Account applicable to any such Series of Bonds pursuant to the foregoing may be limited to the amount which will be sufficient to pay the required monthly installments specified in such resolution, plus an additional amount necessary to make up any deficiencies caused by withdrawals or resulting from valuation of investments of funds on deposit therein.

Section 408. Subordinate Lien Bond Fund.

(a) Amounts in each Account in the Subordinate Lien Bond Fund shall be used by the Trustee to pay the principal of and interest on the related Series of Subordinate Lien Bonds when due in accordance with the terms of the Supplemental Indenture creating each Series of Subordinate Lien Bonds; provided, however, that while there is a Credit Facility in effect with respect to any Series of Subordinate Lien Bonds, amounts in the related Series Interest, Principal or Redemption Account in the Subordinate Lien Bond Fund may be used to reimburse the Credit Provider with respect to such Credit Facility for interest, principal or redemption payments, respectively, made to Holders of such Subordinate Lien Bonds with funds provided by such Credit Provider in accordance with the provisions of the applicable Supplemental Indenture with respect to such Series of Subordinate Lien Bonds to the extent that such reimbursement obligations of the Authority are secured by this Indenture. Amounts in the Subordinate Lien Bond Fund shall be pledged to Holders of such Subordinate Lien Bonds.

(b) In the event that on the Business Day preceding any interest payment date the amount in any Account of the Subordinate Lien Bond Fund shall be less than the amount required for payment of the interest on and the principal of the related Outstanding Subordinate Lien Bonds, and any related parity obligation due and payable on such interest payment date, the Trustee shall withdraw the amount necessary to increase the amount on deposit in such Account in the applicable Subordinate Lien Bond Fund to the requirement therefor from the applicable Subordinate Lien Debt Service Reserve Fund.

(c) When Subordinate Lien Bonds are redeemed or purchased, the amount, if any, in the applicable Account of the Subordinate Lien Bond Fund representing interest thereon shall be applied to the payment of accrued interest in connection with such redemption or purchase. Whenever the amount in an Account of the Subordinate Lien Bond Fund is sufficient to redeem all of the Outstanding Subordinate Lien Bonds of the applicable Series and to pay interest accrued to the redemption date, the Authority will cause the Trustee to redeem all such Subordinate Lien Bonds on the applicable redemption date specified by the Authority. Any amounts remaining in the Subordinate Lien Bond Fund after payment in full of the principal or redemption price, premium, if any, and interest on the applicable Subordinate Lien Bonds (or provision for payment thereof) and the fees, charges and expenses of the Authority, including all amounts owed to the Credit Providers, if any, the Trustee and any paying agents, shall be paid to the Authority.

(d) Moneys delivered to the Trustee in contemplation of optional or mandatory redemption or maturity of the Subordinate Lien Bonds shall be deposited in the related Redemption Account and shall be used by the Trustee to redeem or pay the principal of such

Subordinate Lien Bonds (including any redemption premium thereon) in accordance with the provisions hereof. If any Series of Subordinate Lien Bonds is to be paid or redeemed in full, any balance in the Redemption Account for such Series may, at the option of the Authority, be applied in whole or in part to the payment or redemption of such Series or transferred to the applicable Subordinate Lien Bond Fund.

Section 409. Subordinate Lien Debt Service Reserve Fund.

(a) Subject to the provisions of Section 408, amounts in the Subordinate Lien Debt Service Reserve Account shall be used to pay debt service on all Outstanding Subordinate Lien Bonds on the date such debt service is due when insufficient funds for that purpose are available in the applicable Accounts relating to such Outstanding Subordinate Lien Bonds. Amounts in the Subordinate Lien Debt Service Reserve Account shall be pledged to Holders of Subordinate Lien Bonds.

(b) In lieu of or in addition to cash or investments, at any time the Authority may cause to be deposited to the credit of the Subordinate Lien Debt Service Reserve Account any form of DSRF Credit Facility, in the amount of the Subordinate Lien Debt Service Reserve Requirement, irrevocably payable to the Trustee as beneficiary for the Holders of the Subordinate Lien Bonds, provided that the Trustee has received evidence satisfactory to it that (i) at the time of issuance of such DSRF Credit Facility, the DSRF Credit Provider has a credit rating with a long-term credit rating in the third highest rating category or higher by any Rating Agency, (ii) except as provided in the next sentence of this subsection, the only condition to a drawing under the DSRF Credit Facility is insufficient amounts in the applicable Funds and Accounts held by the Trustee with respect to the Subordinate Lien Bonds when needed to pay debt service on such Subordinate Lien Bonds or the expiration of the DSRF Credit Facility, and (iii) the Authority shall notify the Trustee at least 90 days prior to expiration of the DSRF Credit Facility. If (a) the Authority receives such expiration notice and the DSRF Credit Provider does not extend the expiration date of the DSRF Credit Facility or (b) the Authority receives notice of the termination of the DSRF Credit Facility, the Authority shall (x) provide a substitute DSRF Credit Facility that meets the requirements set forth in the foregoing sentences, (y) deposit in the Subordinate Lien Debt Service Reserve Account, in 36 equal monthly instalments the total amount needed to restore the balance in the Senior Lien Debt Service Account to, the Senior Lien Debt Service Reserve Requirement within 36 months of the termination date in the case of receipt of a termination notice, or (z) instruct the Trustee to draw on such DSRF Credit Facility in the amount necessary to meet the Subordinate Lien Debt Service Reserve Requirement prior to the termination date in the case of receipt of a termination notice, and deposit such drawing to the Subordinate Lien Debt Service Reserve Account. Amounts, if any, released from the Subordinate Lien Debt Service Reserve Account, upon deposit to the credit of such Subordinate Lien Debt Service Reserve Account of a DSRF Credit Facility pursuant to subsection (b) of this Section shall, upon designation by an Authority Authorized Officer, accompanied by an Opinion of Bond Counsel that such use will not adversely affect the exclusion from gross income of interest on the Subordinate Lien Bonds for federal income tax purposes and, if applicable, the non-tax preference status of such interest for federal alternative minimum income tax purposes, be transferred to the Subordinate Lien Principal Account or the Subordinate Lien Redemption Account and used to pay principal of or to redeem such Subordinate Lien Bonds.

(c) In the event that the Trustee shall have withdrawn moneys in the Subordinate Lien Debt Service Reserve Account for the purpose of paying principal and interest on such Subordinate Lien Bonds when due, the Trustee shall promptly notify the Authority of such withdrawal. Upon receipt of such notification, the Authority shall, on or prior to the first Business Day of each month, commencing the month after receipt of the notification from the Trustee, transfer to the Trustee for deposit in the Subordinate Lien Debt Service Reserve Account an amount equal to one-twelfth (1/12th) of the aggregate amount of each unreplenished withdrawal until the amount on deposit in the Subordinate Lien Debt Service Reserve Account is equal to the Subordinate Lien Debt Service Reserve Requirement.

(d) Notwithstanding anything contained herein to the contrary, the Authority may elect, by resolution adopted prior to the issuance of any Subordinate Lien Bonds, to fully fund the Debt Service Reserve Account applicable to any such Series of Bonds over a period specified in such resolution not to exceed the period during which capitalized debt service and an amount sufficient to pay all principal and interest due on such Series of Bonds has been deposited with the Trustee, during which period the Authority shall make substantially equal monthly installments in order that the amounts on deposit therein and available amounts under any DSRF Credit Facility at the end of such period shall equal the Debt Service Reserve Requirement. If the Debt Service Reserve Account applicable to any such Series of Bonds is to be funded in installments as provided in this paragraph, the deposits required to be made to the Debt Service Reserve Account applicable to any such Series of Bonds pursuant to the foregoing may be limited to the amount which will be sufficient to pay the required monthly installments specified in such resolution, plus an additional amount necessary to make up any deficiencies caused by withdrawals or resulting from valuation of investments of funds on deposit therein.

Section 410. Arbitrage Rebate Fund.

(a) The Arbitrage Rebate Fund shall be maintained by the Trustee as a fund separate from any other fund established and maintained hereunder. Within the Arbitrage Rebate Fund, the Trustee shall maintain such accounts as shall be required by the Authority in order to comply with the terms and requirements of the Tax Certificate. All money at any time deposited in the Arbitrage Rebate Fund shall be held by the Trustee in trust, to the extent required to satisfy the Rebate Requirement (as defined in the Tax Certificate), for payment to the Treasury Department of the United States of America. The Authority or the owner of any Bonds shall not have any rights in or claim to such money. All amounts deposited into or on deposit in the Arbitrage Rebate Fund shall be governed by this Section 408 and the Tax Certificate (which is incorporated herein by reference). Amounts in the Arbitrage Rebate Fund shall not be pledged to Bondholders.

(b) The Trustee shall be deemed conclusively to have complied with this Section 410 and the Tax Certificate if it follows the directions of an Authority Authorized Officer, including supplying all necessary written information in the manner provided in the Tax Certificate, and shall have no liability or responsibility for compliance (except as specifically set forth herein or in the Tax Certificate) or to enforce compliance by the Authority with the terms of the Tax Certificate.

(c) Upon the written direction of the Authority, the Trustee shall deposit in the Arbitrage Rebate Fund amounts received from the Authority, so that the balance on deposit thereto shall be equal to the Rebate Requirement. Computations of the Rebate Requirement shall be furnished by or on behalf of the Authority in accordance with the Tax Certificate. The Trustee shall have no obligation to rebate any amounts required to be rebated pursuant to this Section 410, other than from moneys held in the Funds and Accounts created under this Indenture or from other moneys provided to it by the Authority.

(d) The Trustee shall invest all amounts held in the Arbitrage Rebate Fund as provided in written directions of the Authority. In issuing such directions, the Authority shall comply with the restrictions and instructions set forth in the Tax Certificate. Moneys from the Arbitrage Rebate Fund may only be applied as provided in this Section 410.

(e) Upon receipt of written instructions and certification of the Rebate Requirement from an Authority Authorized Officer, the Trustee shall pay the amount of such Rebate Requirement to the Treasury Department of the United States of America, out of amounts in the Arbitrage Rebate Fund, as so directed. Notwithstanding any other provisions of this Indenture, the obligation to remit the Rebate Requirement to the United States of America and to comply with all other requirements of this Section 410 and the Tax Certificate shall survive the defeasance or payment in full of the Bonds.

Section 411. Renewal and Replacement Reserve Fund.

(a) Amounts in the Renewal and Replacement Reserve Fund shall be used exclusively for funding new Renewal and Replacement Costs, as certified for such Fiscal Year by the Consulting Engineers, in accordance with the Authority's Annual Budget, except as permitted otherwise by the first sentence of Section 411(c). Amounts in the Renewal and Replacement Reserve Fund shall be pledged to Bondholders.

(b) Amounts to be deposited in the Renewal and Replacement Reserve Fund in a Fiscal Year shall equal, in the aggregate (and subject to the monthly deposit required under Section 414) the Renewal and Replacement Reserve Fund Requirement for such Fiscal Year, as recommended and certified by the Consulting Engineers, and which Renewal and Replacement Reserve Fund Requirement shall be included in the Authority's Annual Budget.

(c) After a provision has been made for funding of all Renewal and Replacement Costs and for all of the other major maintenance expenditures budgeted by the Authority for any given Fiscal Year, the Authority may, at its discretion, at any point during the Fiscal Year, transfer any funds remaining in the Renewal and Replacement Reserve Fund to the Turnpike Capital Improvement Fund. Except as permitted otherwise by the preceding sentence, the amount deposited in the Renewal and Replacement Fund shall equal the amount in the Annual Budget to be deposited to the credit of such Renewal and Replacement Fund for such month.

(d) The Authority shall maintain the Renewal and Replacement Reserve Fund in a segregated account with an Authorized Depositary and shall execute and deliver to the Trustee an account control agreement or similar agreement with the Trustee and such Authorized Depositary reasonably sufficient, as confirmed in an Opinion of Bond Counsel, to perfect the pledge of, and security interest in, amounts in the Renewal and Replacement Reserve Fund under this Indenture.

Section 412. Turnpike Capital Improvement Fund.

(a) The Turnpike Capital Improvement Fund shall be separately accounted for by the Authority and shall be maintained with and by an Authorized Depositary. Amounts in the Turnpike Capital Improvement Fund may, from time to time, be disbursed or transferred by the Authority for the purposes of providing funds to pay Capital Costs on the Turnpike that are not included in the Renewal and Replacement Costs budgeted by the Authority in its then current Annual Budget. Amounts in the Turnpike Capital Improvement Fund shall be pledged to Bondholders.

(b) Amounts to be deposited in the Turnpike Capital Improvement Fund shall be the aggregate of the amounts specified at the discretion of the Authority from time to time in resolutions of the Authority as the total estimated amounts that will need to be deposited therein to fund on Capital Costs on the Turnpike that are not included in the Renewal and Replacement Costs budgeted by the Authority in its then current Annual Budget. Such amounts, once specified, at the discretion of the Authority, shall be reflected in the Authority's five-year capital improvement program for the Turnpike. That five-year capital improvement program shall include and separately identify (i) such Capital Costs of such capital improvements on the Turnpike and (ii) the Renewal and Replacement Reserve Fund Requirement, for each of the five years covered by such program all as further provided in Section 508. As the Authority makes expenditures on such Capital Costs from the Turnpike Capital Improvement Fund, an appropriate credit and reduction (in the amount of such expenditures) shall be made to the aggregate amounts required to be on deposit in such Fund.

(c) Upon the determination of the Authority in its sole discretion that funds in the Turnpike Capital Improvement Fund are not needed for such Capital Costs, and after satisfying any deficiencies in any Debt Service Fund, any Debt Service Reserve Fund, and Renewal and Replacement Fund, respectively, created under this Indenture, the Authority may transfer such amounts to the General Fund or any other Fund or Account created under this Indenture.

Section 413. General Fund.

(a) The Authority shall maintain the General Fund in a segregated account with an Authorized Depositary.

(b) As provided in Subsection 414(n), after first having made the deposits required by Subsections 414(a) through 414(m), and while any Bonds are Outstanding, the Authority shall transfer monthly from the Revenue Fund to the credit of the General Fund any funds remaining in the Revenue Fund. Moneys in the General Fund may be expended by the Authority to restore deficiencies in any Funds or Accounts created under this Indenture, and absent any such deficiency, for any of the following purposes, but for no other purposes, with no one item having priority over any of the others:

(i) to purchase or redeem Bonds;

(ii) to secure and pay the principal or redemption price of and interest on, any Senior Lien Bonds;

(iii) to secure and pay the principal or redemption price of and interest on, any Subordinate Lien Bonds;

(iii) to make payments into the Parkway Projects Fund or any other Fund or Account created under this Indenture;

(iv) to fund improvements, extensions and replacements of the Turnpike; or

(v) to further any corporate purpose of the Authority that involves expenditures on assets, operations and/or employees of the Authority and is in furtherance of the acquisition, operation, maintenance, improvement, enhancement and/or preservation of assets, operations and/or employees of the Authority.

(c) Amounts in the General Fund shall not be pledged to Bondholders; **provided**, that moneys in the General Fund may be expended by the Authority as provided in Subsection 413(b) to restore deficiencies in any Funds or Accounts created under this Indenture.

Section 414. Flow of Funds.

The amounts in the Revenue Fund shall be withdrawn and deposited or transferred no later than the fifth day of each month in the amounts and order of priority set forth below:

(a) To the Operation and Maintenance Account in the Operation and Maintenance Fund, one-twelfth (1/12th) of the Operation and Maintenance Expenses set forth in the Authority's current Annual Budget.

(b) To the Operation and Maintenance Reserve Account in the Operation and Maintenance Fund, an amount, if any, necessary to maintain a balance therein equal to the Operation and Maintenance Reserve Account Requirement set forth in the Authority's current Annual Budget.

(c) An amount equal to one-twelfth (1/12th) of the installment of principal due on the next succeeding Bond Payment Date that is a principal payment date with respect to all Senior Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Principal Account, will be sufficient to pay principal on all Senior Lien Bonds coming due on the next succeeding Bond Payment Date that is a principal payment date; **provided, however**, that if the first installment of principal on a Series of Bonds will be due on a date that is either less than or greater than twelve months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Principal Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) twelve months that actually will elapse until the Bond Payment Date on which such first installment of principal will come due.

(d) An amount equal to one-twelfth (1/12th) of the amount of any sinking fund installment due on the next succeeding Bond Payment Date with respect to all Senior Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Redemption Account, will be sufficient to pay any sinking fund installment on all Senior Lien Bonds coming due on the next succeeding Bond Payment Date; **provided, however**, that if the first sinking fund installment on a Series of Bonds will be due on a date that is either less than or greater than twelve months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Redemption Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) twelve months that actually will elapse until the Bond Payment Date on which such first sinking fund installment will come due.

(e) An amount equal to one-sixth (1/6th) of the installment of interest due on the next succeeding Bond Payment Date with respect to all Senior Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Interest Account, will be sufficient to pay interest on all Senior Lien Bonds coming due on the next succeeding Bond Payment Date; **provided, however**, that if the first installment of interest coming due on a Series of Bonds will be due a Bond Payment Date that is either less than or greater than six months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Interest Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) six months that actually will elapse until the Bond Payment Date on which such first installment of interest will come due.

(f) To the applicable Account in the Senior Lien Debt Service Reserve Fund with respect to each Series of Senior Lien Bonds (or, as applicable, to any aggregate or composite Account in the Senior Lien Debt Service Reserve Fund for any Senior Lien Bonds) an amount, if any, which, together with the funds on deposit therein and the available amounts under any DSRF Credit Facility, will be sufficient to make the amounts on deposit therein equal to the Debt Service Reserve Requirement within the applicable time frame and making the applicable monthly replenishment installments, as provided under Section 407(b) or Section 407(c), as applicable, or if the Authority has exercised its option under Section 407(d) to fund the Debt Service Reserve Account in installments, the amount then required to be on deposit in the Debt Service Reserve Account in accordance with such election.

(g) To the applicable Principal Account, an amount equal to one-twelfth (1/12th) of the installment of principal due on the next succeeding Bond Payment Date that is a principal payment date with respect to all Subordinate Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Principal Account, will be sufficient to pay principal on all Subordinate Lien Bonds coming due on the next succeeding Bond Payment Date that is a principal payment date; **provided, however**, that if the first installment of principal coming due on a Series of Bonds will be due a Bond Payment Date that is either less than or greater than twelve months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Principal Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) twelve months that actually will elapse until the Bond Payment Date on which such first installment of principal will come due.

(h) An amount equal to one-twelfth (1/12th) of the amount of any sinking fund installment due on the next succeeding Bond Payment Date with respect to all Subordinate Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Redemption Account, will be sufficient to pay any sinking fund installment on all Subordinate Lien Bonds coming due on the next succeeding Bond Payment Date; **provided, however**, that if the first sinking fund installment on a Series of Bonds will be due on a date that is either less than or greater than twelve months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Redemption Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) twelve months that actually will elapse until the Bond Payment Date on which such first sinking fund installment will come due.

(i) An amount equal to one-sixth (1/6th) of the installment of interest due on the next succeeding Bond Payment Date with respect to all Subordinate Lien Bonds or such lesser amount that, in each case, together with amounts already on deposit in the applicable Interest Account, will be sufficient to pay interest on all Subordinate Lien Bonds coming due on the next succeeding Bond Payment Date; **provided, however**, that if the first installment of interest coming due on a Series of Bonds will be due a Bond Payment Date that is either less than or greater than six months from the date of issuance of such Series of Bonds, then the fractional amount to be deposited in the Interest Account in respect of such Series of Bonds shall be adjusted to a larger (or smaller) fraction, proportionally, based on the actual time less than (or greater than) six months that actually will elapse until the Bond Payment Date on which such first installment of interest will come due.

(j) To the applicable Account in the Subordinate Lien Debt Service Reserve Fund with respect to each Series of Subordinate Lien Bonds (or, as applicable, to any aggregate or composite Account in the Subordinate Lien Debt Service Reserve Fund for any Subordinate Lien Bonds) an amount, if any, which, together with the funds on deposit therein and the available amounts under any DSRF Credit Facility, will be sufficient to make the amounts on deposit therein equal to the Debt Service Reserve Requirement within the applicable time frame and making the applicable monthly replenishment installments, as provided under Section 409(b) or Section 409(c), as applicable, or if the Authority has exercised its option under Section 409(d) to fund the Debt Service Reserve Account in installments, the amount then required to be on deposit in the Debt Service Reserve Account in accordance with such election.

(k) As directed in the applicable Tax Certificate, to the Arbitrage Rebate Fund and any accounts established therein an amount, if any, necessary to maintain a balance therein equal to the Rebate Requirement.

(l) To the Renewal and Replacement Reserve Fund an amount equal to a minimum of one-twelfth of the Renewal and Replacement Reserve Fund Requirement as set forth in the Annual Budget; **provided, however**, that nothing in this Section 414(l) shall be construed as preventing the Authority in its sole discretion from depositing amounts in excess of such minimum deposit in any one month, and **provided further**, that if the Authority previously has deposited amounts in the Renewal and Replacement Reserve Fund in excess of such minimum amount, then, in its discretion, the Authority shall have the right to elect to credit, against such minimum monthly deposit, some or all of such cumulative excess deposits during the Fiscal Year to date.

(m) From time to time, to the Turnpike Capital Improvement Fund, such sums as shall be certified by the Authority in its sole discretion as necessary to be deposited therein in order to finance Capital Costs on the Turnpike that are not included in Renewal and Replacement Costs budgeted by the Authority in its then current Annual Budget, taking into account (i) funding for such Capital Costs that has been carried over in such Fund from the prior Fiscal Year and (ii) prior expenditures from such Fund for Capital Costs of capital improvement projects on the Turnpike.

(n) To the General Fund, such sums as shall be remaining in the Revenue Fund (if any) not already deposited or transferred at the times and in the amounts pursuant to subsections (a) through (m) of this Section 414 set forth above.

Section 415. Investment of Moneys.

(a) Moneys in all Funds and Accounts held by the Authority shall be invested as soon as practicable upon receipt in Permitted Investments by the Authority, and in the case of Funds and Accounts held by the Trustee, by the Trustee, as directed in writing by an Authority Authorized Officer, or, in the absence of direction by the Authority, as selected by the Trustee; provided that (i) the maturity date or the date on which such Permitted Investments may be redeemed at the option of the holder thereof shall coincide as nearly as practicable with (but in no event shall be later than) the date or dates on which moneys in the Funds or Accounts for which the investments were made will be required for the purposes thereof, and (ii) subject to subsection (h) of this Section, in the absence of direction from an Authority Authorized Officer, the Trustee, shall invest moneys in all Funds and Accounts held by the Trustee overnight in money market funds described in clause (h) of the definition of Permitted Investments.

(b) For purposes of subsection (a) of this Section, moneys in the following Funds or Accounts shall be invested in Permitted Investments maturing or redeemable at the option of the holder, including the Trustee, of such Permitted Investments not later than the respective following dates: (i) Principal Account, the last Business Day of the then current Bond year with respect to each applicable Series of Bonds set forth in the applicable Supplemental Indenture; (ii) Interest Account, the Business Day preceding the next Bond Payment Date with respect to the applicable Series of Bonds set forth in the applicable Supplemental Indenture; and (iii) Redemption Account, the Business Day preceding the next date on which Bonds of the applicable Series of Bonds set forth in the applicable Supplemental Indenture are to be redeemed.

(c) Investment of amounts in any Fund or Account shall be made in the name of such Fund or Account.

(d) Amounts credited to a Fund or Account may be invested, together with amounts credited to one or more other Funds or Accounts, in the same Permitted Investment; provided, however, that (i) each such investment complies in all respects with the provisions of subsection (a) of this Section as they apply to each Fund or Account for which the joint investment is made, and (ii) separate records are maintained for each Fund and Account and such investments are accurately reflected therein.

(e) The Trustee may make any investment permitted by this Section through or with its own commercial banking or investment departments, unless otherwise directed by the Authority.

(f) Except as otherwise specifically provided herein, in computing the amount in any Fund or Account, Permitted Investments purchased as an investment of moneys therein shall be valued at the current market value thereof or at the redemption price thereof, if then redeemable at the option of the holder, in either event inclusive of accrued interest.

(g) The holder of an investment shall sell at the market price, or present for redemption, any Permitted Investment whenever it shall be necessary to provide moneys to meet any payment or transfer from the Fund or Account for which such investment was made.

(h) The Authority shall not knowingly use or direct or permit the use of any moneys of the Authority in its possession or control in any manner which would cause any Bond to be an "arbitrage bond" within the meaning ascribed to such term in Section 148 of the Code, or any successor section of the Code.

(i) Any transfer to or deposit in any Fund or Account required by this Indenture may be satisfied by transferring or depositing an investment with a market value equal to the required transfer or deposit in lieu of transferring or depositing cash.

(j) Notwithstanding any provision of this Indenture, the Trustee shall observe its covenants and agreements contained herein, to the extent that and for so long as such covenants and agreements are required by law.

Section 416. Liability of Trustee for Investments.

The Trustee shall not be liable for making any investment authorized by the provisions of this Article in the manner provided in this Article or for any loss resulting from any such investment so made, except for its own negligence, willful misconduct or self-dealing constituting a breach of trust under applicable law.

Section 417. Investment Income or Losses.

(a) Unless otherwise specified herein or in the applicable Supplemental Indenture, all investment income or losses on all Funds and Accounts shall be credited to the Fund or Account on which such amount was earned or lost; provided, however, that earnings on amounts in Accounts in the Bond Fund with respect to a Series of Bonds shall be transferred to the Interest Account with respect to such Series. The Authority shall keep records of all such investment income or losses and the applicable Fund or Account which is the source of the income or losses for purposes of determining any rebate amount with respect to each Series.

(b) Investments in each Fund and Account shall be valued by the Authority at current market value as of June 1 and December 1 of each Fiscal Year, or, if those dates do not fall on a

Business Day, on the first Business Day thereafter. Immediately after each such valuation by the Authority, any excess in each Account in the Debt Service Reserve Funds shall be transferred to the Revenue Fund.

Section 418. Purchase Fund.

The Trustee shall establish a separate Purchase Fund for any Series of Bonds that, pursuant to the Supplemental Indenture providing for issuance of such Bonds, is or may be subject to redemption for purchase at the option of the Holders or mandatory tender for purchase. The Purchase Fund for a Series and the amounts deposited therein shall not be subject to the lien and pledge created by this Indenture but shall be held by the Trustee or Paying Agent, as applicable, for the benefit of tendering Holders of Bonds of such Series. Amounts in each Series Purchase Fund shall be held and disbursed as provided in the applicable Supplemental Indenture.

Section 419. Transfer of Excess Funds to the Authority.

Any amounts remaining in any Account of any Bond Fund or any Debt Service Reserve Fund, after payment of all Bonds and reimbursement of the Credit Provider for any drawings on or payments under any Credit Facility which were used to pay principal, premium, if any, or interest on the Bonds and all other obligations owed to the Credit Providers under any Reimbursement Agreements, the fees and expenses of the Trustee, the Paying Agent, and all other amounts required to be paid hereunder, shall be transferred to the General Fund.

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ARTICLE V

COVENANTS OF THE AUTHORITY

Section 501. Maintenance of Corporate Existence

The Authority covenants and agrees that it will maintain its corporate existence and will not merge with or into any other entity in a manner that will materially and adversely affect its ability to comply with its obligations under this Indenture and all Supplemental Indentures and provided that any successor entity must assume all of the obligations of the Authority under this Indenture, all Supplemental Indentures and all other applicable agreements.

Section 502. Payment of Principal and Interest; Pledge of the Toll Road Revenues; Negative Pledge; Annual No Default Certificate.

(a) The Authority covenants and agrees that it will pay or cause to be paid as and when due the principal of, premium, if any, interest on, and other payments with respect to each Bond issued hereunder at the place, on the dates and in the manner provided herein and in the applicable Supplemental Indenture and in such Fund according to the terms thereof but solely from the sources pledged to such payment or from such other sources or revenues as may be used for such payment. Except as expressly pledged hereunder or in any Supplemental Indenture, the Authority has no obligation to make any payment of principal of or interest on any Bond from any assets used in or revenues derived from the operation of the Turnpike or any other funds of the Authority.

(b) Without limiting the generality of the granting clauses set forth above, as security for the payment of the principal of, interest, any premium on and other payments due with respect to the Bonds, the Authority hereby grants to the Trustee a pledge of and lien on the Net Toll Road Revenues, subject only to application as provided herein and in any Supplemental Indenture. To the fullest extent provided by the Act and other applicable law, such pledge shall be valid and binding from and after the date hereof and all Net Toll Road Revenues so pledged and thereafter received by the Authority shall immediately be subject to the lien of such pledge without any physical delivery thereof or further act, and the lien of any such pledge shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the Authority irrespective of whether such parties have notice thereof. Neither the Bond Authorizing Resolution nor this Indenture by which the pledge is created need to be filed or recorded except in the records of the Authority.

(c) The Authority covenants and agrees that it will not create any pledge, lien or encumbrance upon, or permit any pledge, lien or encumbrance to be created on, Toll Road Revenues except for a pledge, lien or encumbrance subordinate to the pledge and lien granted hereby for the benefit of the Senior Lien Bonds or as otherwise permitted hereby or by any Supplemental Indenture.

(d) Neither the State nor the Authority shall be obligated to pay the principal of or interest on the Bonds and neither the faith and credit nor the taxing power of the State or any political subdivision thereof nor the Authority is pledged to the payment of the principal of or interest on the Bonds. The Authority's obligations under this Indenture and the Bonds shall be limited to payment from Net Toll Road Revenues. The Authority has no taxing power.

(e) The Authority shall deliver to the Trustee within 90 days after the close of each Fiscal Year, a certificate signed by an Authority Authorized Officer stating that during such Fiscal Year, and as of the date of such certificate, no event or condition has happened or existed, or is happening or existing, which constitutes, or which, with notice or lapse of time or both, would constitute an Event of Default under this Indenture, or if such an event or condition has happened or existed, or is happening or existing, specifying the nature and period of such event or condition and what action the Authority has taken, is taking or proposes to take with respect thereto, and directing, if necessary, the Trustee to take actions in provided in Section 603.

Section 503. Operation and Maintenance of Turnpike in Good Repair; Appointments of Consulting Engineers and Traffic and Revenue Consultant; Annual Inspection and Report of Consulting Engineers on Condition of Turnpike; Role of Consulting Engineers in Annual Budget-Making Process.

(a) The Authority will at all times operate the Turnpike, or cause the Turnpike to be operated, in an efficient manner and at reasonable cost; will maintain, preserve and keep, or cause to be maintained, preserved and kept, the properties of the Turnpike and all additions and betterments thereto and thereof, and every part and parcel thereof, in good repair, working order and condition; and to that end will from time to time make, or cause to be made, all necessary and proper repairs, renewals, replacements, additions, extensions and betterments thereto.

(b) The Authority covenants that it will, for the purpose of performing and carrying out the duties imposed on the Consulting Engineers by this Indenture, employ an independent engineer or engineering firm or corporation having a nationwide and favorable reputation or skill and experience in such work. The Authority shall file copies of its appointments of the Consulting Engineers with the Trustee and provide copies thereof to any Bondholder who shall make request therefor.

(c) The Consulting Engineers shall make a physical examination and inspection of the Turnpike once a year and shall submit to the Authority a written annual report on the condition of the Turnpike prior to the end of each Fiscal Year. Each such report shall be in sufficient detail to show whether the Authority in operating the Turnpike has maintained it in good repair, working order and condition, and whether the Authority has complied with the covenants set forth in this Indenture with respect to the efficient management of the Turnpike, the proper maintenance of the properties of the Turnpike, and the making of necessary repairs, renewals and replacements thereto and thereof and the necessity for capital replacements and improvements, and recommendations therefor made by the Consulting Engineers. If the Authority shall have in any way failed to perform or comply with the covenants and agreements mentioned in the previous sentence, such report shall specify the detail of such failure. The Consulting Engineers shall annually certify to the Authority and include in their reports their recommendations as to the amounts that are necessary to be expended for the Renewal and Replacement Reserve Fund Requirement for the Turnpike for not less than each of the five (5) next succeeding Fiscal Years. The Authority covenants to include such estimates of the Renewal and Replacement Reserve Fund Requirement in its five-year capital program for the Turnpike that the Authority is required to include with and as part of its Annual Budget.

Copies of all such reports shall be filed with the Authority, the Trustee and any Bondholder who shall make request therefor.

Section 504. Instruments of Further Assurance.

The Authority covenants and agrees that it will do, execute, acknowledge and deliver or cause to be done, executed, acknowledged and delivered, such instruments supplemental hereto and such further acts, instruments and transfers as the Trustee reasonably may require for the better assuring, transferring, conveying, pledging, assigning and confirming unto the Trustee the Authority's interest in and to the Toll Road Revenues as a perfected security interest, subject to application as provided herein and in any Supplemental Indenture, and all other property that is conveyed, pledged or assigned to secure or provide for the payment of the principal, premium, if any, and interest on the Bonds in the manner and to the extent contemplated herein or therein, including the filing of any required financing statements and continuation statements and/or other filings or recordings under the Uniform Commercial Code or other laws.

Section 505. Performance of Covenants.

The Authority covenants that it faithfully will perform at all times any and all covenants, undertakings, stipulations and provisions on its part to be performed as provided herein and in any Supplemental Indenture, in each and every Bond executed, authenticated and delivered hereunder, in each Credit Facility and in all proceedings of the Authority pertaining thereto; provided, that the Authority's payment obligations under this Indenture and the Bonds shall be solely from Toll Road Revenues.

Section 506. Compliance with Laws, Rules and Regulations; Tripartite Agreement.

The Authority will comply with all valid and material requirements, including the Act and any rules, regulations, orders and directives of any governmental, legislative, executive, administrative or judicial body applicable to the Turnpike and to the Authority's operation of the Turnpike, unless the same shall be contested in good faith. The Authority covenants that it will comply with the terms, provisions, and conditions of the Tripartite Agreement.

Section 507. Notice of Events of Default and Termination Events.

The Authority covenants and agrees that it will promptly notify the Trustee of any event that constitutes an Event of Default under this Indenture or any Supplemental Indenture, or a default under any Credit Facility.

Section 508. Annual Budget.

(a) The Authority shall adopt its Annual Budget for the succeeding Fiscal Year prior to the first day of each Fiscal Year, and shall file the same with the Trustee promptly after each such Annual Budget is adopted but in any event prior to the first day of the then succeeding Fiscal Year. The certificate of the Consulting Engineers setting forth the Consulting Engineers' judgment as to the amounts necessary to be expended in such Fiscal Year for Operation and Maintenance Expenses and for the Renewal and Replacement Reserve Fund Requirement shall be included with and constitute part of the Annual Budget. In addition, the Authority shall include as part of its Annual Budget, the estimated costs to be incurred in the current Fiscal Year under its five-year capital program (which program shall include the Consulting Engineers' certified estimates for Renewal and Replacement Reserve Fund Requirements for each Fiscal Year covered by the Authority's five-year capital program).

(b) The Authority covenants that it will include in its Annual Budget sufficient amounts to fulfill the Authority's obligations under this Indenture and any Supplemental Indentures, including its obligations to pay debt service on the Bonds, to fund the Funds and Accounts in the amounts required by this Indenture and its other agreements, and to operate and maintain the Turnpike.

(c) If, for any reason, the Authority is prevented or precluded from adopting an Annual Budget, the Authority covenants that it shall continue to operate under the Annual Budget for the previous Fiscal Year, provided, however, that the Authority nonetheless shall take such action as may be required to permit it to obligate and expend moneys for (i) debt service on previously authorized obligations including, without limitation, all Annual Debt Service on Outstanding Bonds, and (ii) all other required deposits to Funds and Accounts created under this Indenture.

(d) The Authority may at any time adopt and file with the Trustee an amended Annual Budget for the remainder of the then current Fiscal Year, provided that a copy of any adopted amendment to its then current Annual Budget shall be provided to the Trustee prior to the effective date of such amendment, and the amended Annual Budget shall meet all the other requirements for an Annual Budget under this Indenture.

Section 509. Financial Records and Statements.

The Authority covenants to maintain proper books of record and accounts, in which full and correct entries shall be made in accordance with generally accepted accounting principles, of all its business and affairs. It covenants to have an annual audit made by independent certified public accountants of recognized standing and shall by December 31 after the end of each of its Fiscal Years furnish to the Trustee copies of the balance sheet of the Authority as of the end of such Fiscal Year and complete audited financial statements of the Authority for such Fiscal Year, all in reasonable detail.

Section 510. Tax Covenants.

(a) The Authority covenants that it shall not take any action, or fail to take any action, or permit any action to be taken on its behalf or cause or permit any circumstance within its control to arise or continue, if any such action or inaction would adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds under Section 103 of the Code. Without limiting the generality of the foregoing, the Authority covenants that it will comply with the instructions and requirements of the applicable Tax Certificate, which is incorporated herein as if fully set forth herein. This covenant shall survive payment in full or defeasance of the Bonds.

(b) In the event that at any time the Authority is of the opinion that for purposes of this Section it is necessary or helpful to restrict or limit the yield on the investment of any moneys held by the Trustee under this Indenture, the Authority shall so instruct the Trustee under this Indenture in writing, and the Trustee shall take such action as may be necessary in accordance with such instructions.

(c) Notwithstanding any provisions of this Section, if the Authority shall provide to the Trustee an opinion of Bond Counsel that any specified action required under this Section is no longer required or that some further or different action is required to maintain the exclusion from federal income tax of interest on the Bonds, the Trustee may conclusively rely on such opinion in complying with the requirements of this Section and of the applicable Tax Certificate, and the covenants hereunder shall be deemed to be modified to that extent.

Section 511. Establishment of Tolls and Free Passage.

(a) The Authority covenants and agrees that it has and shall maintain so long as any Bonds remain Outstanding and until all other obligations under this Indenture have been satisfied, the exclusive right and lawful power to establish, charge and collect Tolls, user fees and other charges for the use of the Turnpike. The Authority further covenants and agrees that it will take all reasonable measures permitted by law to enforce prompt payment to it of such Tolls, user fees and other charges when and as due.

(b) The Authority covenants that it will not allow or permit any free use of the toll facilities of the Turnpike except to officials or employees of the Authority and/or WVDOH engaged in official business of the Authority and/or WVDOH, or law enforcement officers or emergency vehicles while in the discharge of their official duties, or in the event of an emergency which is temporary, free passage is required in order to assure the health, safety, and security of customers on the Turnpike.

(c) The Authority covenants and agrees that at no time will it subject its exclusive right to establish, charge and collect Tolls and other user fees and charges for the use of the Turnpike to the approval or consent of any other individual or entity, governmental or otherwise. None of the State or any other individual or entity, governmental or otherwise, shall have any rights or responsibilities pursuant to this Indenture.

Section 512. Toll Rate Covenant.

(a) The Authority shall establish, charge, and collect Tolls for the privilege of traveling on the Turnpike at rates sufficient to meet Operation and Maintenance Expenses and produce Net Toll Road Revenues in such Fiscal Year and in each Fiscal Year thereafter that are at least:

(i) 125% of the Annual Debt Service with respect to all Outstanding Senior Lien Bonds, if any, for such Fiscal Year; and

(ii) 100% of the sum of (A) Annual Debt Service with respect to all Outstanding Bonds, (B) the amounts, if any, necessary to restore the amount on deposit in any Debt Service Reserve Fund to the applicable aggregate or composite Debt Service Reserve Requirement in accordance with this Indenture, and (C) the Renewal and Replacement Reserve Fund Requirement.

(b) All such Tolls and charges shall be established and maintained in accordance with all laws, rules, and regulations of the State or of the United States of America applicable thereto. Nothing herein shall require, however, that the Authority make any payment with respect to the Bonds which are not general obligations of the Authority except from the sources and in the manner expressly provided for such Bonds by the Authority.

(c) Prior to the first day of each Fiscal Year while any Series of Bonds are Outstanding, the Authority shall prepare its Annual Budget and deliver to the Trustee a statement in which it sets forth its conclusion as to whether Toll Road Revenues for such budgeted Fiscal Year will be sufficient to satisfy the Toll Rate Covenant set forth in subsection (a) of this Section.

(d) If either (i) the Annual Budget adopted by the Authority under Section 508 for any Fiscal Year shows that Toll Road Revenues will be inadequate to meet the Toll Rate Covenant for such Fiscal Year or (ii) the audited financial reports regarding the Turnpike prepared by the Authority show that the Authority did not satisfy the Toll Rate Covenant for a Fiscal Year, then, the Authority shall:

(i) within 30 days of the date such Annual Budget is adopted or such audit is final, whichever occurs first (and without requiring two studies for the same Fiscal Year), engage a Toll Road Consultant to conduct a study and, within 90 days of such engagement, the Toll Road Consultant shall deliver a written report to the Authority containing the results of such study and the recommendations of the Toll Road Consultant as to the actions required with respect to the operation of the Turnpike and Tolls, fees and charges for the privilege of traveling on the Turnpike in order to provide sufficient Toll Road Revenues in each subsequent Fiscal Year to comply with the Toll Rate Covenant; and

(ii) take the actions recommended by the Toll Road Consultant in such report no later than 60 days after the receipt of such report; provided, however, that if the procedural requirements for a toll increase as provided by the Act (including, without limitation, the requirements for giving public notice, holding public meetings and providing opportunities for public comment) cannot reasonably be complied with in such 60 days, and if the Authority within such 60-day period has commenced and is diligently pursuing the steps necessary to be completed to approve a toll increase, then the Authority shall have an additional 180 days to take such recommended actions; provided, further, that the Authority may take such further actions as it reasonably determines are likely to produce results similar to those recommended by the Toll Road Consultant, as certified by an Authority Authorized Officer; and provided, further, that if the Toll Road Consultant reasonably believes that such further actions as are described in such certificate are not reasonably likely to produce results similar to those recommended by the Toll Road Consultant, then the Toll Road Consultant shall so notify the Authority in writing and provide a copy of such notification to the Trustee within 30 days after receiving the Authority Authorized Officer certificate.

(e) Failure to comply with the Toll Rate Covenant shall not constitute an Event of Default if (i) the Authority complies with the covenants described in subsections (c) and/or (d) of this Section and (ii) the Toll Road Consultant provides a written opinion stating that the actions required in order to produce the required Toll Road Revenues are impracticable at that time and the Authority has commenced the necessary steps to enact increased tolls and charges within the 60-day period as provided under Section 512(d)(ii), and has been diligently pursuing the completion of such steps and enactment of such toll increase and charges to comply as nearly as possible with the recommendation of the Toll Road Consultant, but still is unable to comply with subsection (a) of this Section. For purposes of this subsection, "***impracticable***" means (A) such actions would not result in an increase in Toll Road Revenues that is sufficient to comply with the Toll Rate Covenant, (B) the economic cost of taking such actions exceeds the economic benefit resulting from such actions or (C) the Authority does not have sufficient available funds to pay the cost of taking such actions.

(f) If any study conducted pursuant to subsection (d) of this Section concludes that actions with respect to the operation of the Turnpike and Tolls, fees and charges for the privilege of traveling on the Turnpike will not provide sufficient Toll Road Revenues in each subsequent Fiscal Year to comply with Toll Rate Covenant, the Authority shall use its best efforts to collect revenues from other sources that will enable it to comply with the Toll Rate Covenant.

(g) The Authority shall not reduce tolls unless and until the Toll Road Consultant certifies that the Toll Rate Covenant will be achieved, after the application of such reduction, in the current Fiscal Year and all future Fiscal Years Bonds are then Outstanding.

(h) If the Authority shall adopt a new or revised Toll Rate Schedule, in accordance with the procedures and requirements under the Act, the Authority shall provide a certified copy of such new or revised Toll Rate Schedule to the Trustee.

Section 513. Operation and Maintenance of Turnpike – Additional Covenants.

(a) The Authority covenants and agrees that it has taken, and, so long as any Bonds are Outstanding, that it will take, all steps necessary to ensure that it will continue to have lawful right and lawful power to operate and maintain the Turnpike as a revenue-producing facility consistent with its obligations under the Act.

(b) The Authority covenants and agrees that it will pay all Operation and Maintenance Expenses in accordance with customary business practices.

(c) The Authority covenants that it will, from time to time, duly pay and discharge, or cause to be paid and discharged, any taxes, assessments or other governmental charges lawfully imposed upon the Turnpike or upon any part thereof, or upon the Toll Road Revenues, when the same shall become due, as well as any lawful claim for labor, materials, or supplies which, if unpaid, might by law become a lien or charge upon the Turnpike or the Toll Road Revenues, or which might impair the security of the Bonds.

Section 514. Retention of Assets.

The Authority covenants and agrees that it will not dispose of assets necessary to operate the Turnpike in the manner and at the levels of activity required to enable it to perform its covenants contained herein, including, without limitation, the covenants contained in Section 511.

Section 515. Insurance.

(a) The Authority shall at all times cause to be maintained, to the extent reasonably obtainable, the following kinds of insurance with responsible insurance and/or reinsurance companies authorized and qualified to do business in (or with companies duly authorized and qualified to do business with companies that are authorized and qualified to do business in) the State, in such amounts as recommended by the Consulting Engineers as provided below or as determined by the Authority:

(i) multi-risk insurance on the facilities of the Turnpike which are of an insurable nature and of the character usually insured by those operating similar facilities, covering direct physical loss or damage thereto from causes customarily insured against, in such amounts recommended by the Consulting Engineers to provide against such loss or damage and to protect the interest of the Authority;

(ii) use and occupancy insurance covering loss of Toll Road Revenues by reason of necessary interruption, total or partial, in the use of the facilities of the Turnpike, due to loss or damage to any such facility on which multi-risk insurance is maintained as provided in this Section, in such amount as recommended by the Consulting Engineers to provide income during the period of interruption, but in no event less than 12 months, in the event of the occurrence or any such loss or damage, equal to the amount of the loss of Toll Road Revenues, computed on the basis of Toll Road Revenues for the corresponding period during the preceding calendar year, or if such facility was not in operation during the preceding calendar year, then computed on the basis of the Consulting Engineers' estimate, attributable to such loss or damage;

(iii) public liability insurance covering injuries to persons or property, in such amount as recommended by the Consulting Engineers;

(iv) war risk insurance, if obtainable from the United States Government or any agency thereof, covering direct physical loss or damage, and loss of Toll Road Revenues attributable thereto, on the facilities of the Turnpike which are insurable thereunder;

(v) during the period of construction or reconstruction of any material portion of the facilities of the Turnpike, such insurance as is customarily carried by others with respect to similar structures used for similar purposes, **provided, however**, that the Authority shall not be required to maintain any such insurance to the extent that such insurance is carried for the benefit of the Authority by contractors, and **provided, further,** that the Authority shall require contractors constructing any such portion of the facilities of the System to file bonds or undertakings for the full performance of such contracts, and under which all risks from any cause whatsoever, without any exceptions, during the period of such construction, shall be assumed by such contractors; and

(vi) any additional or other insurance as the Authority in its discretion may determine;

provided, however, that the Authority may self-insure, in whole or in part, with the approval of the Consulting Engineers, against public liability for bodily injury and property damage, loss of Toll Revenues normally covered by use and occupancy insurance and other risks not enumerated above to the extent permitted by law and up to the levels recommended by the Consulting Engineers or a recognized, independent insurance consultant. The adequacy of any self-insurance reserve, or other insurance reserve, established by the Authority shall be evaluated annually by the Authority in consultation with the Consulting Engineers (or a recognized, independent insurance consultant). Deficiencies, if any, in any such self-insurance reserve, or other insurance reserve, shall be made up in accordance with the recommendations of the Consulting Engineers. Except to the extent such coverage is provided by the Authority, such policies shall be taken in the names of the Authority and the Trustee for the benefit of the Holders.

(b) The proceeds of such insurance policies covering loss or damage shall at the direction of the Authority either (i) be applied to the redemption of Bonds or (ii) be paid to the Authority and held by the Authority in a special trust account for the sole purpose of reconstructing or replacing the facility or reimbursing the Authority if the Authority has advanced funds for such reconstruction or replacement. If such proceeds are insufficient to reconstruct or replace the damaged facilities, any deficiency thereof shall be provided by the Authority from lawfully available funds. Any proceeds of use and occupancy insurance paid to the Authority shall be deposited promptly by the Authority into the applicable Debt Service Fund if necessary to prevent a default in payment thereon.

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ARTICLE VI
DEFAULT AND REMEDIES

Section 601. Events of Default.

Subject to the limitation that nonpayment alone of principal of, premium, if any, or interest on any Subordinate Lien Bond shall not constitute an Event of Default with respect to Senior Lien Bonds, each of the following is hereby declared an "***Event of Default***" hereunder with respect to a Series of Bonds:

(a) if payment by the Authority in respect of any installment of principal or interest on any Bond of such Series shall not have been made in full when the same became due and payable, whether at maturity or by proceedings for redemption or otherwise;

(b) if payment by the Authority in respect of any Regularly Scheduled Hedge Payment or any payment pursuant to a Reimbursement Agreement with any Credit Provider with respect to any Bond of such Series shall not have been made in full when the same becomes due and payable;

(c) if the Authority shall fail to observe or perform any covenant or agreement on its part under this Indenture, other than the Toll Rate Covenant, for a period of 60 days after the date on which written notice of such failure, requiring the same to be remedied, shall have been given to the Authority by the Trustee, or to the Authority and the Trustee by the Holders of at least 50.01% in aggregate principal amount of Bonds of a Series then Outstanding; provided, however, that if the breach of covenant or agreement is one which cannot be completely remedied within the 60 days after written notice has been given, it shall not be an Event of Default with respect to such Series as long as the Authority has taken active steps within the 60 days after written notice has been given to remedy the failure and is diligently pursuing such remedy; or

(d) if the Authority shall institute proceedings to adjudicate its bankruptcy or insolvency, or shall consent to the institution of bankruptcy or insolvency proceedings against it, or shall file a petition or answer or consent seeking reorganization or relief under the Federal Bankruptcy Code or any other similar applicable Federal or state law, or shall consent to the filing of any such petition or to the appointment of a receiver, liquidator, assignee, trustee or sequestrator (or other similar official) of the Authority or of any substantial part of the Turnpike or shall make an assignment for the benefit of creditors, or shall admit in writing its inability to pay its debts generally as they become due.

(e) The first Supplemental Indenture pursuant to which Subordinate Lien Bonds are issued shall specify all Events of Default applicable to the Subordinate Lien Bonds, and Events of Default (if any) that are applicable only to a particular Series of Subordinate Lien Bonds shall be set forth in the applicable Supplemental Indenture under which such Series was issued.

Section 602. No Acceleration or Cross Default with Respect to the Bonds.

There shall be no right of acceleration with respect to the Bonds. An Event of Default with respect to the Subordinate Lien Bonds shall not cause an Event of Default with respect to any Senior Lien Bonds, unless such event or condition on its own constitutes an Event of Default with respect to the Senior Lien Bonds pursuant to Section 601.

Section 603. Remedies and Enforcement of Remedies under the Indenture.

(a) Subject to the provisions of Section 615, upon the occurrence and continuance of any Event of Default with respect to a Series of Bonds, the Trustee may or, upon the written request of the Holders of not less than 50.01% in an aggregate principal amount of the Bonds of such Series, together with indemnification of the Trustee to its satisfaction therefor, shall proceed to protect and enforce its rights and the rights of the Bondholders under this Indenture, the Act and such Bonds by such suits, actions or proceedings, as the Trustee, being advised by counsel, shall deem expedient, including but not limited to:

(i) Civil action to recover money or damages due and owing;

(ii) Civil action to enjoin any acts or things, which may be unlawful or in violation of the rights of the Holders of such Bonds; and

(iii) Enforcement of any other right of such Bondholders conferred by law, including the Act, or hereby, including, without limitation, by suit, action, injunction, mandamus or other proceedings to enforce and compel the performance by the Authority of actions required by the Act or this Indenture, including the fixing, charging and collecting of Tolls, fees and charges for the privilege of traveling on the Turnpike.

(b) Subject to the provisions of Section 607, regardless of the happening of an Event of Default, the Trustee, if requested in writing by the Holders of not less than 25% in aggregate principal amount of the Bonds of a Series, shall upon being indemnified to its satisfaction therefor, institute and maintain such suits and proceedings as it may be advised shall be necessary or expedient (i) to prevent any impairment of the security hereunder by any acts or omissions to act which may be unlawful or in violation hereof, or (ii) to preserve or protect the interests of the Holders, provided that such request is in accordance with law and the provisions hereof and, in the sole judgment of the Trustee, is not unduly prejudicial to the interest of the Holders of Bonds of each Series not making such request.

(c) Notwithstanding anything else in this Section, the remedies provided herein with respect to using the moneys on deposit in the Funds or the Accounts hereunder shall be limited to the Funds or Accounts hereunder pledged to the applicable Series of Bonds with respect to which an Event of Default exists.

Section 604. Application of Toll Road Revenues and Other Moneys After Default.

During the continuance of an Event of Default with respect to any Series of Bonds, all moneys held in trust and pledged hereunder and received by the Trustee with respect to such Series of Bonds pursuant to any right given or action taken under the provisions of this Article shall, after payment of the expenses and advances incurred or made by the Trustee, any Credit Provider or the Bondholders with respect thereto, including reasonable costs and expenses of counsel, be applied according to the accrued debt service deposits or payments with respect to each such Series as follows; provided, however, that money drawn under a Credit Facility, if any, and amounts held in Accounts in any Bond Fund and any Debt Service Reserve Fund shall be applied solely to pay interest or principal, as applicable, on the related Series of Bonds:

First: To the payment of all installments of interest then due on any Senior Lien Bonds in the order of maturity of such installments, including installments of interest due with respect to any mandatory sinking fund redemption, Regularly Scheduled Hedge Payments or any payments made on any Senior Lien Bonds pursuant to a Reimbursement Agreement, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment of the amounts due on such date ratably, without any discrimination or preference;

Second: To the payment of any principal or redemption price of any Senior Lien Bonds which shall have become due, whether at maturity or by call for redemption or otherwise or upon the tender of any Senior Lien Bonds pursuant to the terms of the Supplemental Indenture providing for the issuance of such Senior Lien Bonds, as well as any principal due with respect to Regularly Scheduled Hedge Payments or any payments made on any Senior Lien Bonds pursuant to a Reimbursement Agreement, and, if the amount available shall not be sufficient to pay in full all Senior Lien Bonds and any related obligations described above due on any particular date, then to the payment of the amounts due on such date ratably, without any discrimination or preference;

Third: To the payment of all installments of interest then due on any Subordinate Lien Bonds in the order of maturity of such installments, including installments of interest due with respect to any mandatory sinking fund redemption, Regularly Scheduled Hedge Payments or any payments made on any Subordinate Lien Bonds pursuant to a Reimbursement Agreement, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment of the amounts due on such date ratably, without any discrimination or preference;

Fourth: To the payment of any principal or redemption price of any Subordinate Lien Bonds which shall have become due, whether at maturity or by call for redemption or otherwise or upon the tender of any Subordinate Lien Bonds pursuant to the terms of the Supplemental Indenture providing for the issuance of such Subordinate Lien Bonds, as well as any principal due with respect to Regularly Scheduled Hedge Payments or any payments made on any Subordinate Lien Bonds pursuant to a Reimbursement Agreement, and, if the amount available shall not be sufficient to pay in full all Subordinate Lien Bonds and any related obligations described above due on any particular date, then to the payment of the amounts due on such date ratably, without any discrimination or preference.

Whenever moneys are to be applied by the Trustee pursuant to the provisions of this Section, such moneys shall be applied by it at such times, and from time to time, as the Trustee shall determine in accordance with this Indenture, having due regard for the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such moneys, it shall fix the date (which shall be a Bond Payment Date unless it shall deem another date more suitable) upon which such application is to be made and upon such date interest on the principal amounts to be paid on such dates shall cease to accrue if so paid. The Trustee shall give such notice as it may deem appropriate in accordance with this Indenture of the deposit with it of any such moneys and of the fixing of any such date, and shall not be required to make payment to the Holder of any Bond until such Bond shall be presented to the Trustee for appropriate endorsement of any partial payment or for cancellation if fully paid.

Whenever all installments of interest then due on the Outstanding Bonds and all unpaid principal amounts of any Outstanding Bonds that shall have become due have been paid under the provisions of this Section and all expenses and charges of the Trustee have been paid, and each Credit Provider, if any, has been reimbursed for all amounts drawn under the applicable Credit Facility, if any, and used to pay principal, premium, if any, and interest on the Outstanding Bonds, the Authority shall resume making the transfers from the Revenue Fund in the amounts and according to the priority set forth in Section 414.

Section 605. Remedies Not Exclusive.

No remedy by the terms hereof conferred upon or reserved to the Trustee or the Bondholders or any Credit Provider is intended to be exclusive of any other remedy but each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or existing at law or in equity or by statute, including the Act, on or after the date hereof.

Section 606. Remedies Vested in Trustee.

All rights of action (including the right to file proof of claims) hereunder or under any of the Bonds may be enforced by the Trustee without the possession of any of the Bonds or the production thereof in any trial or other proceedings relating thereto. Any such suit or proceeding instituted by the Trustee may be brought in its name as the Trustee without the necessity of joining as plaintiffs or defendants any Holders of the Bonds. Subject to the provisions of Section 606, any recovery or judgment shall be for the equal benefit of the Holders of the Outstanding Bonds.

Section 607. Control of Proceedings.

(a) For the purpose of this Section 607 only, the Holders of the Senior Lien Bonds may control the proceedings if there is an Event of Default with respect to the Senior Lien Bonds; provided, however, that the provisions of Section 606 shall apply with respect to the application of Toll Road Revenues and other moneys after an Event of Default. Subject to the foregoing and the additional limitation that nonpayment of principal of, purchase price of, if applicable, premium, if any, or interest on any Subordinate Lien Bonds shall not alone constitute an Event of Default while any Senior Lien Bonds are Outstanding or remain unpaid, if an Event of Default with respect to a Series of Bonds shall have occurred and be continuing, the Holders of a majority in aggregate principal amount of Bonds of such Series then Outstanding shall have the right, at any time, by any instrument in writing executed and delivered to the Trustee, to direct the method and place of conducting any proceeding to be taken with respect to funds or assets solely securing such Series in connection with the enforcement of the terms and conditions hereof, provided that such direction (i) is in accordance with law and the provisions hereof (including indemnity to the Trustee as provided herein) and (ii), in the sole judgment of the Trustee, is not unduly prejudicial to the interest of Bondholders of each Series of Bonds not joining in such direction, and provided further that nothing in this Section shall impair the right of the Trustee in its discretion to take any other action hereunder which it may deem proper in accordance with this Indenture and which is not inconsistent with such direction by Bondholders.

(b) If an Event of Default with respect to all Series of Bonds shall have occurred and be continuing, the Holders of a majority in aggregate principal amount of all Senior Lien Bonds then outstanding shall have the right, at any time, by any instrument in writing executed and delivered to the Trustee to direct the method and place of conducting any proceeding to be taken with respect to the Toll Road Revenues or other assets securing all Bonds in connection with the enforcement of the terms and conditions hereof, provided that such direction is in accordance with law and the provisions hereof (including indemnity to the Trustee as provided herein) and, in the sole judgment of the Trustee, is not unduly prejudicial to the interest of Bondholders not joining in such direction and provided further that nothing in this Section shall impair the right of the Trustee in its discretion to take any other action hereunder which it may deem proper in accordance with this Indenture and which is not inconsistent with such direction by Bondholders.

(c) No owner of any Subordinate Lien Bond shall have any right to institute any judicial or other action or remedial proceeding (including, without limitation, bankruptcy or insolvency proceedings) against the Authority or any of the Authority's other rights, interests, assets or properties, to collect any moneys due, to enforce payment on its Subordinate Lien Bond so long as any Senior Lien Bonds remain Outstanding without the written consent of a majority of the aggregate principal amount of the Senior Lien Bonds then Outstanding. Any action commenced by an owner of any Subordinate Lien Bond shall terminate upon annulment of the default in respect of the Senior Lien Bonds.

Section 608. Individual Bondholder Action Restricted.

(a) No Holder of any Bond shall have any right to institute any suit, action, or proceeding in equity or at law for the enforcement hereof or for the execution of any trust hereunder or for any remedy hereunder unless:

(i) an Event of Default has occurred with respect to such Series (A) under subsection (a) or (b) of Section 601 of which the Trustee is deemed to have notice, or (B) under subsection (c), (d) or (e) of Section 601 as to which a Responsible Officer has actual knowledge or as to which the Trustee has been notified in writing by the Authority;

(ii) in the case of an Event of Default under subsection (a) or (b) of Section 601, the Holders of at least 51% in aggregate principal amount of Bonds of such Series then Outstanding, or in the case of an Event of Default under subsection (c), (d), or (e) of Section 601, the Holders of at least 51% in aggregate principal amount of all Bonds Outstanding shall have made written request to the Trustee to proceed to exercise the powers granted herein or to institute such action, suit or proceeding in its own name;

(iii) such Bondholders shall have offered the Trustee indemnity as provided in Section 702;

(iv) the Trustee shall have failed or refused to exercise the powers herein granted or to institute such action, suit or proceedings in its own name for a period of 60 days after receipt by it of such request and offer of indemnity; and

(v) during such 60-day period no direction inconsistent with such written request has been delivered to the Trustee by the Holders of a majority in aggregate principal amount of Bonds of such Series then Outstanding in accordance with Section 609.

(b) No one or more Holders of Bonds of such Series shall have any right in any manner whatsoever to affect, disturb or prejudice the security hereof or to enforce any right hereunder except in the manner herein provided and for the equal benefit of the Holders of all Bonds of such Series then Outstanding.

(c) Nothing contained herein shall affect or impair, or be construed to affect or impair, the right of the Holder of any Bond of such Series (i) to receive payment of the principal of or interest on such Bond on or after the due date thereof or (ii) to institute suit for the enforcement of any such payment on or after such due date; provided, however, no Holder of any Bond of such Series may institute or prosecute any such suit or enter judgment therein if, and to the extent that, the institution or prosecution of such suit or the entry of judgment therein would, under applicable law, result in the surrender, impairment, waiver or loss of the lien hereof on the moneys, funds and properties pledged hereunder for the equal and ratable benefit of all Holders of Bonds of such Series.

(d) Neither the Holder of any Bond of a Series nor the Trustee shall name or join WVDOH, or the State or any officer thereof in any legal proceeding seeking remedies provided hereunder or other enforcement of this Indenture except to the extent joining WVDOH is required as a necessary party in order to give a court jurisdiction over such action.

Section 609. Termination of Proceedings.

In case any proceeding taken by the Trustee on account of an Event of Default shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Trustee or to the Bondholders, then the Authority, the Trustee and the Bondholders shall be restored to their former positions and rights hereunder, and all rights, remedies and powers of the Trustee and the Bondholders shall continue as if no such proceeding had been taken.

Section 610. Waiver of Event of Default.

(a) No delay or omission of the Trustee, of any Holder of the Bonds or, if provided by Supplemental Indenture, any Credit Provider to exercise any right or power accruing upon any Event of Default shall impair any such right or power or shall be construed to be a waiver of any such Event of Default or an acquiescence therein. Every power and remedy given by this Article to the Trustee, the Holders of the Bonds and, if provided by Supplemental Indenture, any

Credit Provider, respectively, may be exercised from time to time and as often as may be deemed expedient by them.

(b) The Trustee, with the written consent of any Credit Provider, if provided by Supplemental Indenture (provided, however, that such Credit Provider's consent may be required only in connection with an Event of Default on a Series of Bonds with respect to which such Credit Provider is providing a Credit Facility), may waive any Event of Default with respect to the Bonds, that in its opinion, shall have been remedied at any time, regardless of whether any suit, action or proceeding has been instituted, before the entry of final judgment or decree in any suit, action or proceeding instituted by it under the provisions hereof, or before the completion of the enforcement of any other remedy hereunder.

(c) Notwithstanding anything contained herein to the contrary, the Trustee, upon the written request of (i) the Credit Provider, if any, if provided by a Supplemental Indenture, with respect to an Event of Default which applies only to the related Series of Bonds, (ii) Holders of at least a majority of the aggregate principal amount of Bonds of a Series then Outstanding with respect to any Event of Default which applies only to such Series, with the consent of the applicable Credit Provider, if any, if provided by a Supplemental Indenture or (iii) Holders of at least a majority of the aggregate principal amount of Bonds then Outstanding with respect to any Event of Default which applies to all Bonds, shall waive any such Event of Default hereunder and its consequences; provided, however, that a default in the payment of the principal amount of, premium, if any, or interest on any such Bond, when the same shall become due and payable by the terms thereof or upon call for redemption, may not be waived without the written consent of the Holders of all the Bonds then Outstanding of such Series to which an Event of Default applies and any consent of the applicable Credit Provider, if any, if provided by a Supplemental Indenture.

(d) In case of any waiver by the Trustee of an Event of Default hereunder, the Authority, the Trustee, the Bondholders and, if provided by a Supplemental Indenture, the Credit Provider shall be restored to their former positions and rights hereunder, respectively, but no such waiver shall extend to any subsequent or other Event of Default or impair any right consequent thereon. The Trustee shall not be responsible to any one for waiving or refraining from waiving any Event of Default in accordance with this Section.

Section 611. Notice of Event of Default.

(a) As soon as possible after the occurrence of an Event of Default with respect to a Series of Bonds under Section 601(a), promptly, but in any event within 10 days after (i) the occurrence of an Event of Default with respect to a Series of Bonds under Section 601(a) or (b), of which the Trustee hereby is deemed to have notice, or (ii) receipt, in writing or otherwise, by a Responsible Officer of the Trustee of actual knowledge or notice of an Event of Default with respect to a Series of Bonds under Section 601(c) or (d), the Trustee shall, unless such Event of Default shall have theretofore been cured, give written notice thereof by first class mail to the Authority, the Registrar, each Holder of Bonds of such Series then Outstanding, any Credit Provider and, as long as the Bonds are held in book-entry form, to the Securities Depository in lieu of the Holders of the Bonds, provided that, except in the case of a default in the payment of principal amounts, Sinking Fund installments, or the redemption price of or interest on any of the Bonds of such Series, the Trustee may withhold such notice to such Holders if, in its sole judgment in accordance with this Indenture, it determines that the withholding of such notice is in the best interest of the Holders of such Series of Bonds.

(b) The Trustee shall promptly notify the Authority or any other person, of every notice of election to sell, notice of sale or other notice required by law or by this Indenture in connection with the exercise of remedies under this Indenture.

Section 612. Limitations on Remedies.

It is the purpose and intention of this Article to provide rights and remedies to the Trustee and Bondholders which lawfully may be granted pursuant to the provisions of the Act, but should any right or remedy herein granted be held to be unlawful, the Trustee and the Bondholders shall be entitled to every other right and remedy provided in this Indenture and by law. The Authority has no obligation to make any payment of any Bond or the interest thereon from any assets used in or revenues derived from the operation of the Turnpike or any other funds of the Authority.

Section 613. Credit Providers to Control Remedies.

While a Credit Facility with respect to a Series of Bonds is in effect, notwithstanding anything else herein to the contrary, a Supplemental Indenture may provide that no right, power or remedy hereunder with respect to such Series of Bonds may be pursued without the prior written consent of such Credit Provider and a Supplemental Indenture may provide that the Credit Provider shall have the right to direct the Trustee to pursue any right, power or remedy available hereunder with respect to any assets available hereunder which secure no Bonds other than the Series of Bonds secured by such Credit Facility, including, without limitation, any right, power or remedy with respect to Toll Road Revenues or other assets securing all Bonds.

Section 614. Inconsistent or Lack of Directions in Default.

Notwithstanding anything else herein to the contrary, if any applicable Credit Providers or Holders of separate Series in default do not direct remedies or proceedings to be taken pursuant to this Article, the Trustee shall take whatever action, if any, pursuant to Section 606 it deems to be in the best interest of Bondholders without regard to the existence of any Credit Facility that may exist with respect to any or all Bonds.

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ARTICLE VII
THE TRUSTEE

Section 701. Acceptance of Trust; General.

By execution hereof or by authenticating one or more Bonds, the Trustee shall evidence its acceptance of the powers, duties and obligations of the Trustee only as are specifically set forth herein. The Trustee shall have no duty, responsibility or obligation for the issuance of Bonds or for the validity or exactness hereof, or of any other document relating to such issuance. The Trustee shall have no duty, responsibility or obligation for the payment of Bonds except for payment in accordance with the terms and provisions hereof from, and to the extent of, funds which are held in trust by the Trustee for the purpose of such payment.

Prior to an Event of Default and after the curing or waiving of all Events of Default which may have occurred, the Trustee shall not be liable except for the performance of such duties as are specifically set forth herein. The Trustee shall have no liability for any act or omission to act hereunder, or under any other instrument or document executed pursuant hereto except for the Trustee's own negligent action, its own negligent failure to act or its own willful misconduct. The duties and obligations of the Trustee shall be determined solely by the express provisions hereof, and no implied powers, duties or obligations of the Trustee shall be read into this Indenture.

During an Event of Default, the Trustee shall exercise such of the rights and powers vested in it hereby, and shall use the same degree of care and skill in its exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

The Trustee shall not be required to expend or risk its own funds or otherwise incur individual liability in the performance of any of its duties or in the exercise of any of its rights or powers as the Trustee, except as may result from its own negligent action, its own negligent failure to act or its own willful misconduct.

Notwithstanding any other provision hereof, the Trustee shall have no liability for any (a) error of judgment made in good faith by a Responsible Officer or Officers of the Trustee, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts or (b) action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of not less than a majority in principal amount of Bonds then Outstanding, then existing relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred upon the Trustee hereunder.

Section 702. Trustee Not Required to Take Action Unless Indemnified.

Except as expressly required herein (including the requirements of the next sentence) the Trustee neither shall be required to institute any suit or action or other proceeding in which it may be a defendant, nor to take any steps to enforce its rights and expose it to liability, nor shall the Trustee be deemed liable for failure to take any such action, unless and until it shall have been indemnified, to its satisfaction, against any and all reasonable costs, expenses, outlays, counsel and other fees, other disbursements including its own reasonable fees and against all liability and damages. The Trustee nevertheless, may begin suit, or appear in and defend suit, or do anything else which in its judgment is proper to be done by it as the Trustee, without prior assurance of indemnity, and , to the extent permitted by law, in such case the Authority shall reimburse the Trustee for all reasonable costs, expenses, outlays, counsel and other fees, and other reasonable disbursements including its own fees, and for all liability and damages suffered by the Trustee in connection therewith, except for the Trustee's own negligent action, its own negligent failure to act, its own willful misconduct or self-dealing constituting a breach of trust under applicable law. If the Trustee begins, appears in or defends such a suit, the Trustee shall give reasonably prompt notice of such action to the Authority and shall give such notice prior to taking such action if possible. If the Authority shall fail to make reimbursement, the Trustee may reimburse itself for any such costs and expenses in accordance with Section 607.

Section 703. Employment of Experts.

The Trustee is hereby authorized to employ as its agents such attorneys at law, and other qualified independent consultants (who are not employees of the Trustee), as it may deem necessary to carry out any of its obligations hereunder, and shall be reimbursed by the Authority for all reasonable expenses and charges in so doing. The Trustee shall not be responsible for any misconduct or negligence of any such agent appointed with due care by the Trustee.

Section 704. Enforcement of Performance by Others.

It shall not be the duty of the Trustee, except as herein specifically provided, to seek the enforcement of any duties and obligations herein imposed upon the Authority.

Section 705. Right to Deal in Bonds and Take Other Actions.

The Trustee may in good faith buy, sell or hold and deal in any Bonds with like effect as if it were not such Trustee and may commence or join in any action which a Holder is entitled to take with like effect as if the Trustee were not the Trustee. It is understood and agreed that the Trustee engages in a general banking business and no provision hereof is to be construed to limit or restrict the right of the Trustee to engage in such business with the Authority or any Holder. So engaging in such business shall not, in and of itself, and so long as the Trustee duly performs all of its duties as required hereby, constitute a breach of trust on the part of the Trustee.

Section 706. Removal and Resignation of Trustee.

The Trustee may resign at any time. Written notice of such resignation shall be given to the Authority and such resignation shall take effect upon the appointment and qualification of a successor Trustee. In the event a successor Trustee has not been appointed and qualified within 60 days after the date notice of resignation is given, the Trustee or the Authority may apply to any court of competent jurisdiction for the appointment of a successor Trustee to act until such time as a successor is appointed as provided in this Section.

In addition, the Trustee may be removed at any time by the Authority but only for cause by Supplemental Indenture so long as (a) no Event of Default shall have occurred and be continuing and (b) the Authority determines, in such Supplemental Indenture, that the removal of the Trustee shall not have an adverse effect upon the rights or interests of the Bondholders.

In the event of the resignation or removal of the Trustee or in the event the Trustee is dissolved or otherwise becomes incapable to act as the Trustee, the Authority shall be required to appoint a successor Trustee. In such event, the successor Trustee shall cause notice to be mailed to the Holders of all Bonds then outstanding in such manner deemed appropriate by the Authority. If the Trustee resigns, the resigning Trustee shall pay for such notice. If the Trustee is removed, is dissolved, or otherwise becomes incapable of acting as Trustee, the Authority shall pay for such notice.

Unless otherwise ordered by a court or regulatory body having competent jurisdiction, or unless required by law, any successor Trustee shall be a trust company or bank having the powers of a trust company as to trusts, qualified to do and doing trust business within or without the State and having an officially reported combined capital, surplus, undivided profits and reserves aggregating at least $50,000,000, if there is such an institution willing, qualified and able to accept the trust upon reasonable or customary terms.

Every successor Trustee howsoever appointed hereunder shall execute, acknowledge and deliver to its predecessor and also to the Authority an instrument in writing, accepting such appointment hereunder, and thereupon such successor Trustee, without further action, shall become fully vested with all the rights, immunities, powers, trusts, duties and obligations of its predecessor, and such predecessor shall execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of such predecessor. The predecessor Trustee shall execute any and all documents necessary or appropriate to convey all interest it may have to the successor Trustee. The predecessor Trustee promptly shall deliver all records relating to the trust or copies thereof and communicate all material information it may have obtained concerning the trust to the successor Trustee.

Each successor Trustee, not later than 10 days after its assumption of the duties hereunder, shall mail a notice of such assumption to each Holder of a registered Bond.

Section 707. Proof of Claim.

The Trustee shall have the right and power to act in its name or in the name and place of the Authority or Holders to make proof of claim in any proceeding, bankruptcy, reorganization or otherwise where proof of claim may be required. Any amount recovered by the Trustee as a result of any such claim, after payment of all fees (including reasonable attorneys' fees), costs, expenses, and advances incurred by the Trustee or its agents in pursuing such claim, shall be for the equal benefit of all the Holders of Bonds Outstanding.

Section 708. Trustee's Fees and Expenses.

The Authority hereby agrees to pay fees to and expenses of the Trustee for its services hereunder as agreed to by the Authority and the Trustee pursuant to the terms of a separate agreement. Any provision hereof to the contrary notwithstanding, if the Authority fails to make any payment properly due to the Trustee for its reasonable fees, costs, expenses, and fees of attorneys, certified public accountants, recognized authorities in their field and agents (not employees of the Trustee) incurred in performance of its duties, the Trustee may reimburse itself from any surplus moneys on hand in any Fund or Account held by it, other than any amounts in any Bond Fund or any Debt Service Reserve Fund.

Section 709. Reliance Upon Documents.

In the absence of bad faith on the part of the Trustee, the Trustee may conclusively rely upon and shall be protected in acting or refraining from acting in reliance upon any document, including but not limited to any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, or other paper or document reasonably believed by it to be genuine and to have been signed or presented by the proper officials of the Authority, the Holders or agents or attorneys of the Holders; provided, that in the case of any such document specifically required to be furnished to the Trustee hereby, the Trustee shall be under a duty to examine the same to determine whether it conforms to the requirements hereof. The Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, or other paper or document submitted to the Trustee; provided, however, that the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may deem prudent. Whenever in the administration hereof, the Trustee shall deem it desirable that a matter be provided or established prior to taking or not taking any action hereunder, the Trustee (unless other evidence be specifically prescribed herein) may rely upon any document provided for in this Indenture.

Except where other evidence is required hereby, any request or direction of the Authority mentioned herein shall be sufficiently evidenced by a certified copy of such request executed by an Authority Authorized Officer.

Section 710. Recitals and Representations.

The recitals, statements, and representations contained herein or in any Bond shall be taken and construed as made by and on the part of the Authority and not by the Trustee, and the Trustee neither assumes nor shall be under any responsibility for the correctness of the same other than the Trustee's certification of authentication of any Bonds as to which it is Authenticating Agent.

The Trustee makes no representation as to, and is not responsible for, the validity or sufficiency hereof or, except as herein required, the filing or recording or registering of any document. The Trustee shall be deemed not to have made representations as to the security afforded hereby or hereunder or as to the validity or sufficiency of such document. The Trustee shall not be concerned with or accountable to anyone for the use or application of any moneys which shall be released or withdrawn in accordance with the provisions hereof. The Trustee shall not be responsible or liable for any loss suffered in connection with the investment of any funds made by it in accordance with the provisions hereof. Except with respect to Events of Default described in Section 601(a), the Trustee shall have no duty of inquiry with respect to any default which constitutes or with notice or lapse of time or both would constitute an Event of Default without actual knowledge of a Responsible Officer or receipt by the Trustee of written notice of a default which constitutes or with notice or lapse of time or both would constitute an Event of Default from the Authority or any Holder.

Section 711. Destruction of Bonds.

Upon payment of or surrender to the Trustee for cancellation of any Bond, the Trustee shall destroy or register the cancellation of such Bond. At least annually the Trustee shall deliver a certificate of such destruction or cancellation to the Authority. Upon surrender of any Bond to a Paying Agent for payment, such Bond shall be cancelled by the Paying Agent and delivered to the Trustee for destruction or register of cancellation.

Section 712. Reports.

The Trustee monthly shall prepare and submit to the Authority reports covering all moneys received and all payments, expenditures and investments made as the Trustee hereunder since the last previous such report.

Section 713. Paying Agent, Authenticating Agent and Registrar.

The Authority may appoint a Paying Agent, an Authenticating Agent and a Registrar with respect to a Series of Bonds in the Supplemental Indenture pursuant to which such Series is issued. Each Paying Agent, Authenticating Agent and Registrar shall (i) designate to the Trustee its principal office and (ii) signify its acceptance of the duties and obligations imposed upon it hereunder and under such Supplemental Indenture by written instrument of acceptance delivered to the Authority and the Trustee. In addition, the Trustee is authorized and directed to enter into a Paying Agent Agreement with each Paying Agent as to such Paying Agent's rights and duties.

Each Paying Agent shall exercise its duties in accordance with the terms of and shall have the protection provided to the Trustee in this Indenture.

If any Paying Agent, Authenticating Agent or Registrar shall resign or be removed, the Authority shall designate a successor. If the Authority shall designate a successor, then, upon the Trustee's receipt of the written designation and the written acceptance of such designated successor, such entity shall thereupon, without further action by the Authority, be appointed as successor Paying Agent, Authenticating Agent and Registrar.

In the event that any Paying Agent, Authenticating Agent or Registrar shall resign or be removed, or be dissolved, or if the property or affairs of any Paying Agent, Authenticating Agent or Registrar shall be taken under the control of any state or federal court or administrative body because of bankruptcy or insolvency, or for any other reason, and no successor shall have been appointed, the Trustee shall, ipso facto be deemed to be any Paying Agent, Authenticating Agent or Registrar, until the appointment of a successor.

Any corporation into which any Paying Agent, Authenticating Agent or Registrar may be merged or converted or with which it may be consolidated, or any corporation resulting from any such merger, consolidation or conversion, or succeeding to the corporate trust business of Paying Agent, Authenticating Agent or Registrar, shall be the successor of the Paying Agent, the Authenticating Agent and the Registrar if such successor corporation is otherwise eligible under this Section, without the execution or filing of any further act on the part of the Trustee or the entity serving as Paying Agent, the Authenticating Agent and the Registrar or such successor corporation.

Section 714. Merger, Conversion, Consolidation or Succession to Business.

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all of the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto; provided, however, that, in the event of an assignment of this Indenture by the Trustee, such assignment shall not be binding on the Authority unless and until the Authority has received a certified copy of the assignment, together with written notice of the assignee to which notices may be sent; provided that, if such agreement is required to be recorded, the assignee shall deliver to the Authority a copy of the proof of recordation bearing the date and the instrument number or book and page of such recordation.

Section 715. Appointment of Co-Trustee.

It is the purpose of this Indenture that there shall be no violation of any law of any jurisdiction (including particularly the laws of the State) denying or restricting the right of banking corporations or associations to transact business as Trustee in such jurisdiction. It is recognized that in case of litigation under this Indenture, and in particular in case of the enforcement of any such document in default, or in case the Trustee deems that by reason of any present or future law of any jurisdiction it may not exercise any of the powers, rights or remedies herein granted to the Trustee or hold title to the properties in trust, as herein granted, or take any other action which may be desirable or necessary in connection therewith, it may be necessary that the Trustee appoint an additional individual or institution as a separate or Co-Trustee. The following provisions of this Section are adopted to these ends.

The Trustee may appoint an additional individual or institution as a separate or Co-Trustee, in which event each and every remedy, power, right, claim, demand, cause of action, indemnity, estate, title, interest and lien expressed or intended by this Indenture to be exercised by or vested in or conveyed to the Trustee with respect thereto shall be exercisable by and vest in such separate or Co-Trustee but only to the extent necessary to enable such separate or Co-Trustee to exercise such powers, rights and remedies, and every covenant and obligation necessary to the exercise thereof by such separate or Co-Trustee shall run to and be enforceable by either of them.

Should any deed, conveyance or instrument in writing from the Authority be required by the separate or Co-Trustee so appointed by the Trustee for more fully and certainly vesting in and confirming to him or it such properties, rights, powers, trusts, duties and obligations, any and all such deeds, conveyances and instruments in writing shall, on request, be executed, acknowledged and delivered by the Authority. In case any separate or Co-Trustee, or a successor to either, shall die, become incapable of acting, resign or be removed, all the estates, properties, rights, powers, trusts, duties and obligations of such separate or Co-Trustee, so far as permitted by law, shall vest in and be exercisable by the Trustee until the appointment of a new Trustee or successor to such separate or Co-Trustee.

ARTICLE VIII

SUPPLEMENTAL INDENTURES

Section 801. Supplemental Indentures Not Requiring Consent of Bondholders.

The Authority and the Trustee may, without the consent of or notice to any of the Holders, enter into one or more Supplemental Indentures for one or more of the following purposes:

(a) to cure any ambiguity or formal defect or omission herein;

(b) to correct or supplement any provision herein which may be inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising hereunder that shall not materially adversely affect the interests of the Holders;

(c) to grant or confer upon the Trustee for the benefit of the Holders any additional rights, remedies, powers or authority that may lawfully be granted or conferred upon them;

(d) to secure additional revenues or provide additional security or reserves for payment of the Bonds;

(e) to preserve the excludability of interest on any Bonds from gross income for purposes of federal income taxes, or to change the tax covenants set forth in Section 509, pursuant to an Opinion of Bond Counsel that such action will not affect adversely such excludability;

(f) to remove the Trustee in accordance with the second paragraph of Section 707;

(g) to add requirements the compliance with which is required by a Rating Agency in connection with issuing a rating with respect to any Series of Bonds;

(h) to accommodate the technical, operational and structural features of Bonds which are issued or are proposed to be issued or of a financing program which has been authorized or is proposed to be authorized by a resolution of the Authority and identified in a previous or proposed Supplemental Indenture, and for which the items required under Section 210 and Section 213 have been or will be filed with the Trustee (including demonstration of compliance with the applicable additional bonds test), including, but not limited to, changes in methods and assumptions to be used in calculations of "Annual Debt Service" and any other changes needed to accommodate bond anticipation notes, commercial paper, auction Bonds, Hedge Facilities, Short-Term/Demand Obligations and other variable rate or adjustable rate Bonds, Original Issue Discount Bonds and any other discounted or compound interest Bonds, or other forms of indebtedness which the Authority from time to time deems appropriate to incur;

(i) to accommodate the use of a Credit Facility for specific Bonds or a specific Series of Bonds;

(j) to comply with the requirements of the Code as are necessary, in the Opinion of Bond Counsel, to prevent the federal income taxation of the interest on any of the Bonds, including, without limitation, the segregation of Toll Road Revenues into different funds;

(k) to evidence the appointment of a separate Trustee or a Co-Trustee or to evidence the succession of a new Trustee;

(l) to modify, alter, amend or supplement this Indenture in such manner as to permit the qualification hereof under the Trust Indenture Act of 1939 or any similar federal statute then in effect or to permit the qualification of the Bonds for sale under the securities laws of any of the states of the United States of America and, if the Authority and the Trustee so determine, to add to this Indenture or any indenture supplemental hereto such other terms, conditions and provisions as may be permitted by the Trust Indenture Act of 1939 or similar federal statute;

(m) to issue additional Series of Bonds pursuant to Section 213, to provide additional Funds and Accounts relating such additional Bonds, to authorize different authorized denominations of the Bonds and to make correlative amendments and modifications to this Indenture regarding exchangeability of Bonds of different authorized denominations, redemptions of portions of Bonds of particular authorized denominations and similar amendments and modifications of a technical nature;

(n) to make any amendments appropriate or necessary to provide for any insurance policy, letter of credit, guaranty, surety bond, line of credit, revolving credit agreement, standby bond purchase agreement or other Credit Facility delivered to the Trustee and providing for (i) payment of the principal, interest and redemption premium on the Bonds or a portion thereof, (ii) payment into the Debt Service Reserve Fund, or (iii) payment of the purchase price of the Bonds, or (iv) any combination of (i), (ii) and (iii);

(o) to conform any provision contained herein to permit the issuance of Bonds to a private party or to permit the Authority to participate in a public-private partnership with respect to the funding of the Turnpike; and

(p) to modify, alter, amend or supplement this Indenture in any other respect which in the judgment of the Trustee is not inconsistent with this Indenture and which is not materially adverse to the interests of the Bondholders.

Before the Authority and the Trustee shall enter into any Supplemental Indenture pursuant to this Section 801, there shall have been delivered to the Trustee an opinion of Bond Counsel stating that such Supplemental Indenture is authorized or permitted by the Acts and is authorized under this Indenture, that such Supplemental Indenture will, upon the execution and delivery thereof, be valid and binding upon the Authority in accordance with its terms and will not adversely affect the exclusion from gross income of the interest on the Bonds for federal income tax purposes.

Section 802. Supplemental Indentures Requiring Consent of Bondholders.

(a) Other than Supplemental Indentures referred to in Section 801 and subject to the terms and provisions and limitations contained in this Article and not otherwise, the Holders of not less than a majority in aggregate principal amount of the Senior Lien Bonds then Outstanding and the Holders of not less than a majority in aggregate principal amount of the Subordinate Lien Bonds then Outstanding may consent to or approve, from time to time, which consent or approval shall be in writing and shall not be withheld unreasonably, anything contained herein to the contrary notwithstanding, the execution by the Authority and the Trustee of such Supplemental Indentures as shall be deemed necessary and desirable by the Authority for the purpose of modifying, altering, amending, adding to or rescinding any of the terms or provisions contained in this Indenture; provided, that if any Supplemental Indenture modifying, altering, amending, adding to or rescinding any of the terms and provisions of this Indenture contains provisions which affect the rights and interests of less than all Series of Bonds and Section 801 is not applicable, then such Supplemental Indenture shall require the consent only of the Holders of a majority in Outstanding principal amount of the Series of Bonds so affected; and provided further, that nothing in this Section shall permit or be construed as permitting a Supplemental Indenture which would:

(i) extend the stated maturity of or time for paying the interest on any Bond or reduce the principal amount of or the redemption premium or rate of interest payable on any Bond without the consent of the Holder of such Bond;

(ii) prefer or give a priority to any Bond over any other Bond without the consent of the Holder of each Bond then Outstanding not receiving such preference or priority; or

(iii) reduce the aggregate principal amount of Bonds then Outstanding the consent of the Holders of which is required to authorize such Supplemental Indenture without the consent of the Holders of all Bonds then Outstanding.

(b) If at any time the Authority shall request the Trustee to enter into a Supplemental Indenture pursuant to this Section, the Trustee shall, upon being satisfactorily indemnified with respect to expenses, cause notice of the proposed modifications, alterations, amendments, additions to or rescissions of the provisions of this Indenture to be mailed by first class mail, postage prepaid, to all Holders of Bonds of any affected Series then outstanding at their addresses as they appear on the registration books herein provided for. The Trustee, however, shall not be subject to any liability to any Bondholder by reason of its failure to mail, or the failure of such Bondholder to receive, the notice required by this Section, and any such failure shall not affect the validity of any Supplemental Indenture when consented to and approved as provided in this Section. Such notice shall set forth briefly the nature of the proposed modifications, alterations, amendments, additions to or rescissions of the provisions of this Indenture and shall state that copies thereof are on file at the office of the Trustee for inspection by all Bondholders. It shall not be required that Bondholders approve the final form of such Supplemental Indenture, but it shall be sufficient if such Bondholders approve the substance thereof.

(c) If within such period as shall be prescribed by the Authority, following the first giving of a notice as provided in subsection Section 802(b) above, the Trustee shall receive an instrument or instruments purporting to be executed by the Holders of not less than the aggregate principal amount or number of Bonds specified in subsection Section 802(a) for the Supplemental Indenture in question which instrument or instruments shall refer to the proposed modifications, alterations, amendments, additions to or rescissions of the provisions of this Indenture described in such notice and shall specifically consent to and approve the execution of a Supplemental Indenture or Supplemental Indentures effecting such changes, thereupon, the Trustee may execute any such Supplemental Indenture without liability or responsibility to any Holder of any Bond, regardless of whether such Holder shall have consented thereto.

(d) Any such consent shall be irrevocable for a period of one year (or such longer period as shall be set forth in such consent) and shall be binding upon the Holder of the Bond giving such consent and upon any subsequent Holder of such Bond and of any Bond issued in exchange therefor (regardless of whether such subsequent Holder thereof has notice thereof), unless after such one year (or longer) period, such consent is revoked in writing by the Holder of such Bond giving such consent or by a subsequent Holder thereof by filing with the Trustee, prior to the execution by the Trustee of such Supplemental Indenture, such revocation. At any time after the Holders of the required principal amount or number of Bonds shall have filed their consents to the execution of such a Supplemental Indenture, the Trustee shall make and file with the Authority a written statement to that effect. Such written statement shall be conclusive that such consents have been so filed.

(e) If the Holders of the required principal amount or number of the Bonds Outstanding shall have consented to and approved the proposed modifications, alterations, amendments, additions to or rescissions of the provisions of this Indenture and the execution of such Supplemental Indenture as herein provided, no Holder of any Bond shall have any right to object to the execution thereof, or to object to any of the terms and provisions contained therein or the operation thereof, or in any manner to question the propriety of the execution thereof or to enjoin or restrain the Trustee or the Authority from executing the same or taking any action pursuant to the provisions thereof.

Section 803. Execution and Effect of Supplemental Indentures.

(a) In executing any Supplemental Indenture permitted by this Article, the Trustee shall be entitled to receive and to rely upon an Opinion of Counsel stating that the execution of such Supplemental Indenture is authorized or permitted hereby. The Trustee may but shall not be obligated to enter into any such Supplemental Indenture which affects the Trustee's own rights, duties or immunities.

(b) Upon the execution and delivery of any Supplemental Indenture in accordance with this Article, the provisions hereof shall be modified in accordance therewith and such Supplemental Indenture shall form a part hereof for all purposes and every Holder of a Bond theretofore or thereafter authenticated and delivered hereunder shall be bound thereby.

(c) Any Bond authenticated and delivered after the execution and delivery of any Supplemental Indenture in accordance with this Article may, and if required by the Authority or the Trustee shall, bear a notation in form approved by the Authority and Trustee as to any matter provided for in such Supplemental Indenture. If the Authority shall so determine, new Bonds so modified as to conform in the opinion of the Trustee and the Authority to any such Supplemental Indenture may be prepared and executed by the Authority and authenticated and delivered by the Trustee in exchange for and upon surrender of the Bonds then Outstanding.

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ARTICLE IX
SATISFACTION AND DISCHARGE

Section 901. Discharge.

If payment of all principal of, purchase price of, if applicable, premium, if any, and interest on a Series of Bonds in accordance with their terms and as provided herein is made, or is provided for in accordance with this Article, and if all other sums payable by the Authority hereunder with respect to such Series of Bonds shall be paid or provided for, then the liens, estates and security interests granted hereby shall cease with respect to such Series; provided, however, that the rebate provisions, if any, of the related Supplemental Indenture shall survive so long as there is any amount due to the federal government pursuant to the provisions of such Supplemental Indenture. Thereupon, upon the request of the Authority, and upon receipt by the Trustee of an Opinion of Bond Counsel stating that all conditions precedent to the satisfaction and discharge of the lien hereof have been satisfied with respect to such Series of Bonds and such Bonds are no longer Outstanding and, if applicable, that the defeasance of such Series of Bonds will not adversely affect the exclusion from gross income for federal income tax purposes of interest on such Bonds, the Trustee shall execute and deliver proper instruments acknowledging such satisfaction and discharging the lien hereof with respect to such Series of Bonds. If the lien hereof has been discharged with respect to all Series of Bonds, the Trustee shall transfer all property held by it hereunder, other than moneys or obligations held by the Trustee for payment of amounts due or to become due on the Bonds to the Authority or such other person as may be entitled thereto as their respective interests may appear. Such satisfaction and discharge shall be without prejudice to the rights of the Trustee thereafter to charge and be compensated or reimbursed for services rendered and expenditures incurred in connection herewith.

The Authority may at any time surrender to the Trustee for cancellation any Bonds previously authenticated and delivered which the Authority at its option may have acquired in any manner whatsoever and such Bond upon such surrender and cancellation shall be deemed to be paid and retired.

Section 902. Providing for Payment of Bonds.

Payment of the Bonds or any Series of Bonds may be provided for by the deposit with the Trustee of moneys, Government Obligations or Agency Obligations of the definition of Permitted Investments in Section 101, or any combination thereof. Payment of the Bonds or any Series of Bonds shall be so provided for when the aggregate of amounts in the applicable Account of the Debt Service Reserve Fund together with other amounts available for such purpose hereunder is sufficient to so provide. The moneys and the maturing principal and interest income on such Government Obligations or pre-refunded municipal obligations, if any, shall be sufficient and available to pay when due the principal of, whether at maturity or upon fixed redemption dates, and premium, if any, and interest on such Bonds. The moneys, Government Obligations and pre-refunded municipal obligations shall be held by the Trustee irrevocably in trust for the Holders of such Bonds solely for the purpose of paying the principal or redemption price of, including premium, if any, and interest on such Bonds as the same shall mature or become payable upon prior redemption, and, if applicable, upon simultaneous direction, expressed to be irrevocable, to the Trustee as to the dates upon which any such Bonds are to be redeemed prior to their respective maturities.

The Trustee shall receive a verification report as to the sufficiency of moneys and investments to provide for Payment of a Series of Bonds in the case of a defeasance thereof.

If Payment of a Series of Bonds is so provided for, the Trustee shall mail a notice so stating to each Holder of such Bond.

Bonds the payment of which has been provided for in accordance with this Section shall no longer be deemed Outstanding hereunder. The obligation of the Authority in respect of such Bonds shall nevertheless continue but the Holders thereof shall thereafter be entitled to payment only from the moneys, Government Obligations and pre-refunded municipal obligations deposited with the Trustee to provide for the payment of such Bonds.

No Bond may be so provided for if, as a result thereof or of any other action in connection with which the provision for payment of such Bond is made, the interest payable on any Tax-Exempt Bond with respect to which an Opinion of Bond Counsel has been rendered that such interest is excluded from gross income for federal income tax purposes is made subject to federal income taxes. The Trustee shall receive and may rely upon an Opinion of Bond Counsel (which opinion may be based upon a ruling or rulings of the Internal Revenue Service) to the effect that the provisions of this paragraph will not be breached by so providing for the payment of any Bonds.

Section 903. Payment of Bonds After Discharge; Unclaimed Moneys.

Notwithstanding the discharge of the lien hereof as in this Article IX, the Trustee nevertheless shall retain such rights, powers and duties hereunder as may be necessary and convenient for the payment of amounts due or to become due on the Bonds, including pursuant to any sinking fund redemptions, and the registration, transfer, exchange and replacement of bonds as provided herein. Nevertheless, any moneys held by the Trustee or any Paying Agent for the payment of the principal of, purchase price of, if applicable, premium, if any, or interest on any Bond remaining unclaimed for two (2) years after such payment has become due and payable, or such other period provided by law, whether at maturity or upon proceedings for redemption, shall be disposed of pursuant to the provisions of Section 214. After discharge of the lien hereof, but prior to payment of such amounts to holders or as provided pursuant to Section 214, the Trustee shall invest such amounts in Government Obligations described in paragraph (a) of the definition of Permitted Investments in Section 101 at the direction of and for the benefit of the Authority.

ARTICLE X
MISCELLANEOUS

Section 1001. Evidence of Acts of Bondholders.

Any request, direction, consent or other instrument provided hereby to be signed and executed by the Bondholders may be in any number of concurrent writings of similar tenor and may be signed or executed by such Bondholders in person or by agent appointed in writing. Proof of the execution of any such request, direction or other instrument or of the writing appointing any such agent and of the ownership of Bonds, if made in the following manner, shall be sufficient for any of the purposes hereof and shall be conclusive in favor of the Trustee and the Authority with regard to any action taken by them, or either of them, under such request or other instrument, namely:

(a) The fact and date of the execution by any person of any such writing may be proved by the certificate of any officer in any jurisdiction who by law has power to take acknowledgments in such jurisdiction, that the person signing such writing acknowledged before him the execution thereof, or by the affidavit of a witness of such execution; and

(b) The ownership of all Bonds shall be proved by the Register.

Nothing in this Section shall be construed as limiting the Trustee to the proof herein specified, it being intended that the Trustee may accept any other evidence of the matters herein stated which it may deem sufficient.

Any action taken or suffered by the Trustee pursuant to any provision hereof, upon the request or with the assent of any person who at the time is the Holder of any Bond or Bonds shall be conclusive and binding upon all future Holders of the same Bond or Bonds.

Section 1002. Limitation of Rights.

With the exception of rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Indenture or the Bonds is intended or shall be construed to give to any person other than the parties hereto, the Holders of the Bonds and any Paying Agents, Registrars, Authenticating Agents and Credit Providers, if any, any legal or equitable right, remedy or claim under or in respect to this Indenture or any covenants, conditions and provisions herein contained; this Indenture and all of the covenants, conditions and provisions hereof being intended to be and being for the sole and exclusive benefit of the parties hereto, the Holders of the Bonds and any Paying Agents, Registrars, Authenticating Agents and Credit Providers, if any, as herein provided.

Section 1003. Notice to Rating Agencies.

The Trustee hereby agrees that if at any time (a) the Authority shall redeem the entire principal amount of the Bonds Outstanding hereunder prior to maturity, (b) a successor Trustee is appointed hereunder, or (c) the Bondholders shall consent to any amendment to this Indenture or shall waive any provision of this Indenture then, in each case, the Trustee promptly will give notice of the occurrence of such event to each Rating Agency rating any of the Bonds, which notice in the case of an event referred to in clause (c) hereof shall include a copy of such amendment or waiver.

Section 1004. Severability.

If any one or more sections, clauses, sentences or parts hereof shall for any reason be questioned in any court of competent jurisdiction and shall be adjudged unconstitutional or invalid, such judgment shall not affect, impair or invalidate the remaining provisions hereof, or the Bonds issued pursuant hereto, but shall be confined to the specific sections, clauses, sentences and parts so adjudged.

Section 1005. Holidays.

When the date on which principal of, purchase price of, if applicable, premium, if any or interest on any Bond is due and payable is a day which is not a Business Day, payment may be made on Bonds on the next Business Day with effect as though payment were made on the due date, and, if such payment is made, no interest shall accrue from and after such due date. When any other action is provided herein to be done on a day named or within a time period named, and the day or the last day of the period falls on a day other than a Business Day, it may be performed on the next Business Day with effect as though performed on the appointed day or within the specified period.

Section 1006. Governing Law.

This Indenture and the Bonds are contracts made under the laws of the State and shall be governed and construed in accordance with such laws.

Section 1007. Notices.

(a) Unless otherwise expressly specified or permitted by the terms hereof, all notices, consents or other communications required or permitted hereunder shall be deemed sufficiently given or served if given in writing, mailed by first class mail, postage prepaid and addressed as follows:

(i) If to the Authority, addressed to:

West Virginia Parkways Authority
3310 Piedmont Road
Charleston, WV 25306

If to the Trustee, sent by registered or certified mail addressed to:

United Bank
500 Virginia Street East
Charleston, WV 25301

(ii) If to WVDOH, addressed to:

West Virginia Division of Highways
1900 Kanawha Boulevard East
Charleston, WV 25305

(iii) If to the registered Holder of a Bond, addressed to such Holder at the address shown on the books of the Registrar kept pursuant hereto.

(b) The Authority and the Trustee may from time to time by notice in writing to all parties to this Indenture designate a different address or addresses for notice hereunder.

Section 1008. Counterparts.

This Indenture may be executed in several counterparts, each of which shall be an original and all of which shall constitute one instrument.

Section 1009. Immunity of Individuals.

No recourse shall be had for the payment of the principal of, purchase price of, if applicable, premium, if any, or interest on any of the Bonds or for any claim based thereon or upon any obligation, covenant or agreement herein against any past, present or future member, officer, employee, agent or consultant of the Authority, whether directly or indirectly and all liability of any such individual as such is hereby expressly waived and released as a condition of and in consideration for execution hereof and the issuance of the Bonds.

Section 1010. Binding Effect.

This instrument shall inure to the benefit of and shall be binding upon the parties hereto and their respective successors and assigns subject to the limitations contained herein.

[*Remainder of this page is intentionally left blank*]

IN WITNESS WHEREOF, the Authority has caused these presents to be signed in its name and on its behalf and attested by its duly authorized officers, and, to evidence its acceptance of the trusts hereby created, the Trustee has caused these presents to be signed in its name and on its behalf by its duly authorized officer, all as of the day and year first above written.

[SEAL]

WEST VIRGINIA PARKWAYS AUTHORITY

By: Ann Vincent Urling
Name: Ann V. Urling
Its: Chair's Designee

Attest:

By: Gregory C. Barr
Name: Gregory C. Barr
Its: General Manager

UNITED BANK, as Trustee

By: Thomas J. Provenzano
Name: Thomas J. Provenzano
Its: Vice President

Second Supplemental Trust Indenture

by and between

West Virginia Parkways Authority

and

United Bank
as Trustee

authorizing and securing

Senior Lien Turnpike Toll Revenue Bonds, Series 2021

Dated as of June 1, 2021

SECOND SUPPLEMENTAL TRUST INDENTURE

This SECOND SUPPLEMENTAL TRUST INDENTURE (this "***Second Supplemental Indenture***"), dated as of June 1, 2021, by and between the West Virginia Parkways Authority (the "***Authority***"), a public body corporate and politic and instrumentality of the State of West Virginia created and existing under the Constitution and Laws of West Virginia, and United Bank (the "***Trustee***"), a Virginia banking corporation having the powers of a trust company and having a corporate trust office in Charleston, West Virginia, as Trustee, under the circumstances summarized in the following recitals. Capitalized terms used but not defined in the recitals and granting clauses shall have the meanings given to such capitalized terms in Section 101 of the Master Trust Indenture or Section 101 of this Second Supplemental Indenture.

WITNESSETH THAT:

WHEREAS, Article 16A, Chapter 17 of the Code of West Virginia, 1931, as amended (the "***Act***"), empowers the Authority to construct, reconstruct, improve, maintain, repair, and operate parkway projects within the State and empowers the Authority to issue bonds to provide for the costs of paying all or any part of any one or more such projects;

WHEREAS, under Section 5 of the Act, "parkway projects" include existing or new projects to be constructed, reconstructed, improved, maintained, repaired, and operated by the Authority during the term of this Indenture, either on the Turnpike ("***On-Turnpike Authority Projects***") or as special Authority projects, as well as certain projects to be constructed, reconstructed, improved, maintained, repaired, and operated by the West Virginia Division of Highways, a division of the West Virginia Department of Transportation ("***WVDOH***") that are located (a) off the Turnpike and (b) in ten specific counties identified in the Act that include the four counties through which the Turnpike runs and six counties contiguous to said four counties, to the extent allowed under the Act and applicable federal laws ("***Off-Turnpike WVDOH Projects***," and collectively with On-Turnpike Authority Projects and special Authority projects, "***Parkway Projects***");

WHEREAS, the Authority entered into (a) that certain Master Trust Indenture, dated as of August 1, 2018, by and between the Authority and the Trustee (the "***Master Trust Indenture***", and together with this Second Supplemental Indenture, the "***Indenture***"), for the purposes set forth therein, including, without limitation, authorizing the issuance by the Authority of Turnpike Toll Revenue Bonds in one or more Series by Supplemental Indenture, from time to time, and (b) that certain First Supplemental Trust Indenture, dated as of August 1, 2018, by and between the Authority and the Trustee (the "***First Supplemental Indenture***"), for the purposes set forth therein, including, without limitation, authorizing the issuance of the Authority's $166,370,000 Senior Lien Turnpike Toll Revenue Bonds, Series 2018 (the "***Series 2018 Bonds***").

WHEREAS, this Second Supplemental Indenture is being adopted for the purposes of: (a) authorizing the issuance by the Authority of Senior Lien Turnpike Toll Revenue Bonds, Series 2021 (the "***Series 2021 Bonds***"), secured on a parity basis with the Series 2018 Bonds, on the terms set forth herein, for the purpose of financing Parkway Projects, to pay the costs of issuance of such Series 2021 Bonds, to fund applicable reserve requirements, and to reimburse the Authority for, or to provide funds to finance, certain costs and expenses incurred prior to or after the issuance of the Series 2021 Bonds in connection with the acquisition, design, construction, reconstruction, maintenance, improvement, repair or funding of Parkway Projects; (b) pledging the Toll Road Revenues for the payment of the Bonds; (c) pledging such funds and accounts created and held pursuant to this Second Supplemental Indenture and any Supplemental Indenture as are identified as being pledged for the payment of Senior Lien Bonds and which are subjected to the lien of the Indenture; and (d) making other covenants and agreements and providing other details with respect to the Bonds, subject to and in accordance with the terms hereof;

WHEREAS, the Authority has previously adopted (a) a Reimbursement and Inducement Resolution at its duly held regular meeting on April 22, 2021 (the "***Reimbursement Resolution***"), authorizing, in concept, the issuance of the Series 2021 Bonds and providing for the reimbursement of certain capital expenditures from the proceeds of the Series 2021 Bonds, (b) a Bond Authorizing Resolution at its duly held regular meeting on May 20, 2021 (the "***Bond Authorizing Resolution***"), authorizing the issuance of the Series 2021 Bonds under the Indenture, authorizing the execution and delivery on behalf of the Authority this Second Supplemental Indenture and other related agreements, certificates and documents and approving, or duly delegating the authority to approve on behalf of the Authority, and the final terms and details of the Series 2021 Bonds and (c) a Supplemental Resolution at its duly held regular meeting on June 17, 2021 (the "***Supplemental Resolution***", and together with the Reimbursement Resolution and the Bond Authorizing Resolution, the "***Resolution***"); and

NOW, THEREFORE, THIS SECOND SUPPLEMENTAL INDENTURE WITNESSETH: In consideration of the premises, the acceptance by the Trustee of the trusts hereby created, and of the purchase and acceptance of the Series 2021 Bonds by the Holders thereof, and for the purpose of fixing and declaring the terms and conditions upon which the Series 2021 Bonds are to be issued, authenticated, delivered, secured and accepted by all persons who shall from time to time be or become Holders thereof, and to secure the payment of the Series 2021 Bonds at any time issued and Outstanding hereunder and the interest and premium, if any, thereon according to their tenor, purport and effect, and to secure the performance and observance of all of the covenants, agreements and conditions contained in such Bonds, the Master Trust Indenture, and herein and in the Resolution, the Authority does hereby grant and confirm a security interest in, and does confirm, assign, transfer, pledge and grant and convey unto the Trustee and its successors and assigns forever, for the benefit of the Bondholders, until no amounts are due under the Indenture, the following property:

A. Amounts constituting Net Toll Road Revenues;

B. Amounts on deposit from time to time in the Funds and the Accounts created pursuant hereto and expressly made subject to the pledge of this Indenture under Article IV, including the earnings thereon, subject to the provisions of this Indenture permitting the application thereof for the purposes and on the terms and conditions set forth herein, provided, however, that there expressly is excluded from any pledge, assignment, lien or security interest created by this Indenture (i) amounts in the Operation and Maintenance Account within the Operation and Maintenance Fund, (ii) amounts in the Arbitrage Rebate Fund, and (iii) amounts in the General Fund (though such General Fund monies may be expended by the Authority to restore deficiencies in any funds or accounts created under the Indenture); and

C. Any and all other property of any kind from time to time hereafter by delivery or by writing of any kind specifically conveyed, pledged, assigned or transferred, as and for additional security hereunder for the Senior Lien Bonds, by the Authority or by anyone on its behalf or with its written consent in favor of the Trustee, which is hereby authorized to receive any and all such property at any and all times and to hold and apply the same subject to the terms hereof (collectively, the "***Trust Estate***").

This Second Supplemental Indenture supplements and amends the Master Trust Indenture as herein provided.

TO HAVE AND TO HOLD all such properties pledged, assigned and conveyed by the Authority hereunder, including all additional property which by the terms hereof has or may become subject to the encumbrance hereof, unto the Trustee and its successors in trust and its assigns forever, subject, however, to the rights reserved hereunder.

IN TRUST NEVERTHELESS, for the equal and proportionate benefit and security of the Holders from time to time of all Senior Lien Turnpike Toll Revenue Bonds issued, authenticated, delivered and outstanding hereunder or under any Supplemental Indenture authorizing such Senior Lien Turnpike Toll Revenue Bonds which are subjected to the lien of the Indenture and any such Supplemental Indenture, without preference, priority or distinction as to lien or otherwise of any of the Series 2021 Bonds over any other Senior Lien Turnpike Toll Revenue Bonds that may be issued under the Master Trust Indenture and a Supplemental Indenture, except to the extent otherwise provided in hereof and Section 103 of the Master Trust Indenture.

PROVIDED, HOWEVER, that if the Authority shall pay fully and promptly when due all liabilities, obligations and sums at any time secured hereby or provide for the payment thereof in accordance with the provisions hereof, and shall promptly, faithfully and strictly keep, perform and observe or cause to be kept, performed and observed all of its covenants, warranties and agreements contained herein and in any Reimbursement Agreement, then and in such event, except for the provisions of Article IX hereof, this Second Supplemental Indenture shall be and become void and of no further force and effect; otherwise, the same shall remain in full force and effect, and upon the trusts and subject to the covenants and conditions hereafter set forth.

THE SECOND SUPPLEMENTAL INDENTURE FURTHER WITNESSETH: It is expressly declared that all Series 2021 Bonds are to be issued, authenticated and delivered and all said property, rights, and interest, including, without limitation, the revenues and other amounts hereby assigned and pledged are to be dealt with and disposed of under, upon and subject to the terms, conditions, stipulations, covenants, agreements, trusts, uses, and purposes as hereinafter expressed, and the Authority has agreed and covenanted, and does hereby agree and covenant with the Trustee and with the respective Holders of the Series 2021 Bonds, and to secure further the performance and observance of all of the covenants, agreements and conditions contained in such Bonds, the Master Trust Indenture and herein or in any Reimbursement Agreement (but only, and to the extent, provided in this Second Supplemental Indenture), and has further agreed and covenanted, and does hereby further agree and covenant, as follows:

ARTICLE I
DEFINITIONS; RULES OF CONSTRUCTION

Section 101. Definitions.

All items herein shall have the meaning set forth in Section 101 of the Master Trust Indenture, except as otherwise indicated herein and except that the definitions in Section 101 are amended and supplemented as follows:

"**Authenticating Agent**" means, with respect to the Series 2021 Bonds, United Bank.

"**Bond Authorizing Resolution**" means, with respect to the Series 2021 Bonds, that certain resolution adopted by the Authority at its lawfully held regular meeting on May 20, 2021, authorizing the issuance of the Series 2021 Bonds under the Indenture, authorizing the execution and delivery on behalf of the Authority of this Second Supplemental Indenture and other related agreements, and approving, or duly delegating the authority to approve on behalf of the Authority, and the terms and details of the Series 2021 Bonds.

"**Bond Counsel**" means, with respect to the Series 2021 Bonds, Bowles Rice LLP, or another attorney or firm or firms of attorneys of national recognition experienced in the field of municipal bonds whose opinions are generally accepted by purchasers of municipal bonds selected or employed by the Authority and reasonably acceptable to the Trustee.

"**Bond Payment Date**" means, with respect to the Series 2021 Bonds, each June 1 and December 1, on which dates interest is payable for any Senior Series 2021 Bonds Outstanding.

"**Bond Purchase Contract**" means the contract of purchase, with respect to the Series 2021 Bonds, between the Authority and the Original Purchaser pertaining to the sale of such Series of Bonds.

"**Bondholder**" or "**Holder**" means, with respect to the Series 2021 Bonds, the registered owner of any Series 2021 Bonds.

"**Composite Senior Lien Bonds**" means, collectively, the Series 2018 Bonds and the Series 2021 Bonds, and such other additional Senior Lien Bonds issued pursuant to a subsequent Supplemental Indenture that provides for a composite Debt Service Reserve Account.

"**Composite Senior Lien Debt Service Reserve Account**" means the Composite Senior Lien Debt Service Reserve Account, within the Senior Lien Debt Service Fund, created pursuant to Section 402, which includes the sub-accounts designated as (a) the Series 2018 Debt Service Reserve Account, created pursuant to Section 402 of the First Supplemental Indenture and (b) the Series 2021 Debt Service Reserve Account, created pursuant to Section 402 hereof.

"**Composite Senior Lien Bonds Debt Service Reserve Requirement**" means the lesser of (i) 10% of the aggregate stated principal amount of the Composite Senior Lien Bonds (plus or minus original issue premium or discount, if more than 2% of the stated principal amount of the Composite Senior Lien Bonds), (ii) the aggregate maximum annual debt service on the Composite Senior Lien Bonds, or (iii) 125% of the average Annual Debt Service, which is, with respect to the

Outstanding Composite Senior Lien Bonds, $30,764,181.11, an amount equal to the maximum annual debt service on the Outstanding Composite Senior Lien Bonds; **provided, however**, that the Authority may hereafter, in a subsequent Supplemental Indenture, provide for (a) a composite Debt Service Reserve Account for some or all Senior Lien Bonds, which may result in adjustment or modification of such amount, as further provided in such subsequent Supplemental Indenture or (b) a separate Debt Service Reserve Account for some or all of such additional Senior Lien Bonds, as further provided in such subsequent Supplemental Indenture.

"**Designated Office**" means, with respect to the Series 2021 Bonds, the office of the Trustee located at 500 Virginia Street East, Charleston, West Virginia.

"**Indenture**" means the First Supplemental Indenture and the Master Trust Indenture, as amended and supplemented by this Second Supplemental Indenture.

"**Original Purchaser**" means, with respect to the Series 2021 Bonds, Wells Fargo Bank, N.A., J.P. Morgan Securities LLC, Piper Sandler & Co. and Crews & Associates, Inc.

"**Trustee**" means, with respect to the Series 2021 Bonds, United Bank.

"**Record Date**" means, with respect to the Series 2021 Bonds, each May 15 and November 15.

"**Reimbursement Resolution**" means, with respect to the Series 2021 Bonds, that certain reimbursement and inducement resolution adopted by the Authority at its lawfully held regular meeting on April 22, 2021, authorizing, in concept, the issuance of the Series 2021 Bonds and providing for the reimbursement of certain capital expenditures from the proceeds of the Series 2021 Bonds.

"**Resolution**" means, collectively, the Bond Authorizing Resolution, the Supplemental Resolution and the Reimbursement Resolution.

"**Senior Lien Turnpike Toll Revenue Bonds, Series 2021**" or "**Series 2021 Bonds**" means the Senior Lien Turnpike Toll Revenue Bonds, Series 2021 identified on the attached Schedule I, to be authenticated and delivered pursuant to this Second Supplemental Indenture.

"**Series 2021 Arbitrage Rebate Account**" means the Series 2021 Arbitrage Rebate Account, within the Arbitrage Rebate Fund, created pursuant to Section 402.

"**Series 2021 Costs of Issuance Account**" means the costs of issuance account for the Series 2021 Bonds, within the Parkway Projects Fund, created pursuant to Section 402.

"**Series 2021 Debt Service Reserve Account**" means the Series 2021 Debt Service Reserve Account, within the Senior Lien Debt Service Fund and as a sub-account of Composite Senior Lien Debt Service Reserve Account, created pursuant to Section 402, **provided** that the Authority may hereafter, in a subsequent Supplemental Indenture, provide for (a) a composite Debt Service Reserve Account for some or all Senior Lien Bonds as further provided in such subsequent Supplemental Indenture or (b) a separate Debt Service Reserve Account for some or all of such additional Senior Lien Bonds as further provided in such subsequent Supplemental Indenture.

"**Series 2021 Interest Account**" means the interest account for the Series 2021 Bonds, created within the Senior Lien Bond Fund, pursuant to Section 402.

"**Series 2021 Principal Account**" means the principal account for the Series 2021 Bonds, created within the Senior Lien Bond Fund, pursuant to Section 402.

"**Series 2021 Redemption Account**" means the redemption account for the Series 2021 Bonds, created within the Senior Lien Bond Fund, pursuant to Section 402.

"**Series 2021 Sub-Account**" means the sub-account created under the State Road Construction Account within the West Virginia State Treasury.

"**Tax Certificate**" means, with respect to the Series 2021 Bonds, a Tax Certificate concerning certain matters pertaining to the use of proceeds of the Senior Lien Turnpike Toll Revenue Bonds and other tax matters as may be required by Bond Counsel, executed and delivered by the Authority, including any and all exhibits attached thereto.

Section 102. Rules of Construction.

Unless the context clearly indicates to the contrary, the rules set forth in Section 102 of the Master Trust Indenture shall apply to this Second Supplemental Indenture.

Section 103. Parity as to Toll Road Revenues; Bonds of a Series Equally and Ratably Secured.

All Series 2021 Bonds issued hereunder and at any time Outstanding shall be equally and ratably secured, with the same right, lien and preference with respect to the Trust Estate, including the Toll Road Revenues, with all other Outstanding Senior Lien Bonds that may be issued under the Master Trust Indenture and a Supplemental Indenture, without preference, priority or distinction on account of the date or dates or the actual time or times of the issuance or maturity of such Senior Lien Bonds.

Section 104. Priority of Lien.

There is hereby created an irrevocable lien upon the Trust Estate for the benefit of the Series 2021 Bonds authorized herein. The pledge hereby continued shall be valid and binding from and after the time of the delivery of the first Senior Lien Turnpike Toll Revenue Bond authenticated and delivered under the Indenture. Pursuant to the Act, the security so pledged and now or hereafter received by the Authority shall immediately be subject to the lien of such pledge and the obligation to perform the contractual provisions hereby made shall have priority over any or all other obligations and liabilities of the Authority with regard to the Trust Estate, to the extent provided herein, and the lien of such pledge shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the Authority irrespective of whether such parties have notice thereof.

ARTICLE II
TERMS OF SERIES 2021 BONDS

Section 201. General.

Except as supplemented below, the provisions of Article II of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

Section 202. Issuance.

The Authority hereby authorizes and directs the issuance of the Series 2021 Bonds as hereinafter provided, all within the parameters authorized under the Bond Authorizing Resolution.

Section 203. General Terms.

The Series 2021 Bonds shall be issued in fully registered form as herein provided.

Interest shall be payable (a) from the dated date thereof for any Series 2021 Bond authenticated prior to the first Bond Payment Date, or (b) otherwise from the Bond Payment Date that is, or immediately precedes, the date on which a Series 2021 Bond is authenticated (unless payment of interest thereon is in default, in which case the Series 2021 Bond shall bear interest from the date to which interest has been paid).

Series 2021 Bonds shall be lettered and numbered consecutively from R-1 upwards and shall be available only in denominations of $5,000 and integral multiples thereof, and the interest rate shall be printed on the face of each Series 2021 Bond.

Interest on the Series 2021 Bonds shall be calculated on the basis of a year of 360 days and twelve 30-day months, and all such interest determinations and calculations shall be made by the Trustee.

Section 204. Medium and Place of Payment.

(a) The principal of, purchase price of, if applicable, premium, if any, and interest on the Series 2021 Bonds shall be payable in currency of the United States of America which, at the respective dates of payment thereof, is legal tender for the payment of public and private debts. Upon surrender of each Series 2021 Bond, the principal of, purchase price of, if applicable, premium, if any, and interest on a Series of Bonds shall be payable at maturity or upon redemption at the Designated Office of the Trustee. Interest on Series 2021 Bonds shall be paid by check or draft of the Trustee mailed or by wire transfer to each Bondholder at such owner's address as it appears on the Register as of the last day of the calendar month next preceding each Bond Payment Date or at such wire transfer address furnished to the Trustee in writing by such Bondholder by no later than the last day of the calendar month next preceding the Bond Payment Date on which payment by wire transfer has been requested.

(b) In the event of a default by the Authority in the payment of interest due on a Series 2021 Bond on any Bond Payment Date, such defaulted interest will be payable to the person in whose name such Series 2021 Bond is registered at the close of business on a special record date for the payment of such defaulted interest established by notice mailed by the Trustee for such Series 2021 Bond to the registered owner thereof not less than 10 days preceding such special record date.

(c) So long as the registered owner of any Series 2021 Bond is the Securities Depository or a nominee therefor, the Securities Depository shall disburse any payments received, through its Participants or otherwise, to the Beneficial Owners. Neither the Authority nor the Trustee shall have any responsibility or obligation for the payment to any Participant, any Beneficial Owner or any other person or entity (except a registered owner of Series 2021 Bonds) of the principal of, purchase price of, if applicable, premium, if any, and interest on the Series 2021 Bonds. Notwithstanding any other provision of the Indenture to the contrary, so long as the Series 2021 Bonds are registered in the name of Cede & Co., as nominee for the Securities Depository, all payments with respect to principal of, purchase price of, if applicable, premium, if any, and interest on the Series 2021 Bonds shall be made in the manner provided in the Letter of Representations.

(d) Subject to the foregoing provisions of this Section 204, each Series 2021 Bond delivered under the Indenture upon transfer of or exchange for or in lieu of any other Series 2021 Bond shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Series 2021 Bond.

Section 205. Execution and Authentication of Series 2021 Bonds.

All Series 2021 Bonds shall be executed for and on behalf of the Authority by the Chair and attested by the Secretary and the Treasurer. The signatures of the Chair, the Secretary and the Treasurer may be mechanically or photographically reproduced on the Series 2021 Bonds. If any officer of the Authority whose signature appears on any Series 2021 Bond ceases to be such officer before delivery thereof, such signature shall remain valid and sufficient for all purposes as if such officer had remained in office until such delivery. Each Series 2021 Bond shall be authenticated manually by an authorized officer of the Authenticating Agent; provided that, without such authentication, no Series 2021 Bond shall be entitled to the benefits hereof.

Section 206. Conditions for Delivery of Series 2021 Bonds.

Upon the execution and delivery of this Second Supplemental Indenture providing for the issuance of the Series 2021 Bonds, the Authority shall execute and deliver such Series 2021 Bonds to the Trustee, the Trustee shall deliver such Series 2021 Bonds to the Authenticating Agent for authentication and delivery to or for the account of the Original Purchaser as directed by the Authority Authorized Officer, and the Authenticating Agent shall authenticate such Series 2021 Bonds; provided, however, that, prior to delivery by the Trustee of such Series 2021 Bonds, there shall be delivered to the Trustee the following:

(a) A certified copy of the Bond Authorizing Resolution.

(b) Executed or true counterparts of the Master Trust Indenture, this Second Supplemental Indenture, and the Bond Purchase Contract.

(c) A request and authorization by the Authority to the Authenticating Agent to authenticate and deliver the Series 2021 Bonds, describing the Series 2021 Bonds, designating the Original Purchaser to whom such Series 2021 Bonds are to be delivered upon payment therefor and stating the amount to be paid therefor to the Trustee for the account of the Authority.

(d) The amounts specified in this Second Supplemental Indenture for deposit to the credit of the applicable Funds and Accounts created hereunder.

(e) A certificate of the Consulting Engineers setting forth its opinions as to (i) the Turnpike's being in good repair, and (ii) the estimated amount of Operation and Maintenance Expenses for each of the Annual Periods through five (5) years of operation after completion of any Parkway Project financed with proceeds of the Series 2021 Bonds.

(f) A certificate of the Traffic and Revenue Consultant setting forth its opinion as to the aggregate estimated amount of Toll Road Revenues which the Authority should derive from the operation of the Turnpike under the Toll Rate Schedule or the Projected Toll Rate Schedule referred to, set forth in, or attached to, the certificate, for each of the Annual Periods through the repayment of the Series 2021 Bonds and all other obligations issued by the Authority and payable from Toll Road Revenues.

(g) A certificate of the Authority, dated as of the date of delivery of the Series 2021 Bonds, stating that, as of the date of such certificate, no event or condition has happened or existed, or is happening or existing, that continues, or that, with notice or lapse of time or both, would constitute an Event of Default by the Authority under the Indenture.

(h) (i) a certificate of an Authority Authorized Officer certifying that the Net Toll Road Revenues (adjusted to reflect any authorized and to be implemented within six months adjustment in tolls, fees and charges, as if such adjustment had been in effect since the beginning of the period described herein) for (1) the most recent Annual Period for which audited statements are available or (2) a 12-consecutive-month period in the immediately prior 18 months were at least 125% of the Maximum Annual Debt Service for all then Outstanding Senior Lien Bonds (excluding any Senior Lien Bonds being refunded) and the additional Senior Lien Bonds proposed to be issued, or (ii) a certificate of the Authority stating that, based upon the report of the Consulting Engineers and Traffic and Revenue Consultant, the projected Net Toll Road Revenues (adjusted to reflect any authorized adjustment in tolls, fees and charges, provided that such adjustment is to be implemented within six months, as if such adjustment had been in effect since the beginning of the period described herein) for the current and each of the Annual Periods through the fifth Annual Period following the issuance of the Series 2021 Bonds are at least 135% of Annual Debt Service for each such year and projected Net Toll Road Revenues in the fifth such year equaled or exceeded 135% of the Maximum Annual Debt Service for the Series 2021 Bonds.

(i) A certificate of the Authority, dated as of the date of delivery of the Series 2021 Bonds, stating that, with respect to all then Outstanding Bonds, all applicable Toll Rate Covenants were met in the prior Annual Period and the Authority is current in all deposits into the various Funds and Accounts and in all payments theretofore required to have been deposited or made by it under the provisions of the Indenture as to all Senior Lien Bonds.

(j) Such other closing documents as the Authority or the Trustee reasonably may specify.

Section 207. Form of Bonds.

The definitive Series 2021 Bonds shall be in substantially the form set forth as **<u>Exhibit A</u>** to this Second Supplemental Indenture.

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ARTICLE III
REDEMPTION OF BONDS

Section 301. General.

Except as supplemented below, the provisions of Article III of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

Section 302. Right to Redeem.

The Series 2021 Bonds maturing on or after June 1, 2032 shall be subject to optional redemption prior to maturity at the option of the Authority on or after June 1, 2031, either in whole or in part (in $5,000 increments), on any date and in such order of maturity as the Authority may determine, at a redemption price equal to 100% of the principal amount of such Series 2021 Bonds to be redeemed, plus accrued interest on such Series 2021 Bonds to be redeemed to the redemption date.

At the request of the Trustee, the redemption price of the Series 2021 Bonds to be redeemed at the option of the Authority will be determined by an independent accounting firm, investment banking firm or financial advisor retained by the Authority at the Authority's expense to calculate such redemption price. The Trustee and the Authority may conclusively rely on the determination of such redemption price by such independent accounting firm, investment banking firm or financial advisor and will not be liable for such reliance.

Section 303. Sinking Fund Redemption.

(a) The Series 2021 Bonds maturing on June 1, 2047 are required to be redeemed prior to maturity, in part, on June 1 in the years and amounts, and at a redemption price of 100% of the principal amount thereof to be redeemed plus interest accrued and unpaid to the redemption date, as follows:

Year (June 1)	Principal Amount
2044	$14,400,000
2045	$15,120,000
2046	$15,880,000
2047*	$16,670,000

* Final Maturity.

The Series 2021 Bonds maturing on June 1, 2051 are required to be redeemed prior to maturity, in part, on June 1 in the years and amounts, and at a redemption price of 100% of the principal amount thereof to be redeemed plus interest accrued and unpaid to the redemption date, as follows:

Year (June 1)	Principal Amount
2048	$17,505,000
2049	$18,205,000
2050	$18,935,000
2051*	$19,690,000

* Final Maturity.

(b) At its option, to be exercised on or before the fortieth (40th) day next preceding each mandatory sinking fund redemption date, the Authority may:

(i) cause to be paid to the Trustee for deposit in the Series 2021 Redemption Account such amount, or direct the Trustee to use moneys in the Series 2021 Redemption Account in such amount, as the Authority may determine, accompanied by a certificate signed by the Authority Authorized Officer directing the Trustee to apply such amount to the purchase of the applicable Series 2021 Bonds and the Trustee shall use all reasonable efforts to expend such funds as nearly as may be practicable in the purchase of such Series 2021 Bonds, at a price not exceeding the principal amount thereof plus accrued interest to such sinking fund redemption date; or

(ii) receive a credit against its sinking fund redemption obligation for the applicable Series 2021 Bonds maturing on Bond Payment Dates in the same years which prior to such date have been purchased by the Authority and presented to the Trustee for cancellation or redeemed (otherwise than through the operation of the sinking fund) and cancelled by the Trustee and, in either case, not theretofore applied as a credit against any sinking fund redemption obligation. Each Series 2021 Bond so purchased, delivered or previously redeemed shall be credited by the Trustee at 100% of the principal amount thereof against the obligation of the Authority on such sinking fund redemption date to redeem Series 2021 Bonds of the same maturity.

Each Series 2021 Bond so purchased, delivered or previously redeemed shall be credited by the Trustee at 100% of the principal amount thereof against the obligation of the Authority on such sinking fund redemption date to redeem Series 2021 Bonds of the same maturity. Any excess over such obligation shall be credited against applicable future sinking fund redemption obligations, or deposits with respect thereto, in such order of maturity as shall be determined by the Authority, and the principal amount of such Series 2021 Bonds of the same maturity to be redeemed by operation of the sinking fund shall be accordingly reduced. Any funds received by the Trustee pursuant to subsection (b)(i) of this Section, but not expended as provided therein for the purchase of Series 2021 Bonds on or before said fortieth (40th) day shall be retained in the Series 2021 Redemption Account and shall thereafter be used only for the purchase of Series 2021 Bonds as a credit against future sinking fund obligations, or deposits with respect thereto, to be applied to such Series 2021 Bonds maturing on Bond Payment Dates in the same years and in such order of maturity as determined by the Authority.]

Section 304. Notice of Redemption.

(a) If less than all Series 2021 Bonds are to be redeemed, and subject to the provisions of subsection (b) hereof, the Series 2021 Bonds to be redeemed shall be identified by reference to the Series designation, date of issue, serial or CUSIP numbers and maturity date. Each notice of redemption shall specify: (i) the date fixed for redemption, (ii) the principal amount of Series 2021 Bonds or portions thereof to be redeemed, (iii) the applicable redemption price, (iv) the place or places of payment, (v) that payment of the principal amount and premium, if any, will be made upon presentation and surrender to the Trustee, of the Series 2021 Bonds to be redeemed, (vi) that interest accrued to the date fixed for redemption will be paid as specified in such notice, (vii) that on and after such date interest on Series 2021 Bonds which have been redeemed will cease to accrue, and (viii) the designation, including Series, and the CUSIP and serial numbers, if any, of the Series 2021 Bonds to be redeemed and, if less than the face amount of any such Series 2021 Bond is to be redeemed, the principal amount to be redeemed. Notice of redemption of any Series 2021 Bonds shall be mailed at the times and in the manner set forth in subsection (b) of this Section.

(b) Any notice of redemption shall be sent by the Trustee not less than 20 nor more than 60 days prior to the date set for redemption by first-class mail (i) to the Holder of each such Series 2021 Bond to be redeemed in whole or in part at his address as it appears on the Register, or while the Series 2021 Bonds are held in book-entry form, to the Securities Depository, (ii) to all organizations registered with the Securities and Exchange Commission as securities depositories, and (iii) to the Municipal Securities Rulemaking Board. During such period, the Trustee shall not be responsible for mailing notices of redemption to anyone other than such Securities Depository or its nominee. In preparing such notice, the Trustee shall take into account, to the extent applicable, the prevailing tax-exempt securities industry standards and any regulatory statement of any federal or state administrative body having jurisdiction over the Authority, or the tax-exempt securities industry. Failure to give any notice specified in (i), or any defect therein, shall not affect the validity of any proceedings for the redemption of any Series 2021 Bonds with respect to which no such failure has occurred and failure to give any notice specified in (ii) or (iii), or any defect therein, shall not affect the validity of any proceedings for the redemption of any Series 2021 Bonds with respect to which the notice specified in (i) is given correctly.

(c) If at the time of notice of any optional redemption of the Series 2021 Bonds, there have not been deposited with the Trustee moneys available for payment pursuant to the Indenture and sufficient to redeem all of the Series 2021 Bonds called for redemption, the notice may state that it is conditional in that it is subject to the deposit of sufficient moneys by not later than the redemption date, and if the deposit is not timely made the notice shall be of no effect.

Section 305. Selection of Bonds to be Redeemed.

(a) In connection with any optional redemption of the Series 2021 Bonds, the Authority shall select the maturities of serial bonds, and portions of the amortization of term bonds, that shall be redeemed and shall designate such selections in an Authority Authorized Officer's certificate.

(b) In the case of any partial redemption of a serial maturity of the Series 2021 Bonds, the particular Series 2021 Bonds of such maturity to be redeemed shall be selected by DTC in accordance with its procedures or, if the book-entry system has been discontinued, by the Trustee by lot in such manner as the Trustee shall determine.

(c) Each increment of $5,000 of principal amount of Series 2021 Bonds, shall be counted as one Series 2021 Bond, for purposes of selecting Series 2021 Bonds for a partial redemption.

(d) If a Series 2021 Bond shall be called for partial redemption, upon its surrender, a new Series 2021 Bond, representing the unredeemed balance of the principal amount of the Series 2021 Bond, shall be issued to its Owner.

ARTICLE IV
REVENUES AND FUNDS

Section 401. General.

Except as supplemented below, the provisions of Article IV of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

Section 402. Confirmation and Further Creation of Funds and Accounts.

(a) The Authority hereby confirms the applicable Funds and Accounts, below, established under the Master Trust Indenture, and the Authority hereby establishes and creates, for the Series 2021 Bonds, the Accounts designated with the Series designation "Series 2021," below:

(i) Parkway Projects Fund.

(A) Series 2021 Parkway Projects Account; and

(B) Series 2021 Costs of Issuance Account.

(ii) Revenue Fund.

(iii) Operation and Maintenance Fund.

(A) Operation and Maintenance Account; and

(B) Operation and Maintenance Reserve Account.

(iv) Senior Lien Bond Fund.

(A) Series 2021 Interest Account;

(B) Series 2021 Principal Account; and

(C) Series 2021 Redemption Account.

(v) Senior Lien Debt Service Reserve Fund.

(A) Composite Senior Lien Debt Service Reserve Account.

(1) Series 2018 Debt Service Reserve Account; and

(2) Series 2021 Debt Service Reserve Account.

(vi) Arbitrage Rebate Fund.

(A) Series 2021 Arbitrage Rebate Account.

(vii) Renewal and Replacement Reserve Fund.

(viii) Turnpike Capital Improvement Fund.

(ix) General Fund.

(b) Notwithstanding any provision of this Article IV or any provision elsewhere in this Second Supplemental Indenture to the contrary, the Trustee shall not be required to open any fund, account or subaccount until the need for such fund, account or subaccount arises.

(c) The Funds and Accounts created hereby shall constitute trust funds and accounts for the purposes provided in this Second Supplemental Indenture, and shall be separately accounted for by the Authority with an Authorized Depositary. The Senior Lien Bond Fund and the Accounts therein (the Series 2021 Principal Account, the Series 2021 Interest Account, and the Series 2021 Redemption Account), the Composite Senior Lien Debt Service Reserve Account, the Series 2021 Debt Service Reserve Account and the Arbitrage Rebate Fund shall be held pursuant to the Indenture by the Trustee. The Parkway Projects Fund and the Accounts therein (the Series 2021 Parkway Projects Account and the Series 2021 Costs of Issuance Account), the Revenue Fund, and the Operation and Maintenance Fund and the Accounts therein (the Operation and Maintenance Account and the Operation and Maintenance Reserve Account) shall be held pursuant to the Indenture by the Authority with an Authorized Depositary.

(d) There has been created in the Treasury of the State of West Virginia, pursuant to the Memorandum of Understanding, dated as of June 1, 2021 (the "***Memorandum of Understanding***") and the Act, the State Road Construction Account.

Section 403. Application of Proceeds of Series 2021 Bonds.

All proceeds of the sale of the Series 2021 Bonds (net of $751,634.50 of underwriters' discount), together with an equity contribution made by the Authority in the amount of $20,582,103.52, shall be paid to the Trustee, against receipt therefor, at or prior to the delivery of the Series 2021 Bonds. Immediately upon receipt of such proceeds and equity contribution, the Trustee shall transfer $422,881,498.60 of the proceeds relating to the Off-Turnpike WVDOH Projects to the Series 2021 Sub-Account within the State Road Construction Account, as further provided in the Memorandum of Understanding, and, simultaneously with the delivery of the Series 2021 Bonds, the Trustee shall apply the remaining proceeds thereof, as follows:

(a) to the Series 2021 Parkway Projects Account, $0.00;

(b) to the Series 2021 Costs of Issuance Account, $467,191.15; and

(c) to the Series 2021 Debt Service Reserve Account, $20,114,912.37.

Section 404. Series 2021 Parkway Projects Account; Series 2021 Costs of Issuance Account.

(a) A cash contribution from the Authority of $467,191.15 shall be deposited into the Series 2021 Costs of Issuance Account.

(b) There also may be deposited to the credit of the Series 2021 Parkway Projects Account and to the Series 2021 Costs of Issuance Account created thereunder, any other moneys (including all obligations held as investments thereof and the proceeds of such investments) received from any other source for paying costs of the Parkway Projects, including costs of issuance of the Series 2021 Bonds, or for any other purpose or project authorized by law. Amounts in the Series 2021 Parkway Projects Account, if any, shall be pledged to the Bondholders.

(c) Moneys in the Series 2021 Parkway Projects Account, if any, shall be applied to the payment of the cost of On-Turnpike Authority Projects or for other projects and purposes then authorized by law. Moneys in the Series 2021 Costs of Issuance Account shall be applied to the payment of the costs of issuance of the Series 2021 Bonds. In the case of the Series 2021 Bonds, the Authority hereby requests the Trustee to hold the Series 2021 Costs of Issuance Account and pay Costs of Issuance therefrom, and the Trustee hereby agrees to do so.

(d) Moneys, instruments and securities in the Series 2021 Parkway Projects Account, if any, and the Series 2021 Costs of Issuance Account, shall be held by the Authority. The Authority covenants that the funds in the Series 2021 Parkway Projects Account, if any, and the Series 2021 Costs of Issuance Account shall be applied in accordance with the provisions of this Section and the covenants contained in Section 510 of the Master Trust Indenture.

(e) After payments of, and reimbursements with respect to, the On-Turnpike Authority Projects, if any, financed by the Series 2021 Bonds are completed, including payments for costs of issuance related to the Series 2021 Bonds, as certified by the Authority, and provided no Event of Default has occurred and is continuing in the payment of principal of or interest on any Series 2021 Bonds, excess funds in the Series 2021 Parkway Projects Account and excess funds in the Series 2021 Costs of Issuance Account shall be applied, upon receipt by the Authority of an opinion of Bond Counsel that such use will not affect adversely the exclusion of interest on such Series 2021 Bonds from gross income for federal income tax purposes and, if applicable, (i) the non-tax preference status of such interest for federal alternative minimum income tax purposes, and (ii) the qualification of earnings on any Funds or Accounts for treatment pursuant to Section 148(f)(4)(B) of the Code as meeting the requirement of Section 148(f)(2) to rebate amounts to the United States, (i) to eliminate any deficiency in the Series 2021 Debt Service Reserve Account, (ii) to the Series 2021 Redemption Account for the optional redemption of such Series 2021 Bonds at the earliest date such Series 2021 Bonds are subject to optional redemption without premium or for the purchase of such Series 2021 Bonds, or (iii) to the applicable Account in the Senior Lien Bond Fund.

Section 405. Series 2021 Principal Account; Series 2021 Interest Account; Series 2021 Redemption Account.

(a) Amounts in the Series 2021 Interest Account, within the Senior Lien Bond Fund, shall be used by the Trustee to pay the interest on the Series 2021 Bonds when due. Amounts in the Series 2021 Principal Account, within the Senior Lien Bond Fund, shall be used by the Trustee to pay the principal of the Series 2021 Bonds when due. Amounts in the Series 2021 Redemption Account, within the Senior Lien Bond Fund, shall be used by the Authority to pay the redemption price of the Series 2021 Bonds on the applicable redemption date specified by the Authority. Amounts in the Senior Lien Bond Fund, including the Accounts therein, shall be pledged to Holders of Senior Lien Bonds, including the Series 2021 Bonds.

(b) In the event that on the Business Day preceding any interest payment date the amounts in any Account relating to the Series 2021 Bonds, within the Senior Lien Bond Fund, shall be less than the amount required for payment of the interest on and the principal of the related Outstanding Series 2021 Bonds, and any related parity obligation due and payable on such interest payment date, the Trustee shall withdraw the amount necessary to increase the amount on deposit in the applicable Account relating to the Series 2021 Bonds to the requirement therefor from the Composite Senior Lien Debt Service Reserve Account.

(c) When Series 2021 Bonds are redeemed or purchased, the amount, if any, in the Series 2021 Interest Account shall be applied to the payment of accrued interest in connection with such redemption or purchase. Whenever the amounts in the Accounts relating to the Series 2021 Bonds are sufficient to redeem all of the Outstanding Series 2021 Bonds and to pay interest accrued to the redemption date specified by the Authority. Any amounts remaining in the Accounts relating to the Series 2021 Bonds after payment in full of the principal or redemption price, premium, if any, and interest on the Series 2021 Bonds (or provision for payment thereof) and the fees, charges and expenses of the Authority, the Trustee and any paying agents, shall be paid to the Authority.

(d) Moneys delivered to the Trustee in contemplation of optional or mandatory redemption or maturity of the Series 2021 Bonds shall be deposited in the Series 2021 Redemption Account and shall be used by the Trustee to redeem or pay the principal of such Series 2021 Bonds (including any redemption premium thereon) in accordance with the provisions hereof. If the Series 2021 Bonds are to be paid or redeemed in full, any balance in the Series 2021 Redemption Account may, at the option of the Authority, be applied in whole or in part to the payment or redemption of such Series 2021 Bonds or transferred to the applicable Senior Lien Bond Fund.

Section 406. Composite Senior Lien Debt Service Reserve Account.

(a) Subject to the provisions of Section 405, amounts in the Composite Senior Lien Debt Service Reserve Account shall be used to pay debt service on the Composite Senior Lien Bonds, or on such Senior Lien Bonds as may be hereafter issued under a Supplemental Indenture providing for a composite Debt Service Reserve Account, on a pro rata basis with respect to each series of such Outstanding Composite Senior Lien Bonds, to include (i) the Series 2018 Debt Service Reserve Account, on the date or dates such debt service is due when insufficient funds for that purpose are available in the applicable Accounts relating to such Outstanding Series 2018 Bonds and (ii) the Series 2021 Debt Service Reserve Account, on the date or dates such debt service is due when insufficient funds for that purpose are available in the applicable Accounts relating to such Outstanding Series 2021 Bonds. Amounts in the Composite Debt Service Reserve Account shall be pledged to Holders of the Composite Senior Lien Bonds.

(b) In lieu of or in addition to cash or investments, at any time the Authority may cause to be deposited to the credit of the Composite Debt Service Reserve Account any form of DSRF Credit Facility, in the amount of the Composite Senior Lien Debt Service Reserve Requirement, irrevocably payable to the Trustee as beneficiary for the Holders of the Composite Senior Lien Bonds, as further provided in provisions of the Master Trust Indenture relating to the use of a DSRF Credit Facility.

Section 407. Series 2021 Arbitrage Rebate Account.

(a) The Series 2021 Arbitrage Rebate Account, within the Arbitrage Rebate Fund, shall be maintained by the Trustee as a fund separate from any other fund established and maintained hereunder. Within the Series 2021 Arbitrage Rebate Account, the Trustee shall maintain such accounts as shall be required by the Authority in order to comply with the terms and requirements of the Tax Certificate. All money at any time deposited in the Series 2021 Arbitrage Rebate Account shall be held by the Trustee in trust, to the extent required to satisfy the Rebate Requirement (as defined in the Tax Certificate), for payment to the Treasury Department of the United States of America. The Authority or the owner of any Series 2021 Bonds shall not have any rights in or claim to such money. All amounts deposited into or on deposit in the Series 2021 Arbitrage Rebate Account shall be governed by this Section 407 and the Tax Certificate (which is incorporated herein by reference). Amounts in the Series 2021 Arbitrage Rebate Account shall not be pledged to Bondholders.

(b) The Trustee shall be deemed conclusively to have complied with this Section 407 and the Tax Certificate if it follows the directions of an Authority Authorized Officer, including supplying all necessary written information in the manner provided in the Tax Certificate, and shall have no liability or responsibility for compliance or to enforce compliance by the Authority with the terms of the Tax Certificate.

(c) Upon the written direction of the Authority, the Trustee shall deposit in the Series 2021 Arbitrage Rebate Account amounts received from the Authority, so that the balance on deposit thereto shall be equal to the Rebate Requirement. Computations of the Rebate Requirement shall be furnished by or on behalf of the Authority in accordance with the Tax Certificate. The Trustee shall have no obligation to rebate any amounts required to be rebated pursuant to this Section 407, other than from moneys held in the Funds and Accounts created under this Second Supplemental Indenture or from other moneys provided to it by the Authority.

(d) The Trustee shall invest all amounts held in the Series 2021 Arbitrage Rebate Account as provided in written directions of the Authority. In issuing such directions, the Authority shall comply with the restrictions and instructions set forth in the Tax Certificate. Moneys from the Series 2021 Arbitrage Rebate Account may only be applied as provided in this Section 407.

(e) Upon receipt of written instructions and certification of the Rebate Requirement from an Authority Authorized Officer, the Trustee shall pay the amount of such Rebate Requirement to the Treasury Department of the United States of America, out of amounts in the Series 2021 Arbitrage Rebate Account, as so directed. Notwithstanding any other provisions of the Indenture, the obligation to remit the Rebate Requirement to the United States of America and to comply with all other requirements of this Section 407 and the Tax Certificate shall survive the defeasance or payment in full of the Series 2021 Bonds.

[*Remainder of this page is intentionally left blank*]

ARTICLE V
COVENANTS OF THE AUTHORITY

Section 501. General.

The provisions of Article V of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

ARTICLE VI
DEFAULT AND REMEDIES

Section 601. General.

The provisions of Article VI of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

ARTICLE VII
THE TRUSTEE

Section 701. General.

The provisions of Article VII of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

ARTICLE VIII

SUPPLEMENTAL INDENTURES

Section 801. General.

The provisions of Article VIII of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

ARTICLE IX
SATISFACTION AND DISCHARGE

Section 901. General.

Except as supplemented below, the provisions of Article IX of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

Section 902. Discharge.

If payment of all principal of, purchase price of, if applicable, premium, if any, and interest on the Series 2021 Bonds in accordance with their terms and as provided herein is made, or is provided for in accordance with this Article, and if all other sums payable by the Authority hereunder with respect to the Series 2021 Bonds shall be paid or provided for, then the liens, estates and security interests granted hereby shall cease with respect to the Series 2021 Bonds; provided, however, that the rebate provisions, if any, of this Second Supplemental Indenture shall survive so long as there is any amount due to the federal government pursuant to the provisions of this Second Supplemental Indenture. Thereupon, upon the request of the Authority, and upon receipt by the Trustee of an Opinion of Bond Counsel stating that all conditions precedent to the satisfaction and discharge of the lien hereof have been satisfied with respect to the Series 2021 Bonds and such Series 2021 Bonds are no longer Outstanding and, if applicable, that the defeasance of such Series 2021 Bonds will not adversely affect the exclusion from gross income for federal income tax purposes of interest on such Series 2021 Bonds, the Trustee shall execute and deliver proper instruments acknowledging such satisfaction and discharging the lien hereof with respect to such Series 2021 Bonds. If the lien hereof has been discharged with respect to all Series 2021 Bonds, the Trustee shall transfer all property held by it hereunder, other than moneys or obligations held by the Trustee for payment of amounts due or to become due on the Series 2021 Bonds to the Authority or such other person as may be entitled thereto as their respective interests may appear. Such satisfaction and discharge shall be without prejudice to the rights of the Trustee thereafter to charge and be compensated or reimbursed for services rendered and expenditures incurred in connection herewith.

The Authority may at any time surrender to the Trustee for cancellation any Series 2021 Bonds previously authenticated and delivered which the Authority at its option may have acquired in any manner whatsoever and such Series 2021 Bonds upon such surrender and cancellation shall be deemed to be paid and retired.

Section 903. Providing for Payment of Bonds.

Payment of the Series 2021 Bonds may be provided for by the deposit with the Trustee of moneys, Government Obligations and Agency Obligations of the definition of Permitted Investments in Section 101 of the Master Trust Indenture, or any combination thereof. Payment of the Series 2021 Bonds shall be so provided for when the aggregate of amounts in the applicable Account of the Series 2021 Debt Service Reserve Fund together with other amounts available for such purpose hereunder is sufficient to so provide. The moneys and the maturing principal and interest income on such Government Obligations or Agency Obligation, if any, shall be sufficient and available to pay when due the principal of, whether at maturity or upon fixed redemption dates, and premium, if any, and interest on such Series 2021 Bonds. The moneys, Government Obligations and Agency Obligations shall be held by the Trustee irrevocably in trust for the Holders of such Series 2021 Bonds solely for the purpose of paying the principal or redemption price of, including premium, if any, and interest on such Series 2021 Bonds as the same shall mature or become payable upon prior redemption, and, if applicable, upon simultaneous direction, expressed to be irrevocable, to the Trustee as to the dates upon which any such Series 2021 Bonds are to be redeemed prior to their respective maturities.

The Trustee shall receive a verification report from a firm of independent certified public accountants as to the sufficiency of moneys and investments to provide for Payment of the Series 2021 Bonds in the case of a defeasance thereof.

If Payment of the Series 2021 Bonds is so provided for, the Trustee shall mail a notice so stating to each Holder of such Series 2021 Bonds.

Series 2021 Bonds the payment of which has been provided for in accordance with this Section shall no longer be deemed Outstanding under the Indenture. The obligation of the Authority in respect of such Series 2021 Bonds shall nevertheless continue but the Holders thereof shall thereafter be entitled to payment only from the moneys, Government Obligations and pre-refunded municipal obligations deposited with the Trustee to provide for the payment of such Series 2021 Bonds.

No Senior Lien Turnpike Toll Revenue Bond, Series 2021 may be so provided for if, as a result thereof or of any other action in connection with which the provision for payment of such Series 2021 Bonds is made, the interest payable on any Senior Lien Turnpike Toll Revenue Bond, Series 2021 with respect to which an opinion of Bond Counsel has been rendered that such interest is excluded from gross income for federal income tax purposes is made subject to federal income taxes. The Trustee shall receive and may rely upon an opinion of Bond Counsel (which opinion may be based upon a ruling or rulings of the Internal Revenue Service) to the effect that the provisions of this paragraph will not be breached by so providing for the payment of any Series 2021 Bonds.

Section 904. Payment of Bonds After Discharge; Unclaimed Moneys.

Notwithstanding the discharge of the lien hereof as in this Article IX, the Trustee nevertheless shall retain such rights, powers and duties hereunder as may be necessary and convenient for the payment of amounts due or to become due on the Series 2021 Bonds, including pursuant to any sinking fund redemptions, and the registration, transfer, exchange and replacement of bonds as provided herein. Nevertheless, any moneys held by the Trustee for the payment of the principal of, purchase price of, if applicable, premium, if any, or interest on any Senior Lien Turnpike Toll Revenue Bond, Series 2021 remaining unclaimed for two (2) years after such payment has become due and payable, or such other period provided by law, whether at maturity or upon proceedings for redemption, shall be disposed of pursuant to the provisions of Section 214. After discharge of the lien hereof, but prior to payment of such amounts to holders or as provided pursuant to Section 214, the Trustee shall invest such amounts in Government Obligations and Agency Obligations described in paragraphs (a) and (b), respectively, of the definition of Permitted Investments in Section 101 of the Master Trust Indenture at the direction of and for the benefit of the Authority.

ARTICLE X
MISCELLANEOUS

Section 1001. General.

The provisions of Article X of the Master Trust Indenture are hereby continued, approved, ratified and confirmed, shall apply fully to the Series 2021 Bonds and are incorporated by reference as a part hereof.

[*Signature page follows this page*]

IN WITNESS WHEREOF, the Authority has caused these presents to be signed in its name and on its behalf and attested by its duly authorized officers, and, to evidence its acceptance of the trusts hereby created, the Trustee has caused these presents to be signed in its name and on its behalf by its duly authorized officer, all as of the day and year first above written.

[SEAL]

WEST VIRGINIA PARKWAYS AUTHORITY

By: ______________________________
Name: A. Bray Cary, Jr.
Its: Chair's Designee

Attest:

By: ________________________
Name: Jeffrey A. Miller
Its: Executive Director

UNITED BANK, as Trustee

By: ______________________________
Name: Thomas J. Provenzano
Its: Vice President

SCHEDULE I

$333,630,000
WEST VIRGINIA PARKWAYS AUTHORITY
SENIOR LIEN TURNPIKE TOLL REVENUE BONDS, SERIES 2021

Maturity (June 1)	Principal Amount	Interest Rate	CUSIP*
2022	$6,015,000	5.000%	956510BA8
2023	$5,370,000	5.000%	956510BB6
2024	$5,640,000	5.000%	956510BC4
2025	$5,920,000	5.000%	956510BD2
2026	$6,220,000	5.000%	956510BE0
2027	$6,530,000	5.000%	956510BF7
2028	$6,855,000	5.000%	956510BG5
2029	$7,200,000	5.000%	956510BH3
2030	$7,560,000	5.000%	956510BJ9
2031	$7,935,000	5.000%	956510BK6
2032	$8,335,000	5.000%	956510BL4
2033	$8,750,000	5.000%	956510BM2
2034	$9,190,000	5.000%	956510BN0
2035	$9,645,000	5.000%	956510BP5
2036	$10,130,000	5.000%	956510BQ3
2037	$10,635,000	5.000%	956510BR1
2038	$11,165,000	5.000%	956510BS9
2039	$11,725,000	5.000%	956510BT7
2040	$12,310,000	5.000%	956510BU4
2041	$12,930,000	3.000%	956510BV2
2042	$13,315,000	4.000%	956510BW0
2043	$13,850,000	4.000%	956510BX8

$62,070,000 5.000% Term Bond due June 1, 2047, CUSIP: 956510BY6
$74,335,000 4.000% Term Bond due June 1, 2051, CUSIP: 956510BZ3

*CUSIP Numbers have been assigned by an independent company not affiliated with the State or the Authority and are included on this page solely for the convenience of the owners of the Series 2021 Bonds only at the time of issuance of the Series 2021 Bonds. Neither the State nor the Authority makes any representation regarding the accuracy of such CUSIP numbers as stated in the above table or undertakes any responsibility for the selection of the CUSIP numbers or their accuracy now or at any time in the future. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2021 Bonds.

EXHIBIT A

FORM OF SENIOR LIEN TURNPIKE TOLL REVENUE BOND, SERIES 2021

[*See attached*]

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a New York corporation ("DTC'), to the Issuer or its agent for registration of transfer, exchange or payment, and any certificate issued is registered in the name of Cede & Co. or in such other name as is requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof Cede & Co. has an interest herein.

UNITED STATES OF AMERICA
WEST VIRGINIA PARKWAYS AUTHORITY
SENIOR LIEN TURNPIKE TOLL REVENUE BONDS, SERIES 2021

No. R-1

Interest Rate	Maturity Date	Delivery Date	CUSIP Number
[*]%	[*]	[*], 2021	[*]

REGISTERED OWNER: CEDE & CO.

PRINCIPAL AMOUNT: [*] DOLLARS
($[____________])

KNOW ALL MEN BY THESE PRESENTS: That the WEST VIRGINIA PARKWAYS AUTHORITY (the “Issuer”), for value received, hereby promises to pay to the Registered Owner specified above, or registered assigns (the “Registered Owner”), but solely from the sources and in the manner referred to herein, on the Maturity Date specified above, unless redeemed prior thereto, as hereinafter provided, upon presentation and surrender hereof, the Principal Amount specified above and to pay interest from those sources on said Principal Amount from the Interest Payment Date (as hereinafter defined) preceding the date of authentication hereof or, if authenticated after the Record Date (as hereinafter defined) but prior to the applicable Interest Payment Date or on said Interest Payment Date, from said Interest Payment Date or, if no interest has been paid, from the Bond Date specified above, at the Interest Rate per annum specified above, semiannually, on June 1 and December 1 in each year, beginning December 1, 2021 (each an “Interest Payment Date”), until maturity or until the date fixed for redemption if this Bond is called for prior redemption and payment on such date is provided for. Principal of and interest on this Bond are payable by United Bank, a Virginia banking corporation, as Trustee (the “Trustee”).

Interest accruing on this Bond on and prior to the Maturity Date hereof shall be payable by check or draft mailed by the Trustee to the Registered Owner hereof as of the applicable Record Date (each May 15th and November 15th) or, in the event of a default in the payment of Bonds, that special record date to be fixed by the Trustee by notice given to the Registered Owners not less than 10 days prior to said special record date at the address of such Registered Owner as it appears on the registration books of the Issuer maintained by the Trustee. Principal and premium, if any, shall be paid when due upon presentation and surrender of this Bond for payment to the Trustee, in Charleston, West Virginia.

THIS BOND IS A SPECIAL OBLIGATION OF THE ISSUER. PAYMENT OF THIS BOND, INCLUDING THE PRINCIPAL OR REDEMPTION PRICE HEREOF, AND THE INTEREST HEREON, WILL BE MADE SOLELY FROM THE FUNDS AND OBLIGATIONS DULY PLEDGED IN THE TRUST INDENTURE. THIS BOND SHALL NOT BE A DEBT OF THE STATE OF WEST VIRGINIA, AND THE STATE SHALL NOT BE LIABLE HEREON. THIS BOND SHALL NOT CONSTITUTE AN INDEBTEDNESS OF THE ISSUER WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY DEBT LIMITATION OR RESTRICTION.

THIS BOND DOES NOT CONSTITUTE A DEBT OR A PLEDGE OF THE FAITH AND CREDIT OR THE TAXING POWER OF THE STATE OF WEST VIRGINIA, ANY COUNTY, MUNICIPALITY OR ANY OTHER POLITICAL SUBDIVISION OF THE STATE OF WEST VIRGINIA, TO THE REGISTERED OWNER OF THIS BOND, AND THE REGISTERED OWNER OF THIS BOND SHALL HAVE NO RIGHT TO HAVE TAXES LEVIED BY THE LEGISLATURE OR BY THE TAXING AUTHORITY OF ANY COUNTY, MUNICIPALITY, OR ANY OTHER POLITICAL SUBDIVISION OF THE STATE OF WEST VIRGINIA FOR THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THIS BOND. THE ISSUER HAS NO TAXING POWER.

NONE OF THE PAST, PRESENT OR FUTURE BOARD MEMBERS, OFFICERS OR EMPLOYEES OF THE ISSUER OR ANY PERSON EXECUTING THE BONDS SHALL BE LIABLE PERSONALLY ON THIS BOND BY REASON OF THE ISSUANCE HEREOF.

This Bond is one of an issue of bonds authorized to be issued in the aggregate principal amount of $333,630,000 (hereinafter called the “Bonds”) for the purposes of (i) authorizing the issuance by the Authority of its Senior Lien Turnpike Toll Revenue Bonds, Series 2021 (the “Senior Lien Turnpike Toll Revenue Bonds, Series 2021”), on the terms set forth in a Master Trust Indenture (the “Master Trust Indenture”), dated as of August 1, 2018, and the Second Supplemental Trust Indenture (the “Second Supplemental Indenture” and together with the Master Trust Indenture, the “Trust Indenture”), dated as of June 1, 2021, for the purpose of financing Parkway Projects as defined in the Act, (ii) to pay the costs of issuance of such Senior Lien Turnpike Toll Revenue Bonds, Series 2021, (iii) to fund applicable reserve requirements, and (iv) to fund or pay for any other costs or expenses permitted under the Act. The Bonds are issued under and pursuant to the Trust Indenture, an executed counterpart of which is on file at the office of said Trustee, as authorized by a Bond Authorizing Resolution adopted by the Issuer on May 20, 2021 (as supplemented, the “Resolution”). Reference is hereby made to the Trust Indenture and all indentures supplemental thereto for the provisions, among others, with respect to the custody and application of the proceeds of the Bonds, the collection and disposition of revenues, the revenues charged with and pledged to the payment of the principal of and interest on the Bonds, the nature and extent of security, the terms and conditions under which the Bonds are issued, the rights, duties and obligations of the Issuer and the Trustee, and the rights of the holders of the Bonds, and, by the acceptance of this Bond, the holder hereof assents to all the provisions of the Trust Indenture.

This Bond is transferable by the Issuer hereof in person or by its attorney duly authorized in writing at the principal office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Trust Indenture, and upon surrender and cancellation of this Bond. Upon such transfer, a new bond or bonds of the same series, interest rate, maturity or maturities and of authorized denomination or denominations, for the same aggregate principal amount, will be issued to the transferee in exchange therefor.

The Issuer and the Trustee may deem and treat the Registered Owner thereof as the absolute owner hereof (whether or not this Bond shall be overdue) for the purpose of receiving payment of or on account of principal hereof and interest due hereon and for all other purposes, and neither the Issuer nor the Trustee shall be affected by any notice to the contrary.

The Bonds are issuable only in the full amount thereof. The Bonds may, at the option of the Registered Owner thereof, upon the surrender thereof at the principal office of the Trustee with a written instrument of transfer, in form and with guarantee of signature satisfactory to the Trustee, duly executed by the Registered Owner or his duly authorized attorney, be exchanged for an equal aggregate principal amount of fully registered bonds of the same series, maturity and interest rate of any other authorized denomination.

The Bonds are subject to optional redemption and mandatory sinking fund redemption under the terms and subject to the provisions set forth in the Trust Indenture.

This Bond, as may be outstanding from time to time, is issued pursuant to and in full conformity with the Constitution and the laws of the State of West Virginia, particularly Chapter 17, Article 16A of the Code of West Virginia, 1931, as amended, and pursuant to the Resolution duly adopted by the Issuer, which Resolution also authorizes the execution and delivery of the Trust Indenture.

The Bonds are limited special obligations of the Issuer and are payable out of the Trust Estate as described in the Trust Indenture. Under the Trust Indenture, the Issuer must pay the Trustee from the Trust Estate such payments as will be fully sufficient to pay the principal of and interest on the Bonds, as the same mature.

Pursuant to the Trust Indenture, the Trustee shall, immediately upon receipt of Net Toll Road Revenues from the Issuer, deposit all Net Toll Road Revenues into the Series 2021 Interest Account until such time as the Trustee has sufficient moneys in the Series 2021 Interest Account to pay the interest due on the next ensuing Interest Payment Date for the Bonds, as shall be determined by the Trustee pursuant to Section 405(a) of the Second Supplemental Indenture, and then after satisfying such requirements for the Series 2021 Interest Account, the Trustee shall thereafter deposit the Net Toll Road Revenues received from the Issuer into the Series 2021 Principal Account. Moneys in the Series 2021 Principal Account and the Series 2021 Interest Account established under the Second Supplemental Indenture have been duly pledged to secure payment of the principal of and interest on the Bonds.

The Registered Owners of the Bonds shall have no right to enforce the provisions of the Trust Indenture or to institute any action to enforce the covenants therein, or to take any action with respect to any event of default under the Trust Indenture, or to institute, appear in or defend any suit or other proceedings with respect thereto, except as provided in the Trust Indenture. In certain events, on the conditions, in the manner and with the effect set forth in the Trust Indenture, the principal of all the bonds issued under the Trust Indenture and then outstanding, may become or may be declared due and payable before the stated maturity thereof together with interest accrued thereon. Modifications or alterations of the Trust Indenture, or of any supplements thereto, may be made only to the extent and in the circumstances permitted by the Trust Indenture.

IT IS HEREBY CERTIFIED, RECITED AND DECLARED that all acts and conditions necessary to be done or performed by the Issuer or to have happened precedent to and in the issuance of the Bonds in order to make them legal, valid and binding special obligations of the Issuer in accordance with their terms, and precedent to and in the execution and delivery of the Trust Indenture, have happened or have been performed in regular and due form as required by law; that payment in full for such Bonds has been received; and that such Bonds do not exceed or violate any constitutional or statutory limitation.

This Bond shall not be valid or become obligatory for any purpose or be entitled to any security or benefit under the Trust Indenture until the Certificate of Authentication appearing thereon shall have been duly and manually executed by the Trustee.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the WEST VIRGINIA PARKWAYS AUTHORITY has caused this Bond to be executed in its name by the manual or facsimile signature of its Chair and its seal to be hereunto impressed or imprinted hereon and attested by the manual or facsimile signature of its Secretary and Treasurer, all as of the date set forth above.

WEST VIRGINIA PARKWAYS AUTHORITY

By: ______________________________
Governor James C. Justice, II, Chair

[SEAL]

Attest:

By: ______________________
Its Secretary

Attest:

By: ______________________
Its Treasurer

CERTIFICATE OF AUTHENTICATION:

This Bond is one of the Bonds described in the within-named Trust Indenture and has been duly registered in the name of the Registered Owner set forth above, as of the Date of Authentication set forth below.

Date of Authentication: June 23, 2021

UNITED BANK, as Trustee

By: ____________________________
Its: Authorized Officer

Assignment

FOR VALUE RECEIVED the undersigned hereby sells, assigns and transfer unto _________________________(Please print or typewrite name, address and Social Security Number of Transferee)___________________ the within bond and all rights thereunder, and hereby irrevocably constitutes and appoints ___________________, as Attorney, to transfer the within bond on the books kept for registration thereof, with full power of substitution in the premises.

Dated: __________________

In the presence of:

____

____

NOTICE: The signature to this assignment must correspond with the name as it appears upon the face of the within bond in every particular, without alteration or enlargement or any change whatever.

APPENDIX B

FINANCIAL STATEMENTS OF THE AUTHORITY

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COMPREHENSIVE ANNUAL FINANCIAL REPORT

West Virginia Parkways Authority
(A Component Unit of the State of West Virginia)

Fiscal Years Ended June 30, 2020 and 2019

WEST VIRGINIA PARKWAYS AUTHORITY
(a Component Unit of the State of West Virginia)

Comprehensive Annual Financial Report

Fiscal Years Ended June 30, 2020 and 2019

Prepared by:

Director of Finance,
West Virginia Parkways Authority

West Virginia Parkways Authority

Comprehensive Annual Financial Report

Fiscal Years Ended June 30, 2020 and 2019

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Introductory Section

West Virginia Parkways Authority

West Virginia Parkways Authority

List of Authority Members, Administrative Staff, and Professional Consultants

Authority Members		**Date Appointed**	**Term Expires (2)**
Chairman	The Honorable James C. Justice, II Governor, State of West Virginia	January 16, 2017	(1)
Governor's Chairman Designee	A. Bray Cary, Jr.	April 2, 2019	(1)
Secretary of Transportation	Byrd E. White, III	March 13, 2019	(1)
Vice Chairman, At Large Member	Mike Vinciguerra, Jr.	June 2, 2006	June 30, 2021
Secretary, 1st Congressional District	Tom Mainella	July 10, 2010	June 30, 2020
3rd Congressional District	William Seaver, IV	July 9, 2007	June 30, 2020
3rd Congressional District	Douglas M. Epling	January 29, 2009	June 30, 2022
1st Congressional District	William Cipriani	May 10, 2013	June 30, 2019
2nd Congressional District	Alisha G. Maddox	July 1, 2017	June 30, 2021

Administrative Staff

Executive Director	Jeffrey A. Miller
Executive Assistant	Robin Shamblin
General Counsel	A. David Abrams, Jr.
Director of Finance	Parrish T. French
Director of Maintenance	Leslie Ball
Director of Tolls	Douglas E. Ratcliff
Director of Customer Service	D. Wayne Webb
Director of Purchasing	Margaret Vickers
Director of Information Technology	Brian Bowling
Director of Operations and Training	Tyrone C. Gore
Director of Human Resources	Sherry Lilly
Officer in Charge of State Police	Captain D. A. Gunnoe
Executive Director – Tamarack	Tammy Coffman

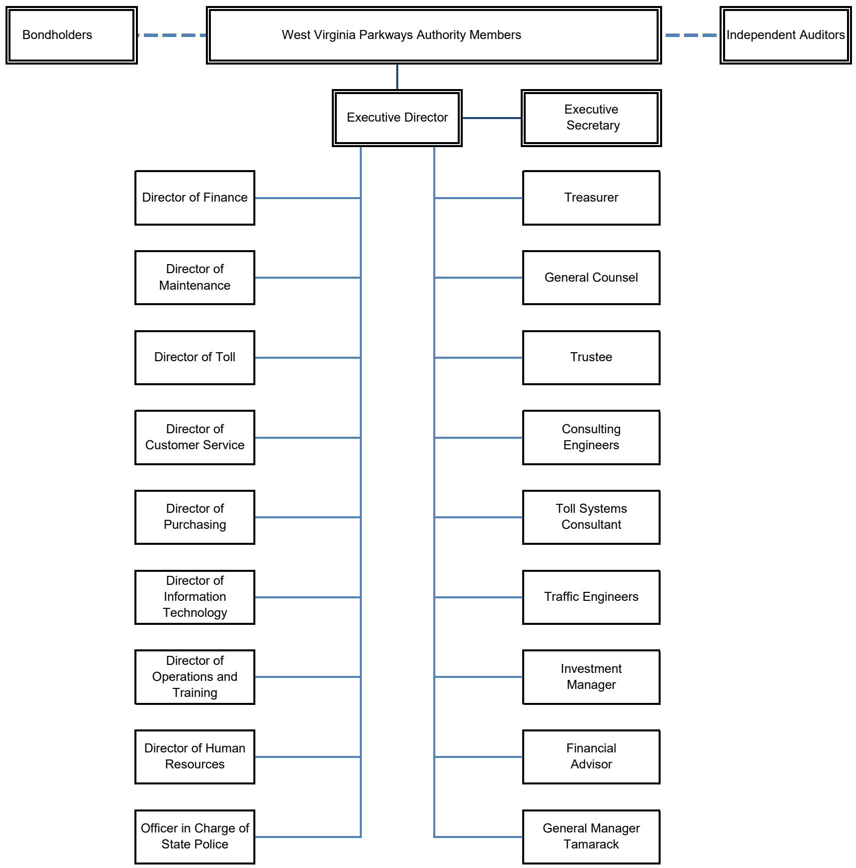
Professional Consultants

Trustee	United Bank, Inc., Charleston, West Virginia
Independent Auditor	Suttle & Stalnaker, PLLC, Charleston, West Virginia
General Counsel	Abrams & Byron, Beckley, West Virginia
Bond Counsel	Bowles Rice, LLP Charleston, West Virginia Spilman, Thomas & Battle, Charleston, West Virginia
Consulting Engineers	HNTB Corporation, Scott Depot, West Virginia
Traffic Engineers	CDM Smith, New Haven, Connecticut
Financial Advisor	Public Resources Advisory Group, New York, New York

(1) Under the provisions of the Act which created the Authority, the Governor or his designee serves as Authority Chairman and the Secretary of Transportation is also a member.

(2) Public members may continue to serve until a successor has been appointed and has qualified.

West Virginia Parkways Authority Organization Chart



West Virginia Parkways Authority
P.O. Box 1469
Charleston, West Virginia 25325-1469
Telephone: 304-926-1900
Fax: 304-926-1909
E-ZPass: 1-800-206-6222
www.wvturnpike.com

December 21, 2020

The Honorable James C. Justice, II, Governor and
The Honorable Members of the West Virginia Parkways Authority

The *Comprehensive Annual Financial Report* (CAFR) of the West Virginia Parkways Authority (the Authority) for the fiscal years ended June 30, 2020 and 2019, is hereby submitted. Responsibility for both the accuracy of the data and the completeness and fairness of the financial presentation, including all disclosures, rests with the Authority. To the best of our knowledge and belief, the accompanying data are accurate in all material respects and are reported in a manner designed to present fairly the financial position, changes in financial position, and cash flows of the Authority. All disclosures necessary to enable the reader to gain an understanding of the Authority's financial activities have been included. Management's Discussion and Analysis (MD&A) immediately follows the independent auditor's report and provides a narrative overview and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

The accompanying financial statements include only the accounts and transactions of the Authority. The Authority has no component units. However, the Authority is considered a component unit of the State of West Virginia (the State) and the West Virginia Department of Transportation (the Department) and its financial statements are discretely presented in the comprehensive annual financial report of the State.

ORGANIZATION AND BACKGROUND

The Authority was formed as successor-in-interest to the West Virginia Turnpike Commission (the Turnpike Commission) which had been created by the West Virginia Legislature in 1947. Because of highway funding limitations, the legislation authorized the construction of highways through the issuance of revenue bonds, with the bonds to be retired through the collection of tolls. The highway was envisioned to become part of a major highway network extending from Michigan to Florida.

For the first stage of development, a route was identified from Charleston to Princeton that would lessen by only 22 miles the original mileage between the two cities, but would reduce the estimated driving time from four to two hours. Due to financial constraints, the project plans were revised to build only a two-lane expressway with right turn only interchanges and no crossing lines of traffic.

The West Virginia Turnpike (Turnpike) opened in 1954 and was incorporated into the nationwide Interstate and Defense Highway System in 1958. The Federal Highway Act of 1968 included a provision permitting interstate funding to be used for the reconstruction of the Turnpike. Beginning in 1970 and concluding September 2, 1987, the Turnpike was upgraded to meet four-lane interstate design standards. Financing was accomplished using Federal highway funds on a 90% Federal/10% state-matching basis. The Authority repaid the Department for the matching funds with the last payment made in 1994. The repaid funds were used by the Department for highway projects located within 75 miles of the Turnpike.

In 2010, the Authority was renamed and reorganized as the West Virginia Parkways Authority. The Authority's governance board was expanded to nine members to include two members from each of the State's three congressional districts, one at-large member, the Secretary of Transportation and the Governor or his designee, as Chairman. Public members' appointments are made by the Governor with the advice and consent of the Senate for a term of five years. Public members may not serve more than two consecutive full five year terms but may continue to serve until a successor has been appointed and has qualified.

The West Virginia Turnpike consists of 88 miles of limited access highway, which are an integral part of the U.S. Interstate Highway System. It carries the designations of Interstate 77 (I-77) for its entire length and Interstate 64 (I-64) from Charleston to Beckley. I-77 is a north-south interstate route connecting Cleveland, Ohio to Columbia, South Carolina. I-64 is an east-west route connecting St. Louis, Missouri to Virginia Beach, Virginia.

Turnpike operations are financed almost entirely by Turnpike toll revenues. Toll revenues must pay for operating and routine maintenance expenses, debt service, renewal and replacement requirements and major maintenance and capital needs. The Turnpike does not regularly receive any other State or Federal funds to assist with maintenance or operations.

Traffic and Revenue

From its beginning, the Turnpike has been an important route for commercial truck traffic serving the northeast and upper Midwest industrial areas to industrial areas and population centers of the South. Today, heavy truck traffic accounts for over 20% of total transactions and more than 55% of toll revenues. The Turnpike is also important to summer and holiday travelers. Average daily passenger car traffic normally increases by approximately 28% during the summer travel months of June, July and August. Annually, the Thanksgiving holiday weekend includes the busiest travel day of the year.

The Turnpike uses a toll barrier system with three mainline toll plazas strategically located between Charleston and Princeton. There are 18 entrance-exit ramps from the Turnpike serving local traffic. All ramps are toll-free except for the U.S. Rte. 19 interchange north of Beckley.

The Authority is a member of the E-ZPass® Group which develops guidelines for and facilitates the electronic collection of tolls among toll agencies from states in mainly the Eastern and Midwest portions of the U.S. The E-ZPass program is the largest, most successful interoperable toll collection program anywhere in the world, servicing more than 32 million customers and processing more than 3 billion electronic toll transactions a year. The West Virginia Turnpike now processes over 56.8% of toll transactions and collects 61.1% of toll revenue with the E-ZPass® system.

As a result of nationwide efforts to control the 2020 COVID-19 pandemic, passenger car traffic levels briefly fell to less than 50% of the prior year levels. Commercial traffic was also impacted, but not by the same degree. Due to various attributes including the Authority's current rate schedule, the resilience of commercial traffic and the time of year of the stay-at-home orders, the actual revenue impact to the Authority has been muted. During the pandemic, the Authority has maintained operations as normally as possible including keeping all tolling lanes open as normal and continuing all planned maintenance and major maintenance projects.

Governor's Road to Prosperity Program

On June 22, 2017, Governor James C. Justice, II signed Senate Bill 1003 (S.B. 1003) creating a "public-public" partnership between the Authority and the West Virginia Department of Transportation. Effective June 16, 2017, S.B. 1003 authorizes the Authority to continue collecting tolls on the Turnpike, to deposit proceeds from the issuance of Parkways Revenue Bonds to the newly created special State Road Construction Account and requires the Authority to implement the West Virginia Parkways Authority Single Fee program allowing non-commercial purchasers of West Virginia E-ZPass transponders to have unlimited passage on toll roads within the State for an annual flat fee once the Authority increases any of its currently existing tolling rates.

S.B. 1003 is part of a series of measures collectively referred to as the Governor's Roads to Prosperity Highway Program envisioned as a centerpiece of economic recovery for West Virginia. The program includes measures for the State to fund over $2.6 billion in transportation infrastructure projects by issuing Parkways, General Obligation and GARVEE Bonds and by revising Private-Public Partnership and Design Build Project legislation. The Authority expects to issue toll revenue bonds to fund in total $500 million or more in transportation projects in multiple issues over the next several years.

S.B. 1003 includes various provisions that govern the amounts and processes the Authority must follow in order to continue to charge tolls and the amount of revenues for which the tolls must generate. Specifically, the provisions required the Authority to implement a Single Fee Program to continue tolls on the Turnpike. The Single Fee Program enables purchasers of West Virginia E-ZPass transponders to have unlimited passage on toll roads within the State for an annual flat fee. The flat fee shall be set by the Authority (with certain limitations including, but not limited to, a cap at $25 per year) at a rate or amount so that the aggregate of all toll revenues estimated to be received by the Authority at the time of fixing any such rate or amount, or any increase thereof, provides sufficient toll revenues to pay debt service, fund necessary reserves and to cover the administrative costs of the program.

The Single Fee Program only applies to passenger motor vehicles, not commercial vehicles, and would entitle purchasers of a West Virginia E-ZPass transponder to traverse all toll roads within the State of West Virginia without stopping to pay individual tolls for one year from the time of payment of the annual flat fee. The Single Fee Program will be made available to any purchaser of a West Virginia E-ZPass transponder, whether such purchaser is a resident of West Virginia or any other state. On September 25, 2018 existing customers were converted to the Single Fee program and the program became available to any new passenger vehicle customers.

On July 31, 2018, the Authority issued $166.4 million Senior Lien Turnpike Toll Revenue Bonds with net original issue premium of $18.0 million. $172.0 million was deposited to the State Road Construction Account. The proceeds are being used to finance the costs of construction by the Division of Highways for transportation projects located not on the Turnpike but in counties adjacent to the Turnpike. The projects are from a list of projects to be constructed by the Division of Highways under its Roads to Prosperity Program and include the Powells Creek Bridge Project in Nicholas County, the Kenneth Shadrick Bridge Project in Wyoming County, the King Coal Highway: Airport Road to John Nash

Boulevard Project in Mercer County and several pieces of the West Virginia Route 10 Operation Improvements Project in Mercer County.

Separate from the Turnpike bonds, but included in the Roads to Prosperity Program, the Division of Highways will widen sections of the Turnpike north of the I-77/I-64 interchange by adding an additional lane over approximately eight miles each way including widening eight bridges. The lane-widening project will mainly be funded from proceeds of the State's General Obligation State Road Bonds, Series 2018 A and Series 2018 B except for project management expenses including contract administration and quality assurance that will be funded by the Authority. Also, additional bridge rehabilitation work identified and added since the start of the project will also be paid for by the Authority. Funding of this project by the Division of Highways eliminates a significant capital investment that otherwise would have been required of the Authority.

Highway and Bridge Rehabilitation Projects

Effective August 1, 2009 the Authority adopted a revised toll rate schedule, its first rate increase in over 28 years. As a result, the Authority substantially increased the breadth and scope of its rehabilitation and repair projects on the Turnpike including full depth concrete repairs and undersealing, asphalt pavement overlay, bridge deck overlay, bridge and facilities retrofit work, guardrails, median barriers, retaining walls, buildings, toll plazas, culverts and drainage pipes, and signs and pavement markings. In accordance with a 10-year capital plan developed with the consulting engineer, the increased toll revenues were used to alleviate an estimated $335 million in essential deferred maintenance and capital needs backlog, including $242 million for paving.

Recent projects included the continuation of asphalt overlay and paving on the northern portion of the Turnpike. Following Memorial Day, most work is performed at night, Monday through Thursday from 6:00 p.m. to 6:00 a.m., in order to keep traffic delays at a minimum.

Bridge deck replacement using accelerated bridge construction (ABC) method

In 2015, the Parkways Authority awarded a contract for the Turnpike's first bridge deck replacement on the Turnpike. It was the first use of the Accelerated Bridge Construction (ABC) method of replacing bridge decks in the State of West Virginia and it had a minimal impact on traffic. The contractor was given less than two weeks to complete the project from the time of the first lane closure until all lanes were open to traffic. This is in contrast to a 6-8 month construction period for a traditional method bridge deck replacement. The project replaced a 220 foot, two-lane bridge deck and was completed in May 2016. Accelerated Bridge Construction is a method in which the decks are brought in as pre-cast units and provides better quality control as the units are made in a casting plant. Once the casts are brought in, the old deck is replaced and the new deck is put into place with a crane and locked in place.

There are 116 bridges on the West Virginia Turnpike and this was the first bridge deck replacement since the Turnpike's upgrade was completed in 1987. The Authority began a program to rout and seal deck cracks in the late 1980's with a two-part epoxy which continues to this day. Starting in 2006, 36 bridge decks have been overlaid with a thin epoxy/aggregate combination for water sealing benefits and traction improvement. Since 2010, water based sealers have been applied to approximately 40 decks. Up to nine tons of salt are applied to some bridges each year. Over the next 30 years, at least 80% of bridge decks will need to be replaced.

Routine Maintenance

In addition to snow removal and ice control, road and bridge maintenance crews perform activities associated with all aspects of highway maintenance including: pavements, drainage, signage and other traffic control devices, bridge repairs, bench cleaning, vegetation control and litter pickup.

Utilizing the Maintenance Management System (MMS), the Maintenance Division prepares periodic condition ratings on maintenance performance areas. Actual conditions are compared to established performance targets to assess the effectiveness of the maintenance program. The Division found that asphalt pavement conditions continued to exceed targets due to the pavement rehabilitation and preservation program as a result of the toll rate increase and the Division's aggressive crack sealing program.

The Authority continued its focus on preventive bridge maintenance including protective deck overlays which provides skid resistant surfaces and helps seal the bridge deck from salt intrusion and sizable spot painting contracts which help to preserve the steel structures.

Traffic Management and Safety

The Turnpike is patrolled by an up to 31 member group designated as Troop 7 of the West Virginia State Police who are responsible for traffic safety management and drug interdiction. With its 24-hour patrol, the State Police are dedicated to making the road safer by monitoring compliance with posted speed limits, assisting disabled motorists, detecting impaired drivers, and apprehending drug traffickers. Troop 7's efforts are strengthened by three Public Service Commission (PSC) officers whose focus is inspection and enforcement of commercial vehicle safety and operating regulations.

The Authority provides roadside assistance to Turnpike travelers with disabled vehicles. In winter, snow and ice removal is a top priority and major concern of the Maintenance Department. The Authority's annual operating budget includes funds necessary to adequately maintain safe highways during the winter storm season. Speed monitoring awareness radar trailers are employed to remind motorists of their speed. Rumble strips and eight-inch edge lines are utilized to enhance the travel lane for the safety of motorists.

Travel Plazas and Tourist Information Centers

The Authority has contracted with two private companies to operate restaurants and service stations at three travel plazas on the Turnpike. The facilities provide convenient service to Turnpike travelers and also serve as tourist information centers. On May 31, 2013, a trucker's shower facility opened at the Beckley Travel Plaza. Tickets for the showers are being sold at the shower facility. Attendants provide towels and other amenities to customers, and are available every day from 6:00 A.M. to 10:00 P.M.

Two other rest areas are accessible to southbound motorists. The rest area at mile 69 provides restrooms, snacks and sandwiches, and vending machines while the rest area at mile 18 has no facilities, but provides a scenic view. A new facility at the rest area at mile marker 69 was completed during 2017 and offers Turnpike customers a modern, state of the art rest area with additional car parking and an upgraded snack shop. The Authority also operates the West Virginia Welcome Center, located near milepost 9, Princeton, WV, which contains restrooms, vending machines and tourist information. Retail shops featuring The Best of West Virginia handmade crafts, art and specialty foods are also located at the travel plazas and the Welcome Center.

Long-Range Financial Planning

The Authority is required by its Trust Indenture to prepare an annual budget prior to the start of each fiscal year. The adopted budget is used for control of operating and renewal and replacement expenditures and for financial planning. The budget is approved by the Authority, but does not require the approval of the State legislature. Additionally, the consulting engineer assists and presents the Authority each year with an updated needs assessment and five year plan.

Economic Development and Tourism

In 1989, the Authority was tasked with supporting the State's tourism industry and was to assist in other economic and tourism development opportunities. The Authority designated revenues from restaurants and service stations to be used for this responsibility. No toll revenues were used for economic development and tourism projects. During the April 12, 2007 Authority meeting, the Board refocused the Authority's core and principal mission of operating and maintaining the Turnpike as a modern, efficient and safe roadway. All economic development and tourism projects, except Tamarack-the Best of West Virginia, were eliminated. Legislation approved in 2010 restricted the Authority from involvement in any other economic development projects.

Accounting Policies and Internal Controls

The Authority's significant accounting policies are briefly described in Note 2 of the financial statements.

Management of the Authority is responsible for establishing and maintaining internal controls designed to ensure that the assets of the Authority are protected from loss, theft, or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America. Internal controls are designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

Tri-Party Agreement of 2018 and Trust Indentures

In 1971, the Turnpike Commission, the Federal Highway Administration (FHWA), and the Department, adopted an agreement necessary for the Department to participate in the reconstruction of the Turnpike. This document charged the Turnpike Commission with the responsibility for maintenance of the improved facility utilizing toll revenues. The 1971 agreement was superseded and replaced in 1988 and then modified and restated in 2018.

The 2018 agreement specifies (a) that tolls collected will be used on the Turnpike for amounts necessary for operation and maintenance, debt service, reasonable return on investment of any private person or entity that may be authorized by the State to operate and maintain the facility and any cost necessary for improvement including reconstruction, resurfacing, rehabilitation and restoration; (b) that the use of excess toll revenues are authorized to be used for any other purpose for which Federal funds may be obligated under Title 23 of the United States Code; (c) that all records are subject to audit by the Department of Highways and/or FHWA; and, (d) that any bonds issued or any costs incurred will not cause tolls to be increased to an unreasonable amount.

Operations of the Authority are also controlled by the provisions of a Trust Indenture, dated July 31, 2018. The indenture requires, among other things, the establishment and maintenance of various accounts, which are restricted to use for construction, renewal and replacement, operations and debt service. The Authority's Trustee works closely with staff to ensure the Authority is in compliance with the terms and covenants of the Bond Indenture and that all financial and operational decisions are made in the best interest of the Authority's bondholders.

AWARDS AND ACKNOWLEDGEMENTS

Independent Audit

The trust indentures also require an annual audit by independent certified public accountants. The accounting firm of Suttle & Stalnaker, PLLC was engaged by the Authority to perform the audit for the fiscal years ended June 30, 2020 and 2019.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Authority for its comprehensive annual financial report for each of the 30 years through the period ended June 30, 2019, including the first year of operations of the Authority. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, the contents of which conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Acknowledgements

The preparation of this comprehensive annual financial report on a timely basis was made possible with the assistance of the Authority's administrative and accounting staff, the consulting engineers, the independent auditor, and the leadership and support of the Members of the West Virginia Parkways Authority. We express our sincere appreciation for the professional contributions made by these individuals in the preparation of this report.

Respectfully submitted,

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

West Virginia Parkways Authority

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2019

Executive Director/CEO

Financial Section

West Virginia Parkways Authority

Suttle & Stalnaker Certified Public Accountants
A Professional Limited Liability Company

INDEPENDENT AUDITOR'S REPORT

To the Members of the
West Virginia Parkways Authority
Charleston, West Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the West Virginia Parkways Authority (the Authority), a component unit of the State of West Virginia, as of and for the years ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

The Virginia Center
1411 Virginia Street, East | Suite 100
Charleston, WV 25301
MAIN (304) 343-4126
FAX (304) 343-8008

Towne Square | 201 Third Street
PO Box 149
Parkersburg, WV 26102
MAIN (304) 485-6584
FAX (304) 485-0971

Wharf District
68 Clay Street | Suite C
Morgantown, WV 26501
MAIN (304) 554-3371
FAX (304) 554-3410

suttlecpas.com
cpa@suttlecpas.com

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2020 and 2019, and the respective changes in financial position and cash flows thereof for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 14 through 20, the schedule of proportionate share of the net pension liability, schedule of pension contributions, schedule of proportionate share of net other post-employment benefits (OPEB) liability, schedule of other post-employment benefits (OPEB) contributions and related notes on pages 58 through 63 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The introductory section on pages 1 through 10 and statistical section on pages 64 through 78 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The introductory section and statistical section have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Emphasis of Matter

As discussed in Note 1, the financial statements of the Authority are intended to present the financial position, the changes in financial position, and cash flows of only that portion of the business-type activities of the State of West Virginia that is attributable to the transactions of the Authority. They do not purport to, and do not present fairly the financial position of the State of West Virginia, as of June 30, 2020 and 2019, the changes in its financial position, or its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Suttle & Stalnaker, PLLC

Charleston, West Virginia
October 13, 2020

WEST VIRGINIA PARKWAYS AUTHORITY
(A Component Unit of the State of West Virginia)
Management's Discussion and Analysis (Unaudited)
Years Ended June 30, 2020 and 2019

The management of the West Virginia Parkways Authority (hereinafter referred to as the Authority) offers this narrative overview and analysis of the Authority's financial activities for the year ended June 30, 2020 which should be read in conjunction with the Authority's basic financial statements.

FINANCIAL HIGHLIGHTS

2020

- Toll revenues increased 18.0% due to 2020 being the first full year with the new toll rate schedule that became effective in January 15, 2019. The total number of transactions on the West Virginia Turnpike during fiscal year 2020 decreased 11.8% from fiscal year 2019 due to a stay-at-home order being in effect for a few months during 2020.

- Operating expenses increased by $3.4 million or 3.6% from 2019. Increases in expenditures mainly related to an increase in depreciation expense.

- In 2020, capital spending on the Turnpike totaled $96.7 million including $35.4 million from the State under the "Roads to Prosperity" program.

2019

- Toll revenues increased 37.4% due mainly to increases in the toll rate schedule which became effective January 15, 2019. Rates were increased by 100% for most vehicle classes except a single fee program was expanded to reduce rates for many passenger automobiles. The total number of transactions on the West Virginia Turnpike during fiscal year 2019 decreased 0.6% from fiscal year 2018.

- Operating expenses increased by $7.1 million or 8.1% from 2018. Increases in expenditures mainly related to an increase in supplies and other costs related to the initiation of the single fee discount program and increases in credit card fees associated with increased revenues and increased administrative costs associated with debt issuance.

- The Authority deposited $172.0 million to the State Road Construction Account under the State's "Roads to Prosperity" program.

- In 2019, capital spending on the Turnpike totaled $58.2 million including $13.7 million from the State under the "Roads to Prosperity" program.

Basic Financial Statements

The Authority accounts for its operations and financial transactions in a manner similar to that used by private business enterprises: the accrual basis of accounting. In these statements, revenue is recognized in the period in which it is earned, and an expense is recognized in the period in which it is incurred, regardless of the timing of its related cash flow.

Overview of the Financial Statements

This discussion and analysis are intended to serve as an introduction to the Authority's basic financial statements. For each fiscal year, the Authority's basic financial statements are comprised of the following:

- Statements of Net Position
- Statements of Revenues, Expenses and Changes in Net Position
- Statements of Cash Flows
- Notes to Financial Statements

The Statements of Net Position present information on all of the Authority's assets, deferred outflows of resources, liabilities, and deferred inflows of resources with the difference between the four reported as net position. Increases or decreases in net position, over time, may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The Statements of Revenues, Expenses and Changes in Net Position present revenue and expense information and how the Authority's net position changed during the fiscal year as a result of these transactions.

The Statements of Cash Flows present sources and uses of cash for the fiscal year, displayed in the following categories: cash flows from operating activities, cash flows from noncapital and related financing activities, cash flows from capital and related financing activities, and cash flows from investing activities.

The Notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements. They are an integral part of the basic financial statements.

FINANCIAL ANALYSIS

Operating Revenue

Toll revenues represent the major source of funding for the Authority. Passenger car traffic volume decreased 14.2% and large commercial traffic volume decreased by 4.2% during 2020. Due to the current year being the first full fiscal year since the adoption of the new toll rate schedule, passenger car toll revenues increased 11.2% and large commercial toll revenues increased by 29.9%. Total net toll revenues and other recoveries increased approximately $23.6 or 18.0%.

CHANGES IN NET POSITION INFORMATION
(in Thousands)

	2020	2019	2018	Change '20 -'19
Revenues:				
Operating revenues:				
Toll revenues	$ 154,468	$ 130,910	$ 95,288	18.0%
Other revenues	5,128	7,198	7,182	(28.8)%
Nonoperating revenues:				
Net investment revenue	2,187	1,905	632	14.8%
Payments on behalf	411	552	584	(25.5)%
Total revenues	162,194	140,565	103,686	15.4%
Expenses:				
Operating expenses:				
Maintenance	24,113	22,418	23,599	7.6%
Toll collection	13,875	14,143	11,436	(1.9)%
Traffic enforcement and communications	4,074	3,967	2,888	2.7%
General and administrative	8,771	9,650	8,291	(9.1)%
Depreciation	46,472	43,734	40,639	6.3%
Nonoperating expenses:				
Interest expense	5,648	5,697	1,051	(0.9)%
Total expenses	102,953	99,609	87,904	3.4%
Change in net position before transfers	59,241	40,956	15,782	44.6%
Transfers out	-	(172,000)	-	(100.0)%
Transfers in	35,421	13,653	-	159.4%
Change in net position	94,662	(117,391)	15,782	180.6%
Net position, beginning of year	400,466	517,857	501,018	(22.7)%
Net effect of change in accounting policy	-	-	1,057	0.0%
Net position, beginning of year, as restated	400,466	517,857	502,075	(22.7)%
Net position, end of year	$ 495,128	$ 400,466	$ 517,857	23.6%

On June 27, 2017 Senate Bill 1003 was enacted giving the Authority the ability to issue bonds for the purpose of funding infrastructure projects as defined in the statute. The legislation created a special revenue account known as the State Road Construction Account within the State Road Fund to be expended by the Division of Highways for construction, maintenance and repair of public highways and bridges in the state. The bill also included new authorizations, requirements and limitations on the Authority's electronic toll collection programs and discounts to the published cash rates. An unlimited use single annual fee discount program for passenger cars utilizing an Authority issued E-ZPass transponder is required under these new provisions.

The Authority issued Senior Lien Turnpike Toll Revenue Bonds Series 2018 in the amount of $166.37 million on August 15, 2018 and deposited $172 million to the State Road Construction account. The proceeds will be used to finance the costs of construction by the Division of Highways for transportation projects located not on the Turnpike but in counties adjacent to the Turnpike. The projects are from a list of projects to be constructed by the Division of Highways under its Roads to Prosperity Program.

As an additional part of the Roads to Prosperity Program, the Division of Highways intends to widen certain sections of the Turnpike north the I-77/I-64 interchange by adding an additional lane each way including widening eight bridges. The lane-widening project will mainly be funded from proceeds of the State's General Obligation State Road Bonds, Series 2018 A and Series 2018 B except for project management expenses including contract administration and quality assurance that will be paid by the Authority. Funding of this project by the Division of Highways eliminates a significant capital investment that otherwise would have been required of the Authority.

In conjunction with the issuance of 2018 Senior Lien Bonds, the adoption of the unlimited use single annual fee discount plan for passenger cars, and to provide for projected operation and maintenance expenses, renewal and replacement costs and capital needs and projected debt service on bonds to be issued under the indenture, the Authority adopted toll rate increases that became effective January 15, 2019. The new toll rate schedule increased the previous toll rates by 100% for all classes of vehicles except for vehicles eligible for the discount plan. In addition, the Authority authorized forward-looking automatic toll increases that will begin on January 1, 2022, equal to 1.6% per year.

Operating Expenses

For the year ended June 30, 2020, total operating expenses increased $3.4 million or 3.6%. Depreciation expense increased $2.7 million due to the increasing amount of infrastructure projects being placed in service. General and administrative expenses decreased 9.1% due mainly to administrative costs associated with debt issuance in prior year as no new debt was issued during the current year.

For the year ended June 30, 2019, total operating expenses increased $7.1 million or 8.1%. Depreciation expense increased $3.1 million due to the increasing amount of infrastructure projects being placed in service. Toll collection expenses increased 23.7% due to purchases of supplies and other costs related to the initiation of the single fee discount program and increases in credit card fees associated with increased revenues. General and administrative expenses increased 16.4% due mainly to administrative costs associated with debt issuance.

Non-operating Revenue and Expense

Interest expense decreased 0.9% in 2020 due to the decrease in outstanding debt. Interest expense increased 442.1% in 2019 due to new debt issuance. Net investment revenue has increased 14.8% for 2020 and 201.4% in the prior year due to increases in market interest rates.

CONDENSED STATEMENTS OF NET POSITION INFORMATION
(in Thousands)

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	2020	2019	2018	Change '20 - '19
Current assets	$ 177,299	$ 135,137	$ 75,418	31.2%
Long-term investments	515	2,982	19,770	(82.7)%
Capital assets, net	522,032	471,790	457,290	10.6%
Total assets	699,846	609,909	552,478	14.7%
Deferred outflows	3,039	3,270	3,728	(7.1)%
Total assets plus deferred outflows	$ 702,885	$ 613,179	$ 556,206	14.6%
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION				
Current liabilities	$ 22,044	$ 20,568	$ 21,012	7.2%
Long-term revenue bonds	172,130	176,886	-	(2.7)%
Other long-term liabilities	9,079	11,467	14,236	(20.8)%
Total liabilities	203,253	208,921	35,248	(2.7)%
Deferred inflows	4,504	3,792	3,101	18.8%
Total liabilities plus deferred inflows	207,757	212,713	38,349	(2.3)%
Net position:				
Net investment in capital assets	522,032	471,790	447,418	10.6%
Restricted	145,687	102,227	67,677	42.5%
Unrestricted	(172,591)	(173,551)	2,762	(0.6)%
Total net position	495,128	400,466	517,857	(23.6)%
Total liabilities, deferred inflows and net position	$ 702,885	$ 613,179	$ 556,206	14.6%

Assets

Total cash, current and long-term investments increased $39.9 million due to increased collections as a result of the new toll rate schedule being applicable for the full year. The Authority's cash and investment balances increased by $39.3 million in the year ended June 30, 2019 due to increased collections as a result of the new toll rate schedule.

For the year ended June 30, 2020, net capital assets increased $50.2 million with capital improvements of $96.7 million less depreciation expense of $46.5 million. For the year ended June 30, 2019, net capital assets increased $14.5 million with capital improvements of $58.2 million less depreciation expense of $43.7 million.

Liabilities

For the year ended June 30, 2020, total liabilities and deferred inflows of resources decreased $4.9 million. Current liabilities increased due to the timing of invoices related to infrastructure projects in progress. Payments made on the 2018 bonds contributed to the decrease in long-term debt. Other long-term liabilities decreased due to a decrease in the net pension liability and the other post-employment benefits liability.

The Authority's credit ratings are among the best for similar facilities worldwide. The current agency ratings are as follows:

Agency	Rating
S&P Global Ratings	AA-
Fitch Ratings, Inc.	AA-

CAPITAL ASSETS

The Authority's capital assets consist of land, buildings, equipment and infrastructure. Infrastructure assets are typically items that are immovable such as highways and bridges. The Authority's investment in capital assets at June 30, 2020 amounted to approximately $1.414 billion of gross asset value with accumulated depreciation of approximately $892 million, leaving a net book value of approximately $522 million. Capital assets represented 74.3% of the Authority's total assets and deferred outflows of resources at June 30, 2020. Additional information on the Authority's capital assets can be found in the Note 5 to the financial statements.

LONG-TERM DEBT

In 2018, the Authority issued $166.4 million Senior Lien Turnpike Toll Revenue Bonds which are due in varying installments through June 2048. These bonds were issued to fund off-Turnpike parkway projects. $172 million was deposited into the State Road Construction Account for these purposes.

Additional information on the Authority's long-term liabilities activity can be found in Notes 6, 7, 8, and 9 to the financial statements.

FACTORS IMPACTING FUTURE OPERATIONS

On June 27, 2017 Senate Bill 1003 was enacted giving the Authority the ability to issue bonds for the purpose of funding infrastructure projects as defined in the statute. The legislation created a special revenue account known as the State Road Construction Account within the State Road Fund to be expended by the Division of Highways for construction, maintenance and repair of public highways and bridges in the state. The bill also included new authorizations, requirements and limitations on the Authority's electronic toll collection programs and discounts to the published cash rates. An unlimited use single annual fee discount program for passenger cars utilizing an Authority issued E-ZPass transponder is required under these new provisions.

The Authority issued Senior Lien Turnpike Toll Revenue Bonds Series 2018 in the amount of $166.37 million on August 14, 2018 and deposited $172 million to the State Road Construction account. The proceeds are being used to finance the costs of construction by the Division of Highways for transportation projects located not on the Turnpike but in counties adjacent to the Turnpike. The projects are from a list of projects to be constructed by the Division of Highways under its Roads to Prosperity Program.

As an additional part of the Roads to Prosperity Program, the Division of Highways is currently widening certain sections of the Turnpike north of the I-77/I-64 interchange by adding an additional lane over more than 5 miles each way as well as widening eight bridges and other improvements. The lane-widening project will mainly be funded from proceeds of the State's General Obligation State Road Bonds, Series 2018 A and Series 2018 B except for project management expenses including contract administration and quality assurance that will be paid by the Authority. Funding of this project by the Division of Highways eliminates a significant capital investment that otherwise would have been required of the Authority.

In addition to the bonds issued in 2018, the Roads to Prosperity program will include, among other financing sources, toll revenue bonds to be issued by the Authority over the next few years, to finance transportation projects both on the Turnpike and off the Turnpike in a ten-county area adjacent to the Turnpike.

CONTACTING THE AUTHORITY'S FINANCIAL MANAGEMENT

This financial report is designed to provide our bondholders, patrons, and other interested parties with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the West Virginia Parkways Authority, Director of Finance, P. O. Box 1469, Charleston, West Virginia 25325-1469.

WEST VIRGINIA PARKWAYS AUTHORITY

(A Component Unit of the State of West Virginia)

STATEMENTS OF NET POSITION

June 30, 2020 and 2019
(In Thousands)

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	2019	2018
Current assets:		
Cash and cash equivalents	$ 77,861	$ 32,219
Short-term investments	86,592	89,826
Accounts receivable	7,039	7,441
Accrued interest receivable	37	179
Inventory	5,307	4,891
Other	463	581
Total current assets	177,299	135,137
Noncurrent assets:		
Investments in securities maturing beyond one year	515	2,982
Capital assets, net	522,032	471,790
Total noncurrent assets	522,547	474,772
Total assets	699,846	609,909
Deferred outflows of resources:		
Deferred outflows related to pension	1,812	1,804
Deferred outflows related to other post-employment benefits	1,227	1,466
Total deferred outflows of resources	3,039	3,270
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION		
Current liabilities:		
Accounts payable	10,308	9,161
Accrued interest payable	625	636
Customer deposits	2,608	2,249
Other accrued liabilities	4,460	4,785
Current portion of compensated absences	1,258	1,087
Current portion of long-term revenue bonds	2,785	2,650
Total current liabilities	22,044	20,568
Noncurrent liabilities:		
Noncurrent portion of long-term revenue bonds, net of unamortized premiums:		
Series 2018 revenue bonds	172,130	176,886
	172,130	176,886
Net pension liability	2,294	2,742
Accrued post-employment benefits other than pensions	6,785	8,725
Total noncurrent liabilities	181,209	188,353
Total liabilities	203,253	208,921
Deferred inflows of resources:		
Deferred inflows related to pension	1,498	1,707
Deferred inflows related to other post-employment benefits	3,006	2,085
Total deferred inflows of resources	4,504	3,792
Total liabilities plus deferred inflows of resources	207,757	212,713
Net position:		
Net investment in capital assets	522,032	471,790
Restricted by trust indenture and tri-party agreement	145,687	102,227
Unrestricted (deficit)	(172,591)	(173,551)
Total net position	$ 495,128	$ 400,466

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA PARKWAYS AUTHORITY

(A Component Unit of the State of West Virginia)

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

Years Ended June 30, 2020 and 2019
(In Thousands)

	2020	2019
Operating revenues:		
Toll revenues	$ 154,468	$ 130,910
Other revenues	5,128	7,198
Total operating revenues	159,596	138,108
Operating expenses:		
Maintenance	24,113	22,418
Toll collection	13,875	14,143
Traffic enforcement and communications	4,074	3,967
General and administrative	8,771	9,650
Depreciation	46,472	43,734
Total operating expenses	97,305	93,912
Operating income	62,291	44,196
Nonoperating revenues (expenses):		
Interest expense	(5,648)	(5,697)
Net investment revenue	2,187	1,905
Payments on behalf	411	552
Nonoperating revenues (expenses), net	(3,050)	(3,240)
Change in net position before transfers	59,241	40,956
Transfers out	-	(172,000)
Transfers in	35,421	13,653
Change in net position	94,662	(117,391)
Net position, beginning of year	400,466	517,857
Net position, end of year	$ 495,128	$ 400,466

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA PARKWAYS AUTHORITY

(A Component Unit of the State of West Virginia)

STATEMENTS OF CASH FLOWS

Years Ended June 30, 2020 and 2019
(In Thousands)

	2020	2019
Cash flows from operating activities:		
Cash received from customers and users	$ 159,954	$ 138,177
Cash paid to employees	(30,675)	(25,615)
Cash paid to suppliers	(19,710)	(26,952)
Net cash provided by operating activities	109,569	85,610
Cash flows from noncapital and related financing activities:		
Proceeds from bond issuance	-	184,324
Transfer to West Virginia Division of Highways	-	(172,000)
Debt service for revenue bonds:		
Principal	(2,650)	(2,830)
Interest	(7,630)	(6,195)
Net cash provided by (used in) noncapital and related financing activities	(10,280)	3,299
Cash flows from capital and related financing activities:		
Acquisition of property and equipment	(61,547)	(40,154)
Debt service for revenue bonds:		
Principal	-	(10,285)
Interest	-	(1,046)
Net cash used in capital and related financing activities	(61,547)	(51,485)
Cash flows from investing activities:		
Purchase of investments	(87,674)	(136,081)
Proceeds from sales and maturities of investments	93,387	100,508
Interest from investments	2,187	1,905
Net cash provided by (used in) investing activities	7,900	(33,668)
Increase (decrease) in cash and cash equivalents	45,642	3,756
Cash and cash equivalents, beginning of year	32,219	28,463
Cash and cash equivalents, end of year	$ 77,861	$ 32,219
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	$ 62,291	$ 44,196
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	46,472	43,734
Other post-employment benefits expense - special funding situation	411	552
Change in assets and liabilities:		
(Increase) decrease in accounts receivable	544	(3,775)
(Increase) decrease in inventory	(416)	(773)
(Increase) decrease in other current assets	118	946
(Increase) decrease in deferred outflows of resources	231	(200)
Increase (decrease) in accounts payable and other liabilities	1,594	2,483
Increase (decrease) in deferred inflows of resources	712	848
Increase (decrease) in net pension liability	(448)	(1,873)
Increase (decrease) in accrued post-employment benefits	(1,940)	(528)
Net cash provided by operating activities	$ 109,569	$ 85,610
Noncash transaction		
Donated capital assets	$ 35,421	$ 13,653

The accompanying notes are an integral part of these financial statements.

NOTE 1 - FINANCIAL REPORTING ENTITY

Effective July 1, 2010, the Authority's legal name was changed to the West Virginia Parkways Authority. The West Virginia Parkways Economic Development and Tourism Authority was created as the successor-in-interest to the West Virginia Turnpike Commission (the Turnpike Commission) by the West Virginia Legislature effective June 1, 1989. All the duties, powers, and functions of the Turnpike Commission were transferred to the Authority and the Authority assumed all assets, property, obligations, indebtedness, and other liabilities of the Turnpike Commission and personnel of the Turnpike Commission were transferred to the employment of the Authority. The Authority has the power to enact and amend its own operating budget, and receives no appropriations from the State of West Virginia (the State). The State's Governor or his designee serves as chairman of the Authority and the State's Secretary of Transportation serves as a board member. The other seven Authority members are appointed by the Governor with the approval of the Senate. As the State is able to impose its will over the Authority, the Authority is considered a component unit of the State and its financial statements are discretely presented in the comprehensive annual financial report of the State.

In evaluating how to define the Authority for financial reporting purposes, management has considered all potential component units. The decision to include a potential component unit in the reporting entity is made by applying the criteria set forth in generally accepted accounting principles. Generally accepted accounting principles define component units as those entities which are legally separate governmental organizations for which the appointed members of the Authority are financially accountable, or other organizations for which the nature and significance of their relationship with the Authority are such that exclusion would cause the Authority's financial statements to be misleading. Since no such organizations exist which meet the above criteria, the Authority has no component units.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Authority is accounted for as a government entity engaged in business-type activities. In accordance with Governmental Accounting Standards Board (GASB) Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments,* and accounting principles generally accepted in the United States of America, the financial statements are prepared on the accrual basis of accounting, using the flow of economic resources measurement focus. Under this basis of accounting, revenues are recognized when earned and expenses are recognized when incurred.

The Authority is included in the State's basic financial statements as a business-type activity using the accrual basis of accounting. Because of the Authority's business-type activities, there may be differences between the amounts reported in these financial statements and the basic financial statements of the State as a result of major fund determination.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Continued)

Cash Equivalents

For purposes of the statement of cash flows, the Authority considers all highly liquid investment securities purchased with an original maturity of three months or less to be cash equivalents.

Investments

Investments are reported at fair value as determined by published sources and realized and unrealized gains or losses are reported in the statements of revenues, expenses, and changes in net position as a component of investment income.

Allowance for Doubtful Accounts

It is the Authority's policy to provide for future losses on uncollectible accounts based on an evaluation of the underlying accounts, the historical collectability experienced by the Authority on such balances and such other factors which, in the Authority's judgment, require consideration in estimating doubtful accounts.

As of June 30, 2020 and 2019, management believes that all accounts receivable will be collected; therefore, no allowance for doubtful accounts has been booked.

Inventory

Supplies inventory is reported at cost. Inventory held for resale is valued at the lower of cost (first-in, first-out method) or market.

Capital Assets

Capital assets, which include property, plant, equipment, and infrastructure assets (e.g. roads, bridges, and similar items), are reported at historical cost and include interest on funds borrowed to finance construction. Donated capital assets are recorded at acquisition value. Capital assets are defined by the Authority as assets with an initial, individual cost of more than $30,000 for Turnpike activities and $2,500 for economic development activities and an estimated useful life in excess of one year. Contributed infrastructure assets are stated at the Department of Highways cost basis, adjusted for depreciation occurring from the date the assets were placed in service through the date of transfer of such assets to the Authority. Depreciation is computed using the straight-line method over the following estimated economic useful lives of the assets; buildings (30 years); equipment (5-10 years); and infrastructure (10-50 years).

Deferred Outflow of Resources

A deferred outflow of resources is a consumption of net position by the government that is applicable to a future reporting period.

WEST VIRGINIA PARKWAYS AUTHORITY
(A Component Unit of the State of West Virginia)
NOTES TO FINANCIAL STATEMENTS
Years Ended June 30, 2020 and 2019
(In thousands)

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Continued)

Compensated Absences

Employees fully vest in all earned but unused vacation and the Authority accrues for obligations that may arise in connection with compensated absences for vacation at the current rate of employee pay. To the extent that accumulated sick leave is expected to be converted to benefits on termination or retirement, the Authority participates in another post-employment benefit plan (see Note 8).

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Public Employee Retirement System (PERS) and additions to/deductions from PERS's fiduciary net position have been determined on the same basis as they are reported by PERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Other Post-Employment Benefit (OPEB) Liability

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the State OPEB Plan and additions to/deductions from the OPEB Plan's fiduciary net position have been determined on the same basis as they are reported by West Virginia Retiree Health Benefit Trust Fund (RHBT). For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. See Note 8 for further discussion.

Customer Deposits

Customer deposits consist of prepaid deposits made by personal and commercial customers into E-ZPass® toll collection accounts held by the Authority. Deposits are refundable upon request.

Bond Premiums

Bond premiums are being amortized over the varying terms of the bonds issued. Amortization of the premium is charged to interest expense using the effective interest rate method.

Net Position

Net position represents assets, plus deferred outflows of resources, less liabilities, less deferred inflows of resources. Net investment in capital assets consists of all capital assets less accumulated depreciation and any outstanding debt related to the acquisition, construction or improvement of those assets. Net position is restricted when there are legal limitations imposed on their use by legislation or external restrictions by other governments, creditors, or grantors. When an expense is incurred for purposes for which both restricted and unrestricted net position are available, restricted resources are applied first.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Continued)

Restricted net position consists of amounts restricted by trust indenture and the tri-party agreement that can only be used for maintenance and operation of the Turnpike and for debt service.

Deferred Inflow of Resources

A deferred inflow of resources is an acquisition of net position by the government that is applicable to a future reporting period.

Operating Revenues and Expenses

Operating revenues and expenses are those that result from providing services and producing and delivering goods. Revenues and expenses related to capital and related financing, non-capital financing, or investing activities are not included as operating revenues and expenses. Other items not meeting these definitions are reported as nonoperating revenues and expenses.

Other Revenues

Other revenues primarily consist of concession sales at the travel centers on the West Virginia Turnpike and craft and food sales at the Caperton Center (also known as TAMARACK-*The Best of West Virginia*). The amount of sales reported is net of costs of goods sold. The related general and administrative expenses are included under operating expenses in the statements of revenues, expenses, and changes in net position.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

Reclassifications

Certain amounts in the 2019 financial statements have been reclassified to conform with the 2020 presentation. Such reclassifications had no effect on the 2019 net position or changes in net position.

WEST VIRGINIA PARKWAYS AUTHORITY
(A Component Unit of the State of West Virginia)
NOTES TO FINANCIAL STATEMENTS
Years Ended June 30, 2020 and 2019
(In thousands)

NOTE 3 - DEPOSITS AND INVESTMENTS

All of the Authority's cash on hand is held with outside bank accounts and the West Virginia State Treasurer's Office, totaling approximately $77,861 and $32,219 in 2020 and 2019, respectively.

A reconciliation of the investments disclosed in this Note to the amounts reported in the Statements of Net Position is as follows:

	June 30, 2020	
As disclosed in this Note:		
Total deposits with outside banks	$ 75,805	
Total WV State Treasurer's Office	2,056	
Total WV Short Term Bond Pool	3,579	
Total other investments	83,528	
		$ 164,968
As reported on the Statement of Net Position:		
Cash and cash equivalents	$ 77,861	
Short-term investments	86,592	
Investments in securities maturing beyond one year	515	
		$ 164,968

	June 30, 2019	
As disclosed in this Note:		
Total deposits with outside banks	$ 28,644	
Total WV State Treasurer's Office	3,575	
Total WV Short Term Bond Pool	3,431	
Total other investments	89,377	
		$ 125,027
As reported on the Statement of Net Position:		
Cash and cash equivalents	$ 32,219	
Short-term investments	89,826	
Investments in securities maturing beyond one year	2,982	
		$ 125,027

(In thousands)

NOTE 3 - DEPOSITS AND INVESTMENTS (Continued)

Investment securities are allocated at June 30, 2020 and 2019, among the following restricted and designated accounts created under the various Trust Indentures or by the adoption of Authority resolution:

	June 30 2020	June 30 2019
Restricted and designated assets:		
Assets restricted by 2018 trust indenture		
Turnpike Capital Improvement Fund	$ 106,591	$ 63,272
Renewal and Replacement Reserve Fund	18,800	18,800
Operating and Maintenance Reserve Account	7,606	7,606
Senior Lien Debt Service Reserve Fund	10,648	10,478
Series 2018 Interest and Principal Accounts	1,923	1,865
Other Restrictions		
Insurance liability	1,000	1,000
Patron account	2,608	2,250
Total restricted	149,176	105,271
Non toll revenue fund	4,060	3,097
Total restricted and designated assets as allocated by trust indentures	$ 153,236	$ 108,368

The assets restricted by the 2018 Master Trust Indenture must be used for Turnpike capital costs, renewal and replacement costs, operation and maintenance expenses, and debt service. The Trust Indentures require that the balance in the 2018 Senior Lien Debt Service Reserve Fund equal maximum annual debt service for such bonds. The balance in the 2018 Interest and Principal Accounts are required by the Trust Indentures to have a balance equal to accrued debt service for the current year plus one-twelfth of the debt service which will accrue in the next succeeding fiscal year. The Trust Indentures also require that a reserve be established for Renewal and Replacement that equals the consulting engineer's recommendations for the year. The Operations and Maintenance Account is required by the Trust Indentures to maintain a balance equal to one-sixth of budgeted operating expenses for the fiscal year.

The Reserve Revenue Account, restricted by the Tri-Party Agreement dated December 1988 among the West Virginia Department of Transportation, the Federal Highway Administration, and the Authority, can only be used for maintenance and operation of the Turnpike and for debt service.

The Insurance Liability account is a self-insured fund that covers the Authority against risk of loss from natural disaster, among other items, and is designated as the Authority's percentage of contribution in the event of a disaster.

The Non Toll Revenue Fund is designated to be used for Non Turnpike activities. This balance is included in unrestricted net position on the Statements of Net Position.

NOTE 3 - DEPOSITS AND INVESTMENTS (Continued)

Interest rate risk - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. All of the Authority's investments are subject to interest rate risk. As a means of limiting its exposure to fair value losses resulting from rising interest rates, the Authority's investment policies limit individual securities in the Authority's investment portfolio to remaining maturities of less than five years and the weighted dollar average maturity is capped at three years. As of June 30, 2020 and 2019, respectively, the Authority had the following investments and maturities (in years):

Investment Type (2020)	Fair Value	Less than 1	1 - 5	6 - 10	10+
Government agency bonds	$ 3,031	$ 2,516	$ 515	$ -	$ -
Corporate bonds	3,579	3,579	-	-	-
Mutual funds	80,497	80,497	-	-	-
	$ 87,107	$ 86,592	$ 515	$ -	$ -

Investment Type (2019)	Fair Value	Less than 1	1 - 5	6 - 10	10+
Government agency bonds	$ 22,792	$ 19,810	$ 2,982	$ -	$ -
Corporate bonds	3,431	3,431	-	-	-
Mutual Funds	1,865	1,865	-	-	-
U.S. Treasury notes	42,959	42,959	-	-	-
U.S. Treasury bills	21,761	21,761	-	-	-
	$ 92,808	$ 89,826	$ 2,982	$ -	$ -

Concentration of credit risk - Concentration of credit risk is the risk of loss attributed to the magnitude of the Authority's investment in a single issuer. The Authority's cash deposits with financial institutions were $75,805 and $28,644 at June 30, 2020 and 2019, respectively. These deposits, which had a bank balance of $75,318 and $27,343, respectively, are insured by the Federal Deposit Insurance Corporation and/or collateralized with securities held in the Authority's name by its agent.

As of June 30, 2020, the Authority did not have any investment balances with the any issuers which were greater than or equal to 5% of the Authority's total investment balance.

As of June 30, 2019, the Authority had investment balances with the following issuers which were greater than or equal to 5% of the Authority's total investment balance:

Security Type	Issuer	Percentage of Investments
Government agency bonds	Federal National Mortgage Association	14%
	Federal Home Loan Banks	6%

(In thousands)

NOTE 3 - DEPOSITS AND INVESTMENTS (Continued)

Custodial credit risk - Custodial credit risk of deposits is the risk that in the event of failure of a depository financial institution, the Authority will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. Deposits include nonnegotiable certificates of deposit. None of the Authority's investments contain nonnegotiable certificates of deposit.

Foreign currency risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Authority does not hold any foreign currency or hold any interests in foreign currency.

BTI DISCLOSURE INFORMATION

The BTI has adopted an investment policy in accordance with the "Uniform Prudent Investor Act." The "prudent investor rule" guides those with responsibility for investing the money for others. Such fiduciaries must act as a prudent person would be expected to act, with discretion and intelligence, to seek reasonable income, preserve capital, and, in general, avoid speculative investments. The BTI's investment policy is to invest assets in a manner that strives for maximum safety, provides adequate liquidity to meet all operating requirements, and achieves the highest possible investment return consistent with the primary objectives of safety and liquidity. The BTI recognizes that risk, volatility, and the possibility of loss in purchasing power are present to some degree in all types of investments. Due to the short-term nature of the Consolidated Fund, the BTI believes that it is imperative to review and adjust the investment policy in reaction to interest rate market fluctuations/trends on a regular basis and has adopted a formal review schedule. Investment policies have been established for each investment pool and account of the Consolidated Fund.

WV Short Term Bond Pool:

Credit Risk — The BTI limits the exposure to credit risk in the WV Short Term Bond Pool by requiring all long-term corporate debt to be rated BBB- or higher by Standard & Poor's (or its equivalent) and all short-term corporate debt be rated A-1 or higher by Standard & Poor's (or its equivalent). Mortgage-backed and asset-backed securities must be rated AAA by Standard & Poor's (or its equivalent). The pool must have at least 15% of its assets in U.S. Treasury obligations or obligations guaranteed as to repayment of interest and principal by the United States of America. The following table provides information on the credit ratings of the WV Short Term Bond Pool's investments:

NOTE 3 - DEPOSITS AND INVESTMENTS (Continued)

	Credit Rating		June 30, 2020	
Security Type	Moody's	S&P	Carrying Value	Percent of Pool Assets
U.S. Treasury notes*	Aaa	AA+	$ 121,838	15.04%
U.S. agency collateralized mortgage obligations				
U.S. governmental guaranteed*	Aaa	AA+	20,539	2.54
Non- U.S. governmental guaranteed	Aaa	AA+	15,762	1.95
Corporate fixed- and floating-rate bonds and notes	Aaa	AAA	3,694	0.46
	Aaa	AA+	6,719	0.83
	Aa1	AA	2,565	0.32
	Aa2	AA+	5,181	0.64
	Aa2	AA	5,753	0.71
	Aa2	AA-	6,432	0.79
	Aa2	NR	5,954	0.73
	Aa3	AA+	2,076	0.26
	Aa3	AA-	18,385	2.27
	Aa3	A+	5,759	0.71
	Aa3	A	12,477	1.54
	A1	AA-	7,480	0.92
	A1	A+	30,064	3.71
	A1	A	5,150	0.64
	A1	A-	10,553	1.30
	A1	NR	5,283	0.65
	A2	A+	17,992	2.22
	A2	A	33,012	4.08
	A2	A-	28,326	3.50
	A2	NR	3,100	0.38
	A3	A+	9,595	1.18
	A3	A	9,366	1.16
	A3	A-	28,248	3.49
	A3	BBB+	44,538	5.50
	Baa1	A-	11,726	1.45
	Baa1	BBB+	17,585	2.17
	Baa1	BBB	8,656	1.07
	Baa1	NR	2,132	0.26
	Baa2	A-	10,242	1.26
	Baa2	BBB+	10,361	1.28
	Baa2	BBB	38,950	4.81
	Baa2	BBB-	4,404	0.54
	Baa3	BBB	10,276	1.27
	Baa3	BBB-	25,583	3.16
	Ba1	BBB	2,005	0.25
	Ba1	BBB-	8,289	1.02
	NR	A	6,478	0.80
	NR	AA-	1,817	0.22
	NR	BBB+	4,575	0.56
Collateralized mortgage obligations	NR	AAA	2,668	0.33
Municipal securities	Aaa	AAA	4,060	0.50
	Aa1	AA+	6,475	0.80
	Aa1	AA	8,928	1.10
	Aa1	NR	7,054	0.87
	Aa2	AA	9,872	1.22
	Aa2	AA-	8,337	1.03
	Aa2	NR	3,528	0.44
	NR	AAA	2,618	0.32
	NR	AA+	3,187	0.39
Asset-backed securities	Aaa	AAA	29,701	3.66
	Aaa	NR	40,232	4.97
	Aa1	NR	7,961	0.98
	NR	AAA	38,951	4.81
Money market funds	Aaa	AAAm	7,585	0.94
			$ 810,077	100.00%

NR = Not Rated
* * U.S. Treasury issues and certain U.S. agency collateralized mortgage obligations are explicitly guaranteed by the United States government and are not considered to have credit risk.

NOTE 3 - DEPOSITS AND INVESTMENTS (Continued)

	Credit Rating		June 30, 2019	
Security Type	Moody's	S&P	Carrying Value	Percent of Pool Assets
U.S. Treasury notes*	Aaa	AA+	$ 115,292	15.75%
U.S. agency collateralized mortgage obligations				
U.S. governmental guaranteed*	Aaa	AA+	26,472	3.62
Non- U.S. governmental guaranteed	Aaa	AA+	23,674	3.23
Corporate fixed- and floating-rate bonds and notes	Aaa	AA+	2,147	0.30
	Aa2	AA+	5,024	0.69
	Aa2	AA	5,577	0.76
	Aa2	A+	8,566	1.17
	Aa2	NR	2,784	0.38
	Aa3	AA+	5,042	0.69
	Aa3	AA-	16,616	2.27
	Aa3	A+	13,139	1.80
	Aa3	A	2,765	0.38
	A1	AA-	18,323	2.50
	A1	A+	15,880	2.17
	A1	A	7,426	1.01
	A1	A-	8,612	1.18
	A1	NR	5,223	0.71
	A2	A	19,418	2.65
	A2	A-	24,214	3.31
	A3	A+	8,592	1.17
	A3	A	13,148	1.80
	A3	A-	35,050	4.79
	A3	BBB+	30,732	4.20
	Baa1	A-	6,889	0.94
	Baa1	BBB+	14,806	2.02
	Baa1	BBB	5,213	0.71
	Baa2	A-	6,143	0.84
	Baa2	BBB+	14,524	1.98
	Baa2	BBB	37,277	5.09
	Baa2	BBB-	6,369	0.87
	Baa3	BBB+	1,091	0.15
	Baa3	BBB	9,193	1.26
	Baa3	BBB-	36,044	4.92
	Ba1	BBB	2,013	0.28
	Ba1	BBB-	4,214	0.58
	NR	A	8,761	1.20
	NR	BBB+	2,658	0.36
Collateralized mortgage obligations	NR	AAA	5,958	0.81
Commercial mortgage-backed securities	Aaa	NR	377	0.05
Asset-backed securities	Aaa	AAA	45,739	6.25
	Aaa	NR	75,441	10.31
	NR	AAA	35,020	4.78
Money Market Fund	Aaa	AAAm	523	0.07
			$ 731,969	100.00%

NR = Not Rated

* U.S. Treasury issues and U.S. agency collateralized mortgage obligations are explicitly guaranteed by the United States Government and are not considered to have credit risk.

At June 30, 2020 and 2019, the Authority ownership of approximately $3,579 represents 0.4% and ownership of approximately $3,431 represents 0.5%, respectively, of these amounts held by the BTI.

NOTE 3 - DEPOSITS AND INVESTMENTS (Continued)

Interest Rate Risk **-** Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. All the BTI's Consolidated Fund pools and accounts are subject to interest rate risk.

The overall effective duration of the investments of the WV Short Term Bond Pool is limited to a +/- 20 percent band around the effective duration of the portfolio's benchmark (the ICE BofAML 1-3 US Corporate & Government Index). As of June 30, 2020, the effective duration of the benchmark was 662 days. Maximum effective duration of individual securities cannot exceed 1,827 days (five years) from date of purchase. The following table provides information on the effective duration for the various asset types in the WV Short Term Bond Pool:

	2020		2019	
Security Type	Carrying Value (In Thousands)	Effective Duration (Days)	Carrying Value (In Thousands)	Effective Duration (Days)
Corporate fixed-rate bonds and notes	$ 454,306	641	$ 365,352	847
Corporate floating-rate bonds and notes	16,475	377	38,121	286
Commercial mortgage-backed securities	-	-	377	15
Collateralized mortgage obligations	2,668	752	5,958	752
U.S. Treasury bonds and notes	121,838	773	115,292	816
U.S. agency collateralized mortgage obligations	36,301	366	50,146	976
Municipal securities	54,059	800		
Asset-backed securities	116,845	442	156,200	393
Money market funds	7,585	-	523	-
	$ 810,077	620	$ 731,969	723

Other Investment Risks - Other risks of investing include concentration of credit risk, custodial credit risk, and foreign currency risk.

Concentration of credit risk is the risk of loss attributed to the magnitude of a Consolidated Fund pool or account's investment in a single corporate issuer. The BTI investment policy prohibits those pools and accounts permitted to hold corporate securities from investing more than 5% of their assets in any one corporate name or one corporate issue.

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the BTI will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. Repurchase agreements are required to be collateralized by at least 102% of their value, and the collateral is held in the name of the BTI. The BTI or its agent does not release cash or securities until the counterparty delivers its side of the transaction.

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. None of the Consolidated Fund's investment pools or accounts holds interests in foreign currency or interests valued in foreign currency.

NOTE 4 - FAIR VALUE MEASUREMENTS

The Authority uses fair value measurements of certain assets and liabilities to record fair value adjustments and to determine fair value disclosures. Professional standards establish a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy, as defined below, gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs.

- Level 1 is defined as observable inputs such as quoted prices in active markets for identical assets or liabilities or the publicly available amount at which the asset or liability can be redeemed. Level 1 assets include the Authority's bond investments.

- Level 2 is defined as observable inputs other than Level 1 prices. These include quoted prices for similar assets or liabilities in an active market, quoted prices for identical assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

- Level 3 is defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

Fair values of assets measured on a recurring basis at December 31, are as follows:

Fair Value Measurements at Reporting Date Using

June 30, 2020	Fair Value	Quoted Prices in Active Markets for Identical Assets/Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Government agency bonds	$ 3,031	$ 3,031	$ -	$ -
Corporate bonds	3,579	3,579	-	-
Mutual funds	80,497	80,497	-	-
Total investments at fair value	$ 87,107	$ 87,107	$ -	$ -

June 30, 2019	Fair Value	Quoted Prices in Active Markets for Identical Assets/Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Government agency bonds	$ 22,792	$ 22,792	$ -	$ -
Corporate bonds	3,431	3,431	-	-
Mutual funds	1,865	1,865	-	-
U.S. Treasury notes	42,959	42,959	-	-
U.S. Treasury bills	21,761	21,761	-	-
Total investments at fair value	$ 92,808	$ 92,808	$ -	$ -

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NOTE 5 - CAPITAL ASSETS

A summary of capital assets at June 30 follows:

2020	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, non-depreciable:				
Land	$ 53,247	$ -	$ -	$ 53,247
Construction in process	13,653	35,421	-	49,074
Total non-depreciable capital assets	66,900	35,421	-	102,321
Capital assets, depreciable:				
Buildings	104,285	1,361	-	105,646
Equipment	23,261	3,637	-	26,898
Infrastructure	1,122,739	56,295	-	1,179,034
Total capital assets being depreciated	1,250,285	61,293	-	1,311,578
Less accumulated depreciation for:				
Buildings	(84,439)	(2,605)	-	(87,044)
Equipment	(14,101)	(1,891)	-	(15,992)
Infrastructure	(746,855)	(41,976)	-	(788,831)
Total accumulated depreciation	(845,395)	(46,472)	-	(891,867)
Total depreciable capital assets, net	404,890	14,821	-	419,711
Total capital assets, net	$ 471,790	$ 50,242	$ -	$ 522,032

2019	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, non-depreciable:				
Land	$ 53,247	$ -	$ -	$ 53,247
Construction in process	-	13,653	-	13,653
Total non-depreciable capital assets	53,247	13,653	-	66,900
Capital assets, depreciable:				
Buildings	104,219	66	-	104,285
Equipment	21,816	1,445	-	23,261
Infrastructure	1,079,669	43,070	-	1,122,739
Total capital assets being depreciated	1,205,704	44,581	-	1,250,285
Less accumulated depreciation for:				
Buildings	(81,854)	(2,585)	-	(84,439)
Equipment	(12,459)	(1,642)	-	(14,101)
Infrastructure	(707,348)	(39,507)	-	(746,855)
Total accumulated depreciation	(801,661)	(43,734)	-	(845,395)
Total depreciable capital assets, net	404,043	847	-	404,890
Total capital assets, net	$ 457,290	$ 14,500	$ -	$ 471,790

There was no interest cost capitalized during the years ended June 30, 2020 and 2019, respectively.

(In thousands)

NOTE 6 - REVENUE BONDS PAYABLE

Revenue bonds payable consisted of the following at June 30:

	2020	2019
Series 2018 Senior Lien Turnpike Toll Revenue Bonds, issued $166,370 in August 2018 at 3.75% to 5.00%, due in varying installments from June 2019 through June 2048	$ 160,710	$ 163,360
Total revenue bonds payable	160,710	163,360
Add:		
Unamortized premium	14,205	16,176
Less:		
Current portion of revenue bonds payable	(2,785)	(2,650)
Total long term revenue bonds payable	$ 172,130	$ 176,886

The Revenue Bonds under the 1993, 2002, 2003, 2008, and 2018 Trust Indentures are secured by a pledge of the Authority's toll revenues and all monies deposited into accounts created by the Trust Indentures. Total debt service was $10,280, $9,025, and $10,140, for the years ended June 30, 2020, 2019, and 2018, respectively. Total net pledged revenues were approximately $112,627, $88,866, and $57,766, which represents 1,095.59%, 984.67%, and 569.68% of the total debt service, respectively, for the years ended June 30, 2020, 2019, and 2018.

In 2002, $44,205 of Revenue Refunding Bonds were issued for the express purpose of defeasing $36,036 of Series 1993 Bonds. The advance refunding resulted in a $6,313 deferred loss arising from the difference between the reacquisition price and the net carrying amount of the refunded debt. Amortization of this deferral, charged annually to interest expense through 2020, approximated $0 and $371 in 2020 and 2019, respectively. The Authority completed the advance refunding to reduce its aggregate debt service payments by almost $3,003 over an 18-year period (life of the refunding bonds) and obtain an economic gain (difference between the present values of the old and new debt service payments) of $1,624. These bonds were paid off in 2019.

In July 2008, the Authority issued $59,100 of Variable Rate Demand Revenue Refunding Bonds for the express purpose of refunding $59,100 of the Authority's Series 2003 Bonds. This refunding resulted in a $5,972 deferred loss arising from the difference between the reacquisition price and the net carrying amount of the refunded debt. Amortization of this deferral, charged annually to interest expense through 2020, approximated $0 and $569 in 2020 and 2019, respectively. The Authority completed the refunding to remove the requirement for bond insurance that was included in the Series 2003 Bonds.

In July 2011, the Authority converted the Series 2008 Variable Rate Demand Revenue Refunding Bonds to a LIBOR Index rate and placed the bonds with a direct purchaser. The supplemental indenture established eight distinct registered bonds in principal amounts identical to the principal maturity schedule prior to the conversion. The Indenture establishes an applicable factor ranging from 67% to 82% of the one-month LIBOR Index with an additional spread ranging from 70 to 110 basis points on each bond. The Interest Rate Swap associated with the Series 2008 Variable Rate Bonds was amended to relate to the new index rate bonds under substantially similar terms. These bonds were paid off in 2019.

NOTE 6 - REVENUE BONDS PAYABLE (Continued)

In accordance with West Virginia Law and the Authority's Master Trust Indenture dated August 1, 2018, the Authority has issued Series 2018 Senior Lien revenue bonds payable solely from, and secured solely by a first lien on and pledge of the Trust Estate, consisting of Net Toll Road Revenues, amounts on deposit in certain Funds and Accounts created pursuant to and pledged by the Indenture and other property conveyed, pledged, assigned or transferred as and for additional security. Toll Road Revenues include tolls, certain interest income, insurance proceeds, condemnation awards, other amounts derived from or with respect to the operation of the Turnpike, and other additional revenues added to the Turnpike. Concession revenues and other revenues derived from the operation or use of service plazas, tourist information centers including Tamarack are excluded from Toll Road Revenues.

Under the terms of the Trust Agreement, the Authority covenants to establish, charge and collect tolls for the privilege of traveling on the Turnpike at rates sufficient in each fiscal year to meet operation and maintenance expenses and produce net toll road revenues of at least 125% of the annual debt service with respect to the Series 2018 Senior Lien Bonds and all other outstanding Senior Lien Bonds issued under the indenture and 100% of the sum of required annual debt service plus the renewal and replacement reserve fund requirement.

The Authority will uphold the Senior Lien Debt Service Reserve Fund Requirement which is to maintain a fund equal to the maximum annual debt service on the Series 2018 Senior Lien Bonds. The Authority has covenanted to maintain funds in its Operation and Maintenance Fund equal to one-sixth of the amount recommended by its Consulting Engineers as the operation and maintenance expenses for its current fiscal year as included in the Authority's annual budget. Also, the Authority will fund its Renewal and Replacement Reserve Fund Requirement in an annual amount equal to the amount recommended by its Consulting Engineers as the Renewal and Replacement Costs for its current fiscal year as included in the Authority's annual budget.

The Authority has covenanted, at all times, to operate or cause the Turnpike to be operated, in an efficient manner and at a reasonable cost, to maintain, preserve and keep, or cause to be maintained preserved and kept, in good repair, working order and condition, and that its consulting Engineers shall make a physical examination and inspection of the Turnpike each year and submit an annual report regarding the condition of the Turnpike and whether compliance with covenants under the Indenture related to the efficient management and maintenance of the Turnpike has been maintained.

In August 2018, the Authority issued $166.4 million Senior Lien Turnpike Toll Revenue Bonds which are due in varying installments through June 2048. These bonds were issued to fund off-Turnpike parkway projects. $172 million was deposited into the State Road Construction Account for these purposes.

(In thousands)

NOTE 6 - REVENUE BONDS PAYABLE (Continued)

Bonds Payable Progression and Maturities

The following schedule summarizes the revenue bonds outstanding as of June 30:

2020	Beginning Balance	Additions	Retired	Amortization	Ending Balance	Due Within One Year
Series 2018	$ 179,536	$ -	$ (2,650)	$ (1,971)	$174,915	$ 2,785
	$ 179,536	$ -	$ (2,650)	$ (1,971)	$174,915	$ 2,785

2019	Beginning Balance	Additions	Retired	Amortization	Ending Balance	Due Within One Year
Series 2002	$ 3,673	$ -	$ (3,585)	$ (88)	$ -	$ -
Series 2008	6,700	-	(6,700)	-	-	-
Series 2018	-	184,144	(2,830)	(1,778)	179,536	2,650
	$ 10,373	$184,144	$ (13,115)	$ (1,866)	$179,536	$ 2,650

Debt service requirements for the Revenue Bonds subsequent to June 30, 2020, are as follows:

Year Ending June 30,	Principal Maturities	Interest	Total
2021	$ 2,785	$ 7,497	$ 10,282
2022	2,925	7,358	10,283
2023	3,070	7,212	10,282
2024	3,225	7,058	10,283
2025	3,385	6,897	10,282
2026 - 2030	19,640	31,770	51,410
2031 - 2035	25,060	26,345	51,405
2036 - 2040	31,855	19,551	51,406
2041 - 2045	40,345	11,057	51,402
2046-2048	28,420	2,244	30,664
Total	$ 160,710	$ 126,989	$ 287,699

Principal outstanding June 30, 2020	
Add:	$ 160,710
Unamortized premium	14,205
Less:	
Current portion of revenue bonds payable	(2,785)
Long-term portion	$ 172,130

NOTE 6 - REVENUE BONDS PAYABLE (Continued)

The Revenue Bonds are subject to the arbitrage rebate provisions of the Internal Revenue Code (the Code). The Code requires that 90% of excess investment earnings on the Bond proceeds be paid to the Internal Revenue Service every five years in order for the Bonds to maintain their tax-exempt status. At June 30, 2020 and 2019, the Authority's estimated arbitrage rebate liability was zero.

NOTE 7 - PENSION PLAN

Plan Description

The Authority contributes to the West Virginia Public Employees Retirement System (PERS), a cost-sharing multiple-employer defined benefit pension plan administered by the West Virginia Consolidated Public Retirement Board (CPRB). PERS provides retirement benefits as well as death and disability benefits. CPRB issues a publicly available financial report that includes financial statements and required supplemental information for PERS. That report can be obtained by writing to CPRB, 4101 MacCorkle Avenue, SE, Charleston, West Virginia 25304-1636 or by calling (304) 558-3570.

Benefits Provided

Benefits are provided through PERS using a two-tiered system. Effective July 1, 2015, PERS implemented the second tier, Tier II. Employees hired, for the first time, on or after July 1, 2015 are considered Tier II members. Tier I and Tier II members are subject to different regulations.

Tier I: Employees who retire at or after age 60 with five or more years of credited service, or at least age 55 with age and service equal to 80 years or greater, are entitled to a retirement benefit established by State statute, payable monthly for life, in the form of a straight-life annuity equal to two percent of the employee's final average salary multiplied by years of service. Final average salary is the average of the highest annual compensation received by an employee during any period of three consecutive years of credited service included within fifteen years of credited service immediately preceding the termination date of employment with a participating public employer. Terminated members with at least five years of contributory service who do not withdraw their accumulated contributions may elect to receive their retirement annuity beginning at age 62.

Tier II: Employees who retire at or after age 62 with ten or more years of credited service are entitled to a retirement benefit established by State statute, payable monthly for life, in the form of a straight-life annuity equal to two percent of the employee's final average salary multiplied by years of service. Final average salary is the average of the highest annual compensation received by an employee during any period of five consecutive years of credited service included within fifteen years of credited service immediately preceding the termination date of employment with a participating public employer. Terminated members with at least ten years of contributory service who do not withdraw their accumulated contributions may elect to receive their retirement annuity beginning at age 64.

NOTE 7 - PENSION PLAN (Continued)

Contributions

While contribution rates are legislatively determined, actuarial valuations are performed to assist PERS and the State Legislature in determining contribution rates. Current funding policy requires employer contributions of 10%, 10%, and 11% for the years ended June 30, 2020, 2019, and 2018, respectively. The employee contribution rate is 4.5% and 6.0% for Tier I and Tier II employees, respectively. The Authority's contribution to the Plan, excluding the employee's contribution paid by the covered employees, approximated $1,701, $1,597, and $1,619 for the fiscal years ended June 30, 2020, 2019, and 2018, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2020 and 2019, the Authority reported a liability of $2,294 and $2,742, respectively for its proportionate share of the net pension liability. The June 30, 2020 net pension liability was measured as of June 30, 2019 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2018, rolled forward to the measurement date of June 30, 2019. The June 30, 2019 net pension liability was measured as of June 30, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017, rolled forward to the measurement date of June 30, 2018. The Authority's proportion of the net pension liability was based on a projection of the Authority's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. At June 30, 2019, the Authority's proportionate share was 1.07%, which was an increase of .01% from its proportionate share measured as of June 30, 2018. At June 30, 2018, the Authority's proportionate share was 1.06%, which was a decrease of .01% from its proportionate share measured as of June 30, 2017.

For the years ended June 30, 2020 and 2019, the Authority recognized pension expense of $1,009 and $298, respectively. At June 30, 2020 and 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	June 30, 2020	
	Deferred Outflows of Resources	Deferred Inflows of Resource
Net difference between projected and actual earnings on pension plan investments	$ -	$ 829
Difference between expected and actual experience	89	201
Changes of assumptions	-	421
Changes in proportion and differences between Authority's contributions and proportionate share of contributions	22	47
Authority's contributions subsequent to the measurement date	1,701	-
Total	$ 1,812	$ 1,498

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NOTE 7 - PENSION PLAN (Continued)

	June 30, 2019	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual earnings on pension plan investments	$ -	$ 1,613
Difference between expected and actual experience	136	7
Changes of assumptions	-	-
Changes in proportion and differences between Authority's contributions and proportionate share of contributions	71	87
Authority's contributions subsequent to the measurement date	1,597	-
Total	$ 1,804	$ 1,707

The Authority reported $1,701 as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date that will be recognized as a reduction of the net pension liability in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	
2021	$ (237)
2022	(1,161)
2023	(229)
2024	240
	$ (1,387)

Actuarial assumptions and methods

The total pension liability in the June 30, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods in the measurement:

Inflation	3.0%
Salary increases	3.1% - 6.5%, average, including inflation
Investment rate of return	7.5%, net of pension plan investment expense

Mortality rates were based on 100% of Pub-2010 General Employees table, below-median, headcount weighted, projected with scale MP-2018 for active members; 108% of Pub-2010 General Retiree Male table, below-median, headcount weighted, projected with scale MP-2018 for retired healthy males; 122% of Pub-2010 Annuitant Scale AA fully generational General Retiree Female table, below-median, headcount weighted, projected with scale MP-2018 for retired healthy females, 118% of Pub-2010 General/Teachers Disabled Male table, below-median, headcount weighted, projected with scale MP-2018 for disabled males, and 118% of Pub-2010 General/Teachers Disabled Female table, below-median, headcount weighted, projected with scale MP-2018 for disabled females.

NOTE 7 - PENSION PLAN (Continued)

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period July 1, 2013 through June 30, 2018.

The total pension liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods in the measurement:

Inflation	3.0%
Salary increases	3.0 - 6.0%, average, including inflation
Investment rate of return	7.5%, net of pension plan investment expense

Mortality rates were based on 100% of RP-2000 Non-Annuitant, Scale AA fully generational for active members, 110% of RP-2000 Healthy Annuitant, Scale AA fully generational for retired healthy males, 101% of RP-2000 Healthy Annuitant, Scale AA fully generational for retired healthy females, 96% of RP-2000 Disabled Annuitant, Scale AA fully generational for disabled males, and 107% of RP-2000 Disabled Annuitant, Scale AA fully generational for disabled females.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period July 1, 2009 through June 30, 2014.

Long-term expected rates of return - The long-term rates of return on pension plan investments were determined using a building-block method in which estimates of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentages and by adding expected inflation. The target allocation and best estimates of long-term geometric rates of return for each major asset class as of June 30, 2019 and 2018, are summarized below:

June 30, 2019

Asset Class	Long-term Expected Real Rate of Return	Target Allocation	Weighted Average Expected Real Rate of Return
Domestic equity	5.8%	27.5%	1.60%
International equity	7.7%	27.5%	2.12%
Fixed income	3.3%	15.0%	0.50%
Real estate	6.1%	10.0%	0.61%
Private equity	8.8%	10.0%	0.88%
Hedge funds	4.4%	10.0%	0.44%
Total		100.0%	6.15%
Inflation (CPI)			2.00%
			8.15%

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NOTE 7 - PENSION PLAN (Continued)

June 30, 2018

Asset Class	Long-term Expected Real Rate of Return	Target Allocation	Weighted Average Expected Real Rate of Return
Domestic equity	4.5%	27.5%	1.24%
International equity	8.6%	27.5%	2.37%
Fixed income	3.3%	15.0%	0.50%
Real estate	6.0%	10.0%	0.60%
Private equity	6.4%	10.0%	0.64%
Hedge funds	4.0%	10.0%	0.40%
Total		100.0%	5.75%
Inflation (CPI)			2.10%
			7.85%

Discount rate

The discount rate used to measure the total pension liability was 7.5%. The projections of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that employer contributions from employers will continue to be made at statutorily required rates, which are determined annually based on actuarial valuations. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rates of return on pension plan investments were applied to all periods of projected benefit payments to determine the total pension liability. Although discount rates are subject to change between measurement dates, there were no changes in the discount rate in the current period.

Sensitivity of the Authority's proportionate share of the net pension liability to changes in the discount rate - The following table presents the Authority's proportionate share of the net pension liability calculated using the current discount rate of 7.5% as well as the Authority's proportionate share of the net pension liability if it were calculated using a discount rate that is one-percentage-point lower or one-percentage-point higher than the current rate.

	Total Net Pension Asset (Liability)		
	1% Decrease 6.5%	Discount Rate 7.5%	1% Increase 8.5%
Net Pension Liability 2020	$ (10,687)	$ (2,294)	$ 4,805
Net Pension Liability 2019	$ (11,041)	$ (2,742)	$ 4,280

(In thousands)

NOTE 7 - PENSION PLAN (Continued)

Pension plan fiduciary net position - Detailed information about the pension plan's fiduciary net position is available in the separately issued PERS financial report available at the Consolidated Public Retirement Board's website at www.wvretirement.com.

NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS

As related to the implementation of GASB 75, following are the Authority's net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, revenues, and the OPEB expense and expenditures for the fiscal year ended June 30, 2020 and 2019:

	2020	2019
Net OPEB liability	$ 6,785	$ 8,725
Deferred outflows of resources	1,227	1,466
Deferred inflows of resources	3,006	2,085
Revenues	411	552
OPEB expense	98	897
Contributions made by the Authority	763	880

Plan Description

The West Virginia Other Post-employment Benefit (OPEB) Plan (the Plan) is a cost-sharing, multiple employer, defined benefit other postemployment benefit plan and covers the retirees of State agencies, colleges and universities, county boards of education, and other government entities as set forth in the West Virginia Code. Financial activities of the Plan are accounted for in the West Virginia Retiree Health Benefit Trust Fund (RHBT), a fiduciary fund of the State established July 1, 2006 as an irrevocable trust. The Plan is administered by a combination of the West Virginia Public Employees Insurance Agency (PEIA) and the RHBT staff. Plan benefits are established and revised by PEIA and the RHBT management with the approval of the PEIA Finance Board. The plan provides medical and prescription drug insurance, as well as life insurance, benefits to certain retirees of State agencies, colleges and universities, county boards of education, and other government entities who receive pension benefits under the PERS, STRS, TDCRS, TIAA-CREF, Plan G, Troopers Plan A, or Troopers Plan B pension systems, as administered by the West Virginia Consolidated Public Retirement Board (CPRB). The plan is closed to new entrants.

The Plan's fiduciary net position has been determined on the same basis used by the Plan. The RHBT is accounted for as a fiduciary fund, and its financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting in conformity with GAAP for fiduciary funds as prescribed or permitted by the GASB. The primary sources of revenue are plan members and employer contributions. Members' contributions are recognized in the period in which the contributions are due. Employer contributions and related receivables to the trust are recognized pursuant to a formal commitment from the employer or statutory or contractual requirement, when there is a reasonable expectation of collection. Benefits and refunds are recognized when due and payable.

NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS (Continued)

RHBT is considered a component unit of the State of West Virginia for financial reporting purposes, and, as such, its financial report is also included in the State of West Virginia's Comprehensive Annual Financial Report. RHBT issues publicly available financial statements and required supplementary information for the OPEB plan. Details regarding this plan and a copy of the RHBT financial report may be obtained by contacting PEIA at 601 57th Street SE, Suite 2, Charleston, West Virginia 25304-2345, or by calling (888) 680-7342.

Benefits Provided

The Plan provides the following benefits:

- Medical and prescription drug insurance
- Life insurance

The medical and prescription drug insurance is provided through two options:

- Self-Insured Preferred Provider Benefit Plan - primarily for non-Medicare-eligible retirees and spouses
- External Managed Care Organizations - primarily for Medicare-eligible retirees and spouses

Contributions

Employer contributions from the RHBT billing system represent what the employer was billed during the respective year for its portion of the pay-as-you-go (paygo) premiums, retiree leave conversion billings, and other matters, including billing adjustments.

Paygo premiums are established by the PEIA Finance Board annually. All participating employers are required by statute to contribute this premium to the RHBT at the established rate for every active policyholder per month. The paygo rates related to the measurement date of June 30, 2019 and 2018 were:

	2019	2018
Paygo premium	$ 183	$ 177

Members retired before July 1, 1997 pay retiree healthcare contributions at the highest sponsor subsidized rate, regardless of their actual years of service. Members retired after July 1, 1997 or hired before June 30, 2010 pay a subsidized rate depending on the member's years of service. Members hired on or after July 1, 2010 pay retiree healthcare contributions with no sponsor provided implicit or explicit subsidy.

(In thousands)

NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS (Continued)

Retiree leave conversion contributions from the employer depend on the retiree's date of hire and years of service at retirement as described below:

- Members hired before July 1, 1988 may convert accrued sick or annual leave days into 100% of the required retiree healthcare contribution.
- Members hired from July 1, 1988 to June 30, 2001 may convert accrued sick or annual leave days into 50% of the required retiree healthcare contribution.

The conversion rate is two days of unused sick and annual leave days per month for single healthcare coverage and three days of unused sick and annual leave days per month for family healthcare coverage.

The Authority's contributions to the OPEB plan for the years ended June 30, 2020, 2019, and 2018, were $763, $880 and $904, respectively.

Assumptions

The June 30, 2020 OPEB liability for financial reporting purposes was determined by an actuarial valuation as of July 1, 2018 and rolled forward to June 30, 2019. The following actuarial assumptions were used and applied to all periods included in the measurement, unless otherwise specified:

- Inflation rate: 2.75%.
- Wage inflation rate: 4.00%.
- Investment rate of return: 7.15%, net of OPEB plan investment expense, including inflation.
- Asset valuation method: Investments are reported at fair (market) value.
- Actuarial cost method: Entry age normal cost method.
- Amortization method: Level percentage of payroll over a 20-year closed period.
- Projected salary increases: Dependent upon pension system ranging from 3.0-6.5%, including inflation.
- Retirement age: Experience-based table of rates that are specific to the type of eligibility condition.
- Aging factors: Based on the 2013 SOA Study "Health Care Costs - From Birth to Death."
- Mortality rates based on RP-2000 Mortality Tables.
- Healthcare cost trend rates: Trend rate for pre-Medicare per capita costs of 8.5% for plan year end 2020, decreasing by 0.5% each year thereafter, until ultimate trend rate of 4.5% is reached in plan year 2028. Trend rate for Medicare per capita costs of 3.1% for plan year end 2020. 9.5% for plan year end 2021, decreasing by 0.5% each year thereafter, until ultimate trend rate of 4.5% is reached in plan year end 2031.
- Expenses: Health administrative expenses are included in the development of the per capita claims cost. Operating expenses are included as a component of the annual expense.

Experience studies are performed at least once in every five-year period. The most recent experience study covered the period from July 1, 2010 to June 30, 2015. These assumptions will remain in effect for valuation purposes until such time as the RHBT adopts revised assumptions.

NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS (Continued)

Certain assumptions have been changed since the prior actuarial valuation of June 30, 2017 and a measurement date of June 30, 2019. The net effect of assumptions changes to the State OPEB plan was approximately $236 million. The assumption changes that most significantly impacted the total OPEB liability were an approximate $11.8 million decrease in the per capita claims costs for Pre-Medicare and Medicare, as well as an approximate $224.2 million decrease due to capped subsidy costs implemented in December 2019. Certain other assumption changes were noted but did not materially impact the total OPEB liability.

The long-term expected rate of return of 7.15% on OPEB plan investments was determined by a combination of an expected long-term rate of return of 7.50% for long-term assets invested with the WV Investment Management Board and an expected short-term rate of return of 3.00% for assets invested with the BTI.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage. Target asset allocations, capital market assumptions (CMA), and a 10-year forecast of nominal geometric returns by major asset class were provided by the plan's investment advisors, including the West Virginia Investment Management Board (WV-IMB). The projected nominal return for the Money Market Pool held with the BTI was estimated based on the WV-IMB assumed inflation of 2.0% plus a 25 basis point spread.

The target allocation and estimates of annualized long-term expected returns assuming a 10-year horizon are summarized below:

Asset Class	Target Allocation	Long-term Expected Real Return
Global equity	49.5%	4.8%
Core plus fixed income	13.5%	2.1%
Core real estate	9.0%	4.1%
Hedge fund	9.0%	2.4%
Private equity	9.0%	6.8%
Cash and cash equivalents	10.0%	0.3%

Real returns by asset class, as shown in the above tables, were estimated using a static inflation assumption of 2.0%. Consequently, real returns may not reflect the potential volatility of inflation by asset class.

(In thousands)

NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS (Continued)

Single discount rate - A single discount rate of 7.15% was used to measure the total OPEB liability. This single discount rate was based on the expected rate of return on OPEB plan investments of 7.15% and a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date to the extent benefits are effectively financed on a pay-as-you-go basis. The long-term municipal bond rate used to develop the single discount rate was 3.62% as of the beginning of the year and 3.13% as of the end of the year. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made in accordance with the prefunding and investment policies. Future pre-funding assumptions include a $30 million annual contribution from the State through 2037. Based on those assumptions, and that the Plan is expected to be fully funded by fiscal year ended June 30, 2033, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability. Discount rates are subject to change between measurement dates. The discount rate used to measure the total OPEB liability did not change from the June 30, 2018 valuation from the June 30, 2017 valuation.

Sensitivity of the net OPEB liability to changes in the discount rate **-** The following presents the Authority's proportionate share of the net OPEB liability as of June 30, 2020 and 2019 calculated using the discount rate of 7.15%, as well as what the Authority's net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.15%) or one percentage point higher (8.15%) than the current rate.

	1% Decrease (6.15%)	Current Discount Rate (7.15%)	1% Increase (8.15%)
Net OPEB liability 2020	$ 8,098	$ 6,785	$ 5,687
Net OPEB liability 2019	$ 10,254	$ 8,725	$ 7,450

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rate - The following presents the Authority's proportionate share of the net OPEB liability as of June 30, 2020 and 2019 calculated using the healthcare cost trend rate, as well as what the Authority's net OPEB liability would be if it were calculated using a healthcare cost trend rate that is one percentage point lower or one percentage point higher than the current rate.

	1% Decrease	Current Healthcare Cost Trend Rate	1% Increase
Net OPEB liability 2020	$ 5,471	$ 6,785	$ 8,380
Net OPEB liability 2019	$ 7,219	$ 8,725	$ 10,559

NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS (Continued)

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

The June 30, 2020 net OPEB liability was measured as of June 30, 2019, and the total OPEB liability was determined by an actuarial valuation as of June 30, 2018, rolled forward to the measurement date of June 30, 2019. The June 30, 2019 net OPEB liability was measured as of June 30, 2018, and the total OPEB liability was determined by an actuarial valuation as of June 30, 2017, rolled forward to the measurement date of June 30, 2018.

At June 30, 2020, the Authority's proportionate share of the net OPEB liability was $8,174. Of this amount, the Authority recognized $6,785 as its proportionate share on the statement of net position. The remainder of $1,389 denotes the Authority's proportionate share of net OPEB liability attributable to the special funding. At June 30, 2019, the Authority's proportionate share of the net OPEB liability was $10,528. Of this amount, the Authority recognized $8,725 as its proportionate share on the statement of net position. The remainder of $1,803 denotes the Authority's proportionate share of net OPEB liability attributable to the special funding.

The allocation percentage assigned to each participating employer and non-employer contributing entity is based on its proportionate share of employer and non-employer contributions to OPEB for each of the fiscal years ended June 30, 2019 and 2018. Employer contributions are recognized when due. At the June 30, 2019 measurement date, the Authority's proportion was 0.409%, an increase of 0.002% from its proportion of 0.407% calculated as of June 30, 2018. At the June 30, 2018 measurement date, the Authority's proportion was 0.407%, an increase of 0.031% from its proportion of 0.376% calculated as of June 30, 2017.

For the year ended June 30, 2020, the Authority recognized OPEB expense of $98. Of this amount, ($313) was recognized as the Authority's proportionate share of OPEB expense and $411 as the amount of OPEB expense attributable to special funding from a non-employer contributing entity. The Authority also recognized revenue of $411 for support provided by the State. For the year ended June 30, 2019, the Authority recognized OPEB expense of $897. Of this amount, $345 was recognized as the Authority's proportionate share of OPEB expense and $552 as the amount of OPEB expense attributable to special funding from a non-employer contributing entity. The Authority also recognized revenue of $552 for support provided by the State.

NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS (Continued)

At June 30, 2020 and 2019, deferred outflows of resources and deferred inflows of resources related to OPEB are as follows.

	June 30, 2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual non-investment experience	$ -	$ 791
Changes in proportion and differences between employer contributions and proportionate share of contributions	462	583
Net difference between projected and actual investment earnings	-	73
Changes in assumptions	-	1,376
Reallocation of opt-out employer change in proportionate share	2	183
Contributions after the measurement date	763	-
Total	$ 1,227	$ 3,006

	June 30, 2019	
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual non-investment experience	$ -	$ 129
Changes in proportion and differences between employer contributions and proportionate share of contributions	586	923
Net difference between projected and actual investment earnings	-	162
Changes in assumptions	-	871
Contributions after the measurement date	880	-
Total	$ 1,466	$ 2,085

The Authority will recognize the $763 reported as deferred outflows of resources resulting from OPEB contributions after the measurement date as a reduction of the net OPEB liability in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Fiscal Year Ended June 30:	Amortization
2021	$ (982)
2022	(979)
2023	(590)
2024	9
	$ (2,542)

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NOTE 8 - OTHER POST-EMPLOYMENT BENEFITS (Continued)

Payables to the OPEB Plan

The Authority did not report any amounts payable for normal contributions to the OPEB plan as of June 30, 2020 and 2019.

NOTE 9 - NONCURRENT LIABILITIES

The following is a summary of long-term obligation transactions for the Authority for the years ended June 30:

	2020				
	Beginning Balance	Additions	Reductions	Ending Balance	Current Portion
OPEB liability	$ 8,725	$ -	$ (1,940)	$ 6,785	$ -
Net pension liability	2,742	1,217	(1,665)	2,294	-
Total noncurrent liabilities	$ 11,467	$ 1,217	$ (3,605)	$ 9,079	$ -

	2019				
	Beginning Balance	Additions	Reductions	Ending Balance	Current Portion
OPEB liability	$ 9,253	$ 931	$ (1,459)	$ 8,725	$ -
Net pension liability	4,615	298	(2,171)	2,742	-
Total noncurrent liabilities	$ 13,868	$ 1,229	$ (3,630)	$ 11,467	$ -

NOTE 10 - LEASES

The Authority leases certain facilities and service areas to third party businesses under operating lease agreements. The cost of the facilities and service areas were $38,188 at June 30, 2020 and 2019. Accumulated depreciation on the facilities and service areas was $32,418 and $30,016 at June 30, 2020 and 2019, respectively.

The Authority receives both guaranteed payments and contingent payments under the leases. Aggregate rental income from the lease agreements was approximately $2,444 and $3,147 for the years ended June 30, 2020 and 2019, respectively. Total contingent rental income received was approximately $1,677 and $2,380 for the years ended June 30, 2020 and 2019, respectively. Future minimum rentals to be received during the year ended June 30, 2021 are $383.

NOTE 11 - RISK MANAGEMENT

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to and illnesses of employees; and natural disasters.

The Authority has obtained coverage for job-related injuries of employees and health coverage for its employees from a commercial insurer, and the West Virginia Public Employees Insurance Agency (PEIA). In exchange for the payment of premiums to PEIA and the commercial insurer, the Authority has transferred its risks related to health coverage for employees and job-related injuries of employees.

The Authority, for an annual premium, obtains insurance coverage for general liability, property damage, business interruption, errors and omissions, and natural disasters through the West Virginia Board of Risk and Insurance Management, a public risk pool entity insuring the State of West Virginia, its component units, local government entities, and eligible not-for-profit organizations. Liability coverage provided to all insured entities under this policy is limited to $1,000 per occurrence, subject to an annual aggregate limit of coverage of $22,000. To further reduce its risk of loss, the Authority, for an annual premium paid to a commercial insurer, has obtained an additional liability policy which provides coverage of $10,000 over and above the coverage provided by the West Virginia Board of Risk and Insurance Management. For the fiscal years ended June 30, 2020, 2019, and 2018, the Authority's insurance coverage has been sufficient to meet all claims and settlements against the Authority.

NOTE 12 - COMMITMENTS AND CONTINGENCIES

Litigation

The Authority is a defendant in certain legal proceedings pertaining to matters incidental to routine operations. Based on the current status of these legal proceedings, it is the opinion of Authority management and counsel that the ultimate resolution of these matters will not have a material effect on the Authority's financial position.

Construction Commitments

At June 30, 2020, the Authority had contractual commitments totaling $30,267 for various Turnpike System improvement projects. Subsequent to June 30, 2020, the Authority entered into additional contractual commitments totaling $3,609.

NOTE 13 - ACCOUNTING PRONOUNCEMENTS

Newly Adopted Statements Issued by the Governmental Accounting Standards Board

The Authority implemented GASB Statement No. 90, *Majority Equity Interests*, which is effective for fiscal years beginning after December 15, 2019. The requirements of this Statement will improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and will improve the relevance of financial statement information for certain component units. This Statement also provides guidance for reporting a component unit if a government acquires a 100% equity interest in that component unit. An equity interest is a financial interest in a legally separate organization evidenced by the ownership of shares of the organization's stock or by otherwise having an explicit, measurable right to the net resources of the organization that is usually based on an investment of financial or capital resources by a government. An equity interest is explicit and measurable if the government has a present or future claim to the net resources of the entity and the method for measuring the government's share of the entity's net resources is determinable. The adoption of GASB Statement No. 90 had no impact on the June 30, 2020 financial statements.

The Authority implemented GASB Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance,* which is effective immediately. The primary objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. That objective is accomplished by postponing for one year the effective dates of certain provisions in Statements and Implementation Guides that first became effective or are scheduled to become effective for periods beginning after June 15, 2018, and later. Providing governments with sufficient time to apply the authoritative guidance addressed in this Statement will help to safeguard the reliability of their financial statements, which in turn will benefit the users of those financial statements. The adoption of GASB Statement No. 95 by the Authority extended the implementation date of all statements through GASB Statement No. 94.

Recent Statements Issued by the Governmental Accounting Standards Board

GASB has issued Statement No. 84, *Fiduciary Activities*, effective for fiscal years beginning after December 15, 2019. The requirements of this Statement will enhance consistency and comparability by (1) establishing specific criteria for identifying activities that should be reported as fiduciary activities and (2) clarifying whether and how business-type activities should report their fiduciary activities. Greater consistency and comparability enhances the value provided by the information reported in financial statements for assessing government accountability and stewardship. The Authority has not yet determined the effect that the adoption of GASB Statement No. 84 may have on its financial statements.

NOTE 13 - ACCOUNTING PRONOUNCEMENTS (Continued)

GASB has also issued Statement No. 87, *Leases*, effective for fiscal years beginning after June 15, 2021. The requirements of this Statement will increase the usefulness of governments' financial statements by requiring reporting of certain lease liabilities that currently are not reported. It will enhance comparability of financial statements among governments by requiring lessees and lessors to report leases under a single model. This Statement also will enhance the decision-usefulness of the information provided to financial statement users by requiring notes to financial statements related to the timing, significance, and purpose of a government's leasing arrangements. The Authority has not yet determined the effect that the adoption of GASB Statement No. 87 may have on its financial statements.

GASB has also issued Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, effective for fiscal years beginning after December 15, 2020. The requirements of this Statement will improve financial reporting by providing users of financial statements with more relevant information about capital assets and the cost of borrowing for a reporting period. The resulting information also will enhance the comparability of information about capital assets and the cost of borrowing for a reporting period for both governmental activities and business-type activities. The Authority has not yet determined the effect that the adoption of GASB Statement No. 89 may have on its financial statements.

GASB has also issued Statement No. 91, *Conduit Debt Obligations*, which is effective for fiscal years beginning after December 15, 2021. The requirements of this Statement will improve financial reporting by eliminating the existing option for issuers to report conduit debt obligations as their own liabilities, thereby ending significant diversity in practice. The clarified definition will resolve stakeholders' uncertainty as to whether a given financing is, in fact, a conduit debt obligation. Requiring issuers to recognize liabilities associated with additional commitments extended by issuers and to recognize assets and deferred inflows of resources related to certain arrangements associated with conduit debt obligations also will eliminate diversity, thereby improving comparability in reporting by issuers. Revised disclosure requirements will provide financial statement users with better information regarding the commitments issuers extend and the likelihood that they will fulfill those commitments. That information will inform users of the potential impact of such commitments on the financial resources of issuers and help users assess issuers' roles in conduit debt obligations. The Authority has not yet determined the effect that the adoption of GASB Statement No. 91 may have on its financial statements.

GASB has also issued Statement No. 92, *Omnibus 2020,* which is effective for fiscal years beginning after June 15, 2021. The requirements of this Statement will enhance comparability in the application of accounting and financial reporting requirements and will improve the consistency of authoritative literature. More comparable reporting will improve the usefulness of information for users of state and local government financial statements. The Authority has not yet determined the effect that the adoption of GASB Statement No. 92 may have on its financial statements.

NOTE 13 - ACCOUNTING PRONOUNCEMENTS (Continued)

GASB has also issued Statement No. 93, *Replacement of Interbank Offered Rates.* The removal of LIBOR as an appropriate benchmark interest rate is effective for reporting periods ending after December 31, 2022. All other requirements of this Statement are effective for reporting periods beginning after June 15, 2021. The requirements of this Statement will enhance comparability in the application of accounting and financial reporting requirements and will improve the consistency of authoritative literature. More comparable reporting will improve the usefulness of information for users of state and local government financial statements. The Authority has not yet determined the effect that the adoption of GASB Statement No. 93 may have on its financial statements.

GASB has also issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements,* which is effective for fiscal years beginning after June 15, 2023. The requirements of this Statement will improve financial reporting by establishing the definitions of Public-Private and Public-Public Partnerships (PPPs) and Availability Payment Arrangements (APAs) and providing uniform guidance on accounting and financial reporting for transactions that meet those definitions. That uniform guidance will provide more relevant and reliable information for financial statement users and create greater consistency in practice. This Statement will enhance the decision usefulness of a government's financial statements by requiring governments to report assets and liabilities related to PPPs consistently and disclose important information about PPP transactions. The required disclosures will allow users to understand the scale and important aspects of a government's PPPs and evaluate a government's future obligations and assets resulting from PPPs. The Authority has not yet determined the effect that the adoption of GASB Statement No. 94 may have on its financial statements.

GASB has also issued Statement No. 96, *Subscription-Based Information Technology Arrangements,* which is effective for fiscal years beginning after June 15, 2022. The requirements of this Statement will improve financial reporting by establishing a definition for Subscription-Based Information Technology Arrangements (SBITA) and providing uniform guidance for accounting and financial reporting for transactions that meet that definition. That definition and uniform guidance will result in greater consistency in practice. Establishing the capitalization criteria for implementation costs also will reduce diversity and improve comparability in financial reporting by governments. This Statement also will enhance the relevance and reliability of a government's financial statements by requiring a government to report a subscription asset and subscription liability for a SBITA and to disclose essential information about the arrangement. The disclosures will allow users to understand the scale and important aspects of a government's SBITA activities and evaluate a government's obligations and assets resulting from SBITAs. The Authority has not yet determined the effect that the adoption of GASB Statement No. 96 may have on its financial statements.

NOTE 13 - ACCOUNTING PRONOUNCEMENTS (Continued)

GASB has also issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32*, which is effective immediately for certain provisions, and for the other provisions, is effective for reporting periods beginning after June 15, 2021. The requirements of this Statement will result in more consistent financial reporting of defined contribution pension plans, defined contribution OPEB plans, and other employee benefit plans, while mitigating the costs associated with reporting those plans. The requirements also will enhance the relevance, consistency, and comparability of (1) the information related to Section 457 plans that meet the definition of a pension plan and the benefits provided through those plans and (2) investment information for all Section 457 plans. The portion of GASB Statement No. 97 that was implemented during the current fiscal year had no impact on the June 30, 2020 financial statements. The Authority has not yet determined the effect that the adoption of the remaining portions of GASB Statement No. 97 may have on its financial statements.

NOTE 14 - UNRESTRICTED NET POSITION (DEFICIT)

At June 30, 2020 and 2019 the Authority had an unrestricted net position (deficit) of $172,591, and $173,551, respectively. The deficit was created with the issuance of the Series 2018 Senior Lien revenue bonds. These bonds were issued to fund off-Turnpike parkway projects. $172 million was transferred into the State Road Construction Account at the West Virginia Division of Highways for these purposes. Future toll revenues are expected to be sufficient to fulfill the debt service requirements on the bonds.

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WEST VIRGINIA PARKWAYS AUTHORITY
(A Component Unit of the State of West Virginia)
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY
June 30, 2020

Public Employees Retirement System
Last 10 Fiscal Years*
(In Thousands)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Authority's proportion of the net pension liability (asset) (percentage)	1.07%	1.06%	1.07%	1.09%	1.05%	1.06%	1.07%			
Authority's proportionate share of the net pension liability (asset)	$ 2,294	$ 2,742	$ 4,615	$ 10,007	$ 5,848	$ 3,925	$ 9,756			
Authority's covered payroll	$ 15,970	$ 14,718	$ 15,608	$ 15,415	$ 14,664	$ 14,241	$ 14,321			
Authority's proportionate share of the net pension liability (asset) as a percentage of its covered payroll	14.36%	18.63%	29.57%	64.92%	39.88%	27.56%	68.12%			
Plan fiduciary net position as a percentage of the total pension liability	96.99%	96.33%	93.67%	86.11%	91.29%	93.98%	79.70%			

* - The amounts presented for each fiscal year were determined as of June 30th of the previous year.

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, governments should present information for those years for which information is available.

WEST VIRGINIA PARKWAYS AUTHORITY
(A Component Unit of the State of West Virginia)
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF PENSION CONTRIBUTIONS
June 30, 2020

Public Employees Retirement System
Last 10 Fiscal Years
(In Thousands)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Contractually required contribution	$ 1,701	$ 1,597	$ 1,619	$ 1,873	$ 2,081	$ 2,053	$ 2,065	$ 2,005	$ 2,061	$ 1,787
Contributions in relation to the contractually required contribution	(1,701)	(1,597)	(1,619)	(1,873)	(2,081)	(2,053)	(2,065)	(2,005)	(2,061)	(1,787)
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Authority's covered payroll	$ 17,010	$ 15,970	$ 14,718	$ 15,608	$ 15,415	$ 14,664	$ 14,241	$ 14,321	$ 14,214	$ 14,296
Contributions as a percentage of covered payroll	10.00%	10.00%	11.00%	12.00%	13.50%	14.00%	14.50%	14.00%	14.50%	12.50%

WEST VIRGINIA PARKWAYS AUTHORITY
(A Component Unit of the State of West Virginia)
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULES OF PROPORTIONATE SHARE OF THE NET OPEB LIABILITY
June 30, 2020

Last 10 Fiscal Years*
(In Thousands)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Authority's proportion of the net OPEB liability (asset) (percentage)	0.41%	0.41%	0.38%							
Authority's proportionate share of the net OPEB liability (asset)	$ 6,785	$ 8,725	$ 9,253							
State's proportionate share of the net OPEB liability (asset)	1,389	1,803	1,901							
Total proportionate share of the net OPEB liability (asset)	$ 8,174	$ 10,528	$ 11,154							
Authority's payroll (1)	$ 16,840	$ 15,637	$ 15,606							
Authority's proportionate share of the net OPEB liability (asset) as a percentage of its payroll (1)	40.29%	55.80%	59.29%							
Plan fiduciary net position as a percentage of the total OPEB liability	39.69%	30.98%	25.10%							

* - The amounts presented for each fiscal year were determined as of June 30th of the previous year (measurement date).

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Authority should present information for those years for which information is available.

(1) Covered payroll related to the OPEB plan was unavailable; therefore total payroll for the Authority was used.

WEST VIRGINIA PARKWAYS AUTHORITY
(A Component Unit of the State of West Virginia)
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF OPEB CONTRIBUTIONS
June 30, 2020

Last 10 Fiscal Years
(In Thousands)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Statutorily required contribution	$ 763	$ 880	$ 904	$ 773						
Contributions in relation to the statutorily required contribution	(763)	(880)	(904)	(773)						
Contribution deficiency (excess)	$ -	$ -	$ -	$ -						
Authority's payroll (1)	$ 18,576	$ 16,840	$ 15,637	$ 15,606						
Contributions as a percentage of payroll (1)	4.11%	5.23%	5.78%	4.95%						

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Authority should present information for those years for which information is available.

(1) Covered payroll related to the OPEB plan was unavailable; therefore total payroll for the Authority was used.

Changes in Assumptions

An experience study, which was based on the years 2013 through 2018, was approved by the Consolidated Public Retirement Board. As a result, valuation assumptions were changed as of June 30, 2019 to reflect the most recent experience study:

	Projected Salary Increases				Withdrawal Rates		
	State	Nonstate	Inflation rate	Mortality Rates	State	Nonstate	Disability Rates
2019	3.1% - 5.3%	3.35% - 6.0%	3.00%	Active-100% of Pub-2010 General Employees table, below-median, headcount weighted, projected with scale MP-2018; Retired healthy males-108% of Pub-2010 General Retiree Male table, below-median, headcount weighted, projected with scale MP-2018; Retired healthy females-122% of Pub-2010 Annuitant, Scale AA fully generational General Retiree Female table, below-median, headcount weighted, projected with scale MP-2018; Disabled males-118% of Pub-2010 General / Teachers Disabled Male table, below-median, headcount weighted, projected with scale MP-2018; Disabled females-118% of Pub-2010 General / Disabled Teachers Disabled Female table, below-median, headcount weighted, projected with scale MP-2018	2.28-45.63%	2-35.88%	0.005-0.540%
2018	3.00% - 4.6%	3.35% - 6.0%	3.00%	Active-100% of RP-2000 Non-Annuitant, Scale AA fully generational Retired healthy males-110% of RP-2000 Healthy Annuitant, Scale AA fully generational Retired healthy females-101% of RP-2000 Healthy Annuitant, Scale AA fully generational Disabled Males-96% of RP2000 Disabled Annuitant, Scale AA fully generational Disabled Females-107% of RP-2000 Disabled Annuitant, Scale AA fully generational	1.75-35.10%	2-35.88%	0.007-.675%
2017	3.00% - 4.6%	3.35% - 6.0%	3.00%	Active-100% of RP-2000 Non-Annuitant, Scale AA fully generational Retired healthy males-110% of RP-2000 Healthy Annuitant, Scale AA fully generational Retired healthy females-101% of RP-2000 Healthy Annuitant, Scale AA fully generational Disabled Males-96% of RP2000 Disabled Annuitant, Scale AA fully generational Disabled Females-107% of RP-2000 Disabled Annuitant, Scale AA fully generational	1.75-35.10%	2-35.88%	0.007-.675%
2016	3.00% - 4.6%	3.35% - 6.0%	3.00%	Active-100% of RP-2000 Non-Annuitant, Scale AA fully generational Retired healthy males-110% of RP-2000 Healthy Annuitant, Scale AA fully generational Retired healthy females-101 % of RP-2000 Healthy Annuitant, Scale AA fully generational Disabled Males-96% of RP2000 Disabled Annuitant, Scale AA fully generational Disabled Females-107% of RP-2000 Disabled Annuitant, Scale AA fully generational	1.75-35.10%	2-35.88%	0.007-.675%
2015	3.00% - 4.6%	3.35% - 6.0%	1.90%	Healthy males - 110% of RP-2000 Non-Annuitant, Scale AA; Healthy females - 101% of RP-2000 Non-Annuitant, Scale AA; Disabled males - 96% of RP-2000 Disabled Annuitant, Scale AA; Disabled females - 107% of RP-2000 Disabled Annuitant, Scale AA	1.75-35.1%	2-35.8%	0-.675%
2014	4.25% - 6.0%	4.25% - 6.0%	2.20%	Healthy males - 1983 GAM; Healthy females-1971; disabled males - 1971 GAM; Disabled females - Revenue ruling 96-7	1-26%	2-31.2%	0-.8%

Actuarial Changes Other Postemployment Benefits Plan

The actuarial assumptions used in the total OPEB liability calculation can change from year to year. Please see table below which summarizes the actuarial assumptions used for the respective measurement dates.

	Inflation Rate	Salary Increases	Wage Inflation Rate	Investment Rate of Return & Discount Rate	Mortality	Retirement Age	Aging Factors	Expenses	Healthcare Cost Trend Rates
2019	2.75%	Dependent upon pension system. Ranging from 3.0% to 6.5%, including inflation	4.00%	7.15%, net of OPEB plan investment expense, including inflation	Post-Retirement: RP – 2000 Healthy Annuitant Mortality Table projected with Scale AA on a fully generational basis Pre-Retirement: RP– 2000 Non-Annuitant Mortality Table projected with Scale AA on a fully generational basis	Experience-based table of rates that are specific to the type of eligibility condition	2013 SOA study "Health Care Costs - From Birth to Death"	Health administrative expenses are included in the development of the per capita claims cost. Operating expenses are included as a component of annual expense.	Trend rate for pre-Medicare per capita costs of 8.5% for plan year end 2020, decreasing by 0.5% each year thereafter, until ultimate trend rate of 4.5% is reached in plan year 2028. Trend rate for Medicare per capita costs of 3.1% for plan year end 2020. 9.5% for plan year end 2021, decreasing by 0.5% each year thereafter, until ultimate trend rate of 4.5% is reached in plan year end 2031.
2018	2.75%	Dependent upon pension system. Ranging from 3.0% to 6.5%, including inflation	4.00%	7.15%, net of OPEB plan investment expense, including inflation	Post-Retirement: RP – 2000 Healthy Annuitant Mortality Table projected with Scale AA on a fully generational basis Pre-Retirement: RP– 2000 Non-Annuitant Mortality Table projected with Scale AA on a fully generational basis	Experience-based table of rates that are specific to the type of eligibility condition.	2013 SOA study "Health Care Costs - From Birth to Death"	Health administrative expenses are included in the development of the per capita claims cost. Operating expenses are included as a component of annual expense.	Actual trend used for fiscal year 2018. For fiscal years on and after 2019, trend starts at 8.0% and 10.0% for pre and post-Medicare, respectively, and gradually decreases to an ultimate trend rate of 4.50%. Excess trend rate of 0.13% and 0.00% for pre and post-Medicare, respectively, is added to healthcare trend rates pertaining to per capita claims costs beginning in 2022 to account for the Excise Tax.
2017	2.75%	Dependent upon pension system. Ranging from 3.0% to 6.5%, including inflation	4.00%	7.15%, net of OPEB plan investment expense, including inflation	Post-Retirement: RP – 2000 Healthy Annuitant Mortality Table projected with Scale AA on a fully generational basis Pre-Retirement: RP– 2000 Non-Annuitant Mortality Table projected with Scale AA on a fully generational basis	Experience-based table of rates that are specific to the type of eligibility condition.	2013 SOA study "Health Care Costs - From Birth to Death"	Health administrative expenses are included in the development of the per capita claims cost. Operating expenses are included as a component of annual expense.	Actual trend used for fiscal year 2017. For fiscal years on and after 2018, trend starts at 8.5% and 9.75% for pre and post-Medicare, respectively, and gradually decreases to an ultimate trend rate of 4.50%. Excess trend rate of 0.14% and 0.29% for pre and post-Medicare, respectively, is added to healthcare trend rates pertaining to per capita claims costs beginning in 2020 to account for the Excise Tax.

Statistical Section

West Virginia Parkways Authority

Statistical Section

This part of the West Virginia Parkways Authority's Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information say about the Authority's overall financial health.

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WEST VIRGINIA PARKWAYS AUTHORITY

CONDENSED SCHEDULES OF NET POSITION

(In Thousands)

	Year Ended June 30, 2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES										
Current assets	$ 177,299	$ 135,137	$ 75,418	$ 68,601	$ 61,088	$ 61,774	$ 53,678	$ 49,513	$ 42,259	$ 62,391
Long-term investments	515	2,982	19,770	27,806	25,603	22,989	26,240	20,401	24,528	8,662
Capital assets, net	522,032	471,790	457,290	451,041	453,833	458,292	458,490	470,889	470,161	466,398
Deferred outflows of resources	3,039	3,270	3,728	8,126	7,402	7,663	7,603	9,717	12,481	13,046
Total assets plus deferred outflows of resources	$ 702,885	$ 613,179	$ 556,206	$ 555,574	$ 547,926	$ 550,718	$ 546,011	$ 550,520	$ 549,429	$ 550,497
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION										
Current liabilities	$ 22,044	$ 20,568	$ 21,012	$ 21,367	$ 18,720	$ 24,704	$ 20,689	$ 22,363	$ 18,356	$ 21,516
Long-term revenue bonds, net	172,130	176,886	-	10,523	20,479	29,939	39,084	47,775	55,836	63,881
Other long-term liabilities	9,079	11,467	14,236	21,465	17,033	14,495	10,039	9,901	9,522	6,908
Deferred inflows of resources	4,504	3,792	3,101	1,201	3,595	6,463	3,316	4,489	6,314	5,938
Total liabilities plus deferred inflows of resources	207,757	212,713	38,349	54,556	59,827	75,601	73,128	84,528	90,028	98,243
Net position:										
Net investment in capital assets	522,032	471,790	447,418	432,154	426,447	422,704	415,153	420,432	412,527	408,157
Restricted by trust indenture and tri-party agreement	145,687	102,227	67,677	65,834	58,626	51,094	56,020	43,824	45,127	40,961
Unrestricted (deficit)	(172,591)	(173,551)	2,762	3,030	3,026	1,319	1,710	1,736	1,747	3,136
Total net position	495,128	400,466	517,857	501,018	488,099	475,117	472,883	465,992	459,401	452,254
Total liabilities, deferred inflows of resources and net position	$ 702,885	$ 613,179	$ 556,206	$ 555,574	$ 547,926	$ 550,718	$ 546,011	$ 550,520	$ 549,429	$ 550,497

Source: West Virginia Parkways Authority

WEST VIRGINIA PARKWAYS AUTHORITY

CONDENSED SCHEDULES OF REVENUES, EXPENSES AND CHANGES
IN NET POSITION

(In Thousands)

	Year Ended June 30, 2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Operating revenues:										
Toll revenues	$ 154,468	$ 130,910	$ 95,288	$ 93,249	$ 93,579	$ 88,697	$ 84,907	$ 83,519	$ 83,907	$ 81,960
Other revenues	5,128	7,198	7,182	7,370	7,404	6,797	6,749	6,944	7,217	7,010
	159,596	138,108	102,470	100,619	100,983	95,494	91,656	90,463	91,124	88,970
Operating expenses:										
Maintenance	24,113	22,418	23,599	25,056	24,791	25,488	23,028	21,907	22,337	23,827
Toll collection	13,875	14,143	11,436	9,857	9,566	9,273	9,826	10,332	11,411	10,984
Traffic enforcement	4,074	3,967	2,888	3,231	3,172	3,912	3,487	3,581	3,744	3,188
General and administrative	8,771	9,650	8,291	10,308	11,248	9,093	9,154	9,159	9,590	9,446
Depreciation	46,472	43,734	40,639	37,318	36,929	35,357	36,294	35,595	32,924	32,227
	97,305	93,912	86,853	85,770	85,706	83,123	81,789	80,574	80,006	79,672
Operating income (loss)	62,291	44,196	15,617	14,849	15,277	12,371	9,867	9,889	11,118	9,298
Nonoperating revenues (expenses):										
Net investment revenue	2,187	1,905	632	280	336	338	302	122	242	355
Intergovernmental	-	-	-	-	-	-	-	-	-	2,834
Interest expense	(5,648)	(5,697)	(1,051)	(2,210)	(2,631)	(2,784)	(3,278)	(3,420)	(4,213)	(4,630)
Payments on behalf	411	552	584	-	-	-	-	-	-	-
	(3,050)	(3,240)	165	(1,930)	(2,295)	(2,446)	(2,976)	(3,298)	(3,971)	(1,441)
Change in net position before transfers	59,241	40,956	15,782	12,919	12,982	9,925	6,891	6,591	7,147	7,857
Transfers out	-	(172,000)	-	-	-	-	-	-	-	-
Transfers in	35,421	13,653	-	-	-	-	-	-	-	-
Change in net position	94,662	(117,391)	15,782	12,919	12,982	9,925	6,891	6,591	7,147	7,857
Cumulative effect of implementation of GASB Statement 75 (2018), 68 (2015), and 65 (2011)	-	-	1,057	-	-	(7,691)	-	-	-	(849)
Net position, beginning of year	400,466	517,857	501,018	488,099	475,117	472,883	465,992	459,401	452,254	445,246
Net position, end of year	$ 495,128	$ 400,466	$ 517,857	$ 501,018	$ 488,099	$ 475,117	$ 472,883	$ 465,992	$ 459,401	$ 452,254

Source: West Virginia Parkways Authority

WEST VIRGINIA PARKWAYS AUTHORITY

FINANCIAL RATIOS

	Year Ended June 30,									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Long-term series 2002 revenue bonds to total assets plus deferred outflows of resources	0.00%	0.00%	0.00%	0.65%	1.28%	1.85%	2.43%	2.95%	3.45%	4.14%
Long-term series 2008 revenue bonds to total assets plus deferred outflows of resources	0.00%	0.00%	0.00%	1.21%	2.39%	3.49%	4.60%	5.58%	6.53%	7.46%
Long-term series 2018 revenue bonds to total assets plus deferred outflows of resources	24.49%	26.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total long-term revenue bonds to total assets plus deferred outflows of resources	24.49%	26.21%	0.00%	1.86%	3.67%	5.34%	7.03%	8.53%	9.98%	11.60%
Net position to total assets plus deferred outflows of resources	70.44%	65.31%	93.11%	90.18%	89.08%	86.27%	86.61%	84.65%	83.61%	82.15%
Long-term bonds to lane miles	404.06	415.23	0.00	24.70	48.07	70.28	91.75	112.15	131.07	149.96
Long-term bonds to number of transactions/vehicles	5.24	4.75	0.00	0.28	0.55	0.83	1.12	1.39	1.59	1.62

Source: West Virginia Parkways Authority

WEST VIRGINIA PARKWAYS AUTHORITY

REVENUE BOND COVERAGE (1)

(In Thousands)

	Year Ended June 30									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Revenues:										
Toll revenues	$ 156,655	$ 132,815	$ 95,288	$ 93,249	$ 93,579	$ 88,697	$ 84,907	$ 83,519	$ 83,907	$ 81,960
Adjustment to toll revenues per Trust Indentures	-	-	(73)	(303)	(356)	(72)	(177)	(81)	(333)	480
Total revenues	156,655	132,815	95,215	92,946	93,223	88,625	84,730	83,438	83,574	82,440
Operating expenses	97,305	93,912	86,853	85,770	85,706	83,123	81,789	80,574	80,006	79,496
Adjustments to operating expenses per Trust Indentures:										
Depreciation	(46,472)	(43,734)	(40,639)	(37,318)	(36,929)	(35,357)	(36,294)	(35,595)	(32,924)	(32,227)
Renewal and replacement provided for by reserves	(2,700)	(1,500)	(2,518)	(2,031)	(2,701)	(2,476)	(3,139)	(2,789)	(2,888)	(3,280)
Economic development and tourism costs	(4,105)	(4,729)	(4,892)	(4,931)	(4,899)	(4,850)	(5,087)	(5,132)	(6,748)	(5,000)
Other	-	-	(1,355)	641	(2,054)	464	1,801	(1,286)	(2,403)	(3,098)
Total operating expenses	44,028	43,949	37,449	42,131	39,123	40,904	39,070	35,772	35,043	35,891
Net revenues available for debt service	$ 112,627	$ 88,866	$ 57,766	$ 50,815	$ 54,100	$ 47,721	$ 45,660	$ 47,666	$ 48,531	$ 46,549
Revenue bond coverage items:										
Total debt service	10,280	9,025	10,140	10,760	10,755	10,577	10,529	11,186	10,541	10,515
Renewal and replacement reserve requirement per recommendation of consulting engineer	18,800	16,988	13,184	12,553	13,952	11,187	11,163	10,280	11,128	8,673
Total debt service and renewal and replacement	$ 29,080	$ 26,013	$ 23,324	$ 23,313	$ 24,707	$ 21,764	$ 21,692	$ 21,466	$ 21,669	$ 19,188
Coverage percentages:										
Total debt service (125% required since 2019, previously 150%) (1)	1095.59%	984.67%	569.68%	472.26%	503.02%	451.18%	433.66%	426.12%	460.40%	442.69%
Total debt service and renewal and replacement per recommendation of consulting engineer (100% required)	387.30%	341.62%	247.67%	217.97%	218.97%	219.27%	210.49%	222.05%	223.97%	242.59%

(1) See Note 6, Revenue Bonds Payable

Source: West Virginia Parkways Authority

WEST VIRGINIA PARKWAYS AUTHORITY

TRAFFIC STATISTICS

(In Thousands, except per transaction and per mile amounts)

	Year Ended June 30,									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Number of transactions:										
Passenger cars	24,487	28,526	28,966	29,146	28,924	28,006	27,154	26,934	27,549	27,140
Commercial vehicles	8,342	8,709	8,484	8,250	8,057	7,890	7,621	7,462	7,515	7,328
Total transactions	32,829	37,235	37,450	37,396	36,981	35,896	34,775	34,396	35,064	34,468
ETC penetration rate - transactions	56.81%	49.40%	40.91%	38.83%	37.24%	36.54%	35.70%	34.20%	32.69%	30.16%
Number of miles:										
Passenger cars	557,353	657,214	671,565	680,261	676,651	651,789	629,908	623,890	639,854	634,053
Commercial vehicles	343,136	354,842	345,291	336,067	328,146	320,245	308,082	300,589	302,644	296,473
Total miles	900,489	1,012,056	1,016,856	1,016,328	1,004,797	972,034	937,990	924,479	942,498	930,526
Total revenues:										
Passenger cars	$ 68,727	$ 64,925	$ 49,766	$ 48,847	$ 50,333	$ 46,309	$ 44,032	$ 43,429	$ 43,280	$ 42,066
Commercial vehicles	85,741	65,985	45,522	44,402	43,246	42,388	40,875	40,090	40,627	39,894
Total toll revenues	$ 154,468	$ 130,910	$ 95,288	$ 93,249	$ 93,579	$ 88,697	$ 84,907	$ 83,519	$ 83,907	$ 81,960
ETC penetration rate - revenue	61.07%	55.24%	48.34%	45.66%	43.63%	42.15%	40.80%	39.09%	36.70%	35.60%
Toll revenue per transaction:										
Passenger cars	$ 2.81	$ 2.28	$ 1.72	$ 1.68	$ 1.74	$ 1.65	$ 1.62	$ 1.61	$ 1.57	$ 1.55
Commercial vehicles	10.28	7.58	5.37	5.38	5.37	5.37	5.36	5.37	5.41	5.44
Toll revenue per mile:										
Passenger cars	$ 0.123	$ 0.099	$ 0.074	$ 0.072	$ 0.074	$ 0.071	$ 0.070	$ 0.070	$ 0.068	$ 0.066
Commercial vehicles	0.250	0.186	0.132	0.132	0.132	0.132	0.133	0.133	0.134	0.135
Miles per transaction:										
Passenger cars	23	23	23	23	23	23	23	23	23	23
Commercial vehicles	41	41	41	41	41	41	40	40	40	40

Source: West Virginia Parkways Authority

WEST VIRGINIA PARKWAYS AUTHORITY

NUMBER OF EMPLOYEES

	Year Ended June 30,									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Permanent employees										
Toll	136	138	152	154	156	160	156	160	160	162
Maintenance	148	146	158	159	147	145	146	141	140	141
Other	84	86	66	61	60	55	57	53	53	55
	368	370	376	374	363	360	359	354	353	358
Temporary	52	73	62	75	76	74	78	43	98	82
Leased employees										
State Police and Public Service Commission	30	31	32	30	28	28	29	31	31	27
Tamarack	105	120	132	134	144	132	147	149	146	146

Source: West Virginia Parkways Authority

TRAFFIC ACCIDENT AND POLICING STATISTICS

	Year Ended June 30,									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Number of fatalities	4	13	9	8	7	5	1	8	7	7
Fatality rate per 100 million miles traveled	0.4	1.3	0.9	0.8	0.7	0.5	0.1	0.9	0.8	0.8
Policing statistics										
Arrests	2,471	4,186	5,123	6,065	10,445	9,604	10,189	12,019	10,943	11,033
Warning tickets	18,217	11,767	17,866	17,870	20,794	25,089	24,677	24,377	20,069	16,340
Assists to motorists	1,073	1,924	3,285	2,322	3,222	2,948	2,914	3,633	2,816	2,382

Source: West Virginia Parkways Authority

WEST VIRGINIA PARKWAYS AUTHORITY

POPULATION DEMOGRAPHICS

	Year Ended June 30, 2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Population - WV (1)	1,852,994	1,852,994	1,852,994	1,852,994	1,852,994	1,852,994	1,852,994	1,852,994	1,852,994	1,852,994
Personal income - WV ($ in thousands) (2)	$ 75,952,800	$ 73,334,400	$ 69,872,741	$ 68,548,511	$ 68,272,316	$ 67,804,094	$ 66,037,342	$ 63,968,460	$ 62,178,478	$ 60,484,487
Per capital personal income - WV (2)	$ 42,336	$ 40,578	$ 37,708	$ 37,386	$ 37,047	$ 36,644	$ 35,613	$ 34,477	$ 33,513	$ 32,641
Unemployment Rate - WV (3)	10.50%	4.70%	4.60%	4.60%	6.00%	7.40%	6.20%	7.30%	8.00%	9.10%

(1) Data based on the US Decennial Census
(2) Bureau of Economic Analysis
(3) Work Force WV Labor Market Information

Principal Employers in the State of West Virginia

	Ranking 2019	2010
Local Government	1	1
State Government	2	2
Federal Government	3	3
WVU Medicine (formerly West Virginia United Health)	4	5
Wal-Mart Associates, Inc.	5	4
Charleston Area Medical Center, Inc.	6	6
Mountain Health System	7	
Kroger	8	7
Lowe's Home Centers, Inc.	9	9
Contura Energy	10	
Wheeling Hospital, Inc.	11	
Mylan Pharmaceuticals, Inc.	12	12
Murray American Energy, Inc.	13	
Consolidation Coal		8
St. Mary's Medical Center, Inc.		10
Res-Care, Inc.		11

Population - WV

White	1,732,549	93.50%
Black	66,708	3.60%
Native American	5,559	0.30%
Asian & Pacific Islanders	14,824	0.80%
Two or more Races	33,354	1.80%
Total Population	1,852,994	100.00%

Source: WorkForce WV

Most Current Data Available

Note: Due to confidentiality issues, the number of people employed is not available.

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WEST VIRGINIA PARKWAYS AUTHORITY

Significant Dates

June 30, 2020

February 1947	West Virginia Turnpike Commission created by State Legislature
October 1949	West Virginia Turnpike Commission organized
April 1952	$96 million revenue bonds issued to construct Turnpike
August 1952	Groundbreaking
April 1954	$37 million revenue bonds issued
September 1954	36 miles of Turnpike opened (Princeton to Beckley)
November 1954	Final 52 miles of Turnpike opened (Beckley to Charleston)
August 1971	Tri-Party Agreement of 1971
May 1973	Commenced first contract for upgrade to interstate standards
December 1979	Interest paid up-to-date on 1952 and 1954 bonds for first time
October 1982	First bonds retired from 1952 and 1954 issues
September 1987	Final upgrade to interstate standards
July 1988	Final segment of I-64 completed
December 1988	Tri-Party Agreement of 1988
June 1989	West Virginia Parkways, Economic Development and Tourism Authority created to succeed the West Virginia Turnpike Commission by State Legislature
November 1989	Issued $143 million of Revenue Bonds
November 1989	Removed side toll charges
April 1990	Implemented commuter passes at North Beckley
March 1991	The GFOA awarded the Authority a Certificate of Achievement for Excellence in Financial Reporting for the Authority's first component unit financial report for the year ended June 30, 1990

Significant Dates
(Continued)

June 30, 2020

March 1993	Issued $118 million of Series 1993 Revenue Refunding Bonds resulting in approximately $5.2 million in net present value savings
January 1994	Implemented Parkways Authority Commuter ("PAC") card program
December 1994	Issued $9 million of Series 1994 Raleigh County, West Virginia Commercial Development Revenue Bonds to partially finance construction of *TAMARACK-The Best of West Virginia* arts and crafts center
May 1996	Opened *TAMARACK-The Best of West Virginia* and the new Beckley Interchange (Exit 45)
December 1999	New Electronic Toll Collection System with E-ZPass interoperability through Inter Agency Group membership began operations at the Ghent toll facility. The remaining mainline toll facilities began operation in January 2000 and North Beckley began operations in March 2000
December 2001	Issued $5.7 million of Series 2001A Taxable Commercial Development Refunding Revenue Bonds and $5.9 million of Series 2001B Commercial Development Bonds to advance refund series 1994 and 1996 Bonds and to construct Educational, Cultural, and Banquet facilities at the Caperton Center
February 2002	Issued $44.2 million of Series 2002 Refunding Revenue Bonds to advance refund for savings $36 million of Series 1993 Bonds
February 2003	Issued $63.9 million of Series 2003 Variable Rate Demand Revenue Refunding Bonds to advance refund for savings $61.3 million of Series 1993 Bonds
June 2003	Opened Tamarack Conference Center
February 2004	House Bill #4033 adopted raising bonding capacity to $200 million
November 2004	Celebrated 50th Anniversary of the WV Turnpike
January 2006	Tolls rates increased for first time since 1981
February 2006	Court orders Preliminary Injunction on procedural issues and orders rates put back to December 31, 2005 levels. Accordingly, Parkways Board passes resolution eliminate rate increases

Significant Dates
(Continued)

June 30, 2020

March 2006	Senate Bill #557 adopted that restricts bonding authority, requires public notice and hearings for future toll or rate increases, and requires discount program prior to any increase in rates
April 2007	Board adopted Resolution to refocus the core mission of the Parkways Authority to maintenance and upkeep of the Turnpike
July 2008	Issued $59.1 million of Series 2008 Variable Rate Demand Revenue Refunding Bonds to advance refund for savings Series 2003 Bonds
August 2009	Adopted new toll rate schedule, the first increase in 28 years. Cash toll rates increased 60% and discounts given to E-ZPass users
July 2010	Renamed and reorganized as the West Virginia Parkways Authority
December 2011	Completed upgrade of electronic toll collection system
April 2012	Board approval of the final Incident Management Plan including use of new detour system and barrier wall gates
June 2017	Senate Bill #1003 adopted authorizing Authority to continue collecting tolls, deposit proceeds from Revenue Bonds to be deposited to State Road Construction Account and requires adoption of Single Fee program
June 2018	Tri-Party Agreement of 2018
August 2018	Issued $166.37 million of Series 2018 Senior Lien Turnpike Toll Revenue Bonds and deposited $172.0 million to State Road Construction Account
August 2018	Memorandum of Understanding with WVDOH regarding Turnpike Widening Project
January 2019	Adopted new toll rate schedule. Cash toll rates increased 100% with discounts given to E-ZPass users including single fee program

Source: West Virginia Parkways Authority

Miscellaneous Data and Statistics

June 30, 2020

Length of West Virginia Turnpike	88 miles
Number of lane miles	426
Number of bridges	116
Steel surface of bridges	4 million square feet
Interchanges	18
Toll plazas	4
Service plazas	3
Welcome Center	1
Rest areas	2
Overlooks	2
Maintenance areas	7
Administration building	1
State Police administration buildings	2

Source: West Virginia Parkways Authority

WEST VIRGINIA PARKWAYS AUTHORITY

Toll Rates and Vehicle Classifications

June 30, 2020

Toll Class	Axles	Description	Cash Rate Mainline Plazas	Cash Rate Corridor "L" (U.S. Route 119)
1*	2	Passenger car	$ 4.00	$ 0.75
2*	3+	Passenger car with trailer	5.00	1.50
3	2/3	Motor home	5.00	1.50
4	3+	Motor home with trailer	6.50	2.50
5	2	2-Axle, dual tire trucks, RVs and buses	6.50	1.50
6	3	3-Axle trucks and buses	9.00	2.50
7	4	4-Axle trucks and semi-trailers	13.00	3.25
8	5	5-Axle trucks and semi-trailers	13.50	3.25
9	6+	6-Axle trucks and semi-trailers	19.00	4.75
10	-	Oversize trucks	24.00	14.50

* Vehicle must be less than 7'6" in height. Passenger cars include station wagons, pickups, vans, panel trucks, recreational vehicles, sport utility vehicles, motorcycles, and other two axle single-tired trucks.

DISCOUNT PLANS

Single Fee Discount Plan

Valid for Personal Account plans beginning January 1, 2019. Cost is $25 (plus one-time transponder issuance fee of $13) per transponder for unlimited use of the entire West Virginia Turnpike for a period of one year from date of activation. Single Fee Discount Plans and transponders are non-refundable.

Commercial Discount Plan – West Virginia E-ZPass Account

There is a $25.00 charge for the purchase of each E-ZPass® transponder (non-refundable). The plan provides a 35% discount from the cash rate for Toll Class 1 through 4 and a 20% discount for Toll Class 5 through 10.

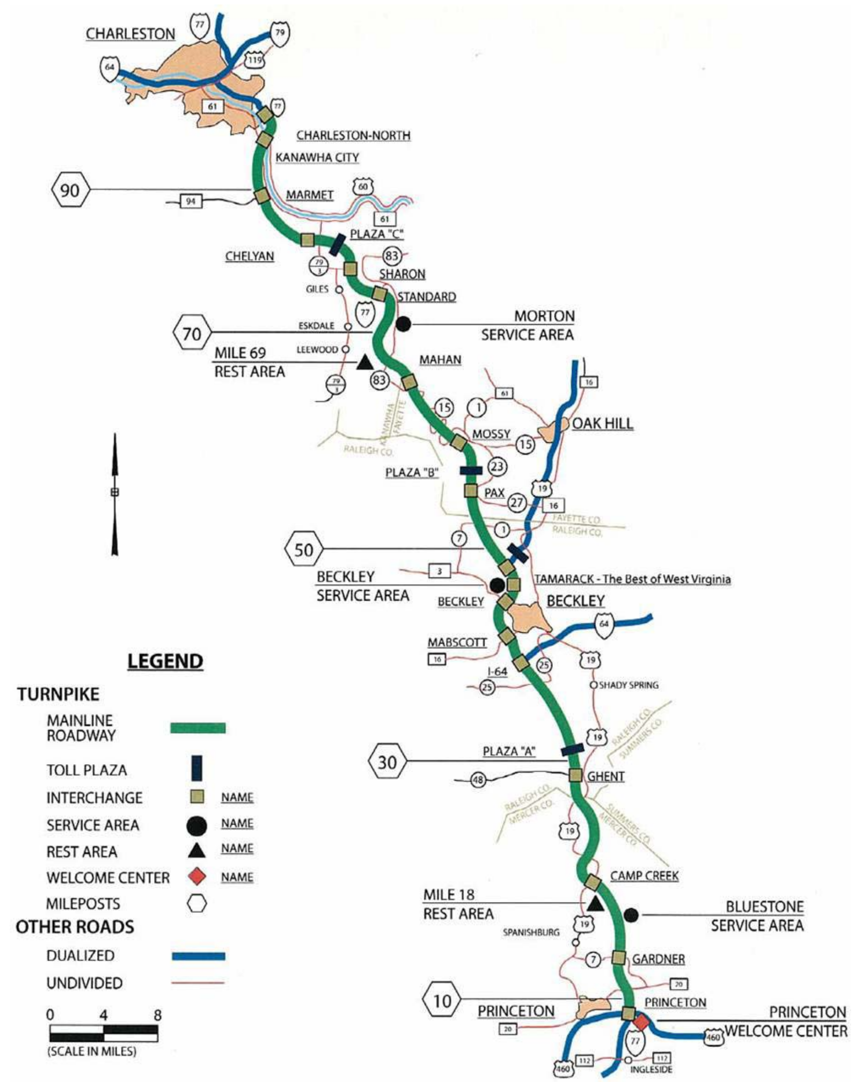
Example: For a 5 axle tractor-trailer, the cost per toll plaza of $10.80 will be deducted from an E-ZPass® pre-paid account as opposed to a cash rate of $13.50.

Commercial Discount Plan – Non-West Virginia E-ZPass Account

Accounts are opened and managed by other E-ZPass® agencies, so there is no account maintenance or charge for transponders. The plan provides a 13% discount from the cash rate for Toll Class 5 through 10.

Example: For a 5 axle tractor-trailer, the cost per toll plaza of $11.74 will be charged to a Non-West Virginia E-ZPass® account, as opposed to the cash rate of $13.50.

Source: West Virginia Parkways Authority



APPENDIX C

FORM OF OPINION OF BOND COUNSEL

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Bowles Rice
Attorneys at Law

600 Quarrier Street, Charleston, WV 25301
P.O. Box 1386, Charleston, WV 25325-1386
304.347.1100

101 South Queen Street
Martinsburg, WV 25401

125 Granville Square, Suite 400
Morgantown, WV 26501

501 Avery Street
Parkersburg, WV 26101

Post Office Box 390
Wheeling, WV 26003

Southpointe Town Center
1800 Main Street, Suite 200
Canonsburg, PA 15317

480 West Jubal Early Drive, Suite 130
Winchester, VA 22601

bowlesrice.com

June 23, 2021

West Virginia Parkways Authority
Charleston, West Virginia

Re: $333,630,000 West Virginia Parkways Authority
Senior Lien Turnpike Toll Revenue Bonds, Series 2021

Ladies and Gentlemen:

We have acted as Bond Counsel in connection with the issuance by the West Virginia Parkways Authority (the "Authority") of its Senior Lien Turnpike Toll Road Revenue Bonds, Series 2021 (the "Series 2021 Bonds"), in the aggregate principal amount of $333,630,000. We have examined such law and such certified proceedings and other papers as we have deemed necessary to render this opinion. We have also examined an unauthenticated specimen Series 2021 Bond.

As to questions of fact material to our opinion, we have relied upon representations of the Authority contained in the documents described herein and other certifications of public officials furnished to us without undertaking to verify the same by independent investigation.

The Series 2021 Bonds are issued pursuant to the Constitution and the laws of the State of West Virginia (the "State"), including particularly Chapter 17, Article 16A of the Code of West Virginia, 1931, as amended, (the "Act"), and pursuant to a Direction of the Governor Approving Issuance of Bonds dated May 28, 2021, a Resolution adopted by the Authority on May 20, 2021 (as supplemented or amended, the "Resolution"), a Master Trust Indenture dated as of August 1, 2018 (the "Master Trust Indenture"), and the Second Supplemental Trust Indenture dated as of June 1, 2021 (the "Second Supplemental Indenture" and, together with the Master Trust Indenture, the "Indenture"), between the Authority and United Bank, a Virginia banking corporation with a corporate trust office in Charleston, West Virginia, as trustee (the "Trustee"). The Authority has also entered into a Tax Compliance Certificate, dated as of June 23, 2021 (the "Tax Certificate").

We have not been engaged to review the accuracy, completeness or sufficiency of the Official Statement prepared in connection with the Series 2021 Bonds (the "Official Statement") or other offering material related to the Series 2021 Bonds (except to the extent, if any, stated in the Official Statement) and we express no opinion relating thereto.

Based upon the foregoing, we are of the opinion, under existing law, as follows:

1. The Authority is duly created and validly existing pursuant to the Act, with power under the laws of the State, including the Act, to adopt the Resolution, to execute and deliver the Indenture and the Tax Certificate, and to perform the agreements on its part contained therein and to issue the Series 2021 Bonds.

2. The Resolution has been duly adopted by the Authority, is in full force and effect, and is valid and binding upon the Authority and enforceable against the Authority in accordance with its terms.

3. The Indenture creates the valid pledge which it purports to create of the funds, accounts and property pledged under the Indenture, subject to the terms thereof.

4. The Series 2021 Bonds have been duly authorized, executed and delivered by the Authority and, assuming proper authentication, are valid and binding limited obligations of the Authority, payable solely from the sources provided therefor in the Indenture.

5. The 2021 Bonds are limited obligations of the Authority payable solely out of the Trust Estate (as defined in the Indenture) and other revenues, funds and accounts pledged or available for payment of debt service on the Series 2021 Bonds under the Indenture. The State is not obligated to pay the principal or redemption price of or interest on the Series 2021 Bonds. The Series 2021 Bonds shall not constitute or give rise to a general obligation or other indebtedness of the Authority or the State within the meaning of any constitutional limitation.

6. Under existing laws, regulations, rules and published rulings and judicial decisions of the United States of America, as presently written and applied, and assuming among other matters, the accuracy of certain representations and compliance with certain covenants, the interest on the Series 2021 Bonds is excludable from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the “Code”), and such interest will not be treated as a preference item for purposes of the alternative minimum tax imposed under the Code with respect to individuals. In giving the foregoing opinion we have assumed and relied upon compliance with the covenants of the Authority and the accuracy, which we have not independently verified, of the representations and certifications of the Authority, all as contained in the Tax Certificate. The accuracy of certain of those representations and certifications, and compliance by the Authority with those covenants subsequent to the issuance of the Series 2021 Bonds, may be necessary for the interest on the Series 2021 Bonds to be and to remain excluded from gross income for federal income tax purposes. Failure to comply with certain of those covenants subsequent to the issuance of the Series 2021 Bonds could cause the interest thereon to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2021 Bonds.

7. Under the Act, the Series 2021 Bonds, their transfer and the income therefrom (including any profit made on the sale thereof) shall at all times be free from taxation within the State of West Virginia.

The validity and enforceability of the documents described above are subject to the provisions of applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to the enforcement of creditors' rights generally or against public agencies such as the Authority or the State, whether now or hereafter in effect. Such obligations are also subject to the exercise of judicial discretion and to general equity principles, whether considered at law or in equity, which may, among other things, limit the specific enforcement under state law of certain remedies.

Our services as Bond Counsel to the Authority have been limited to rendering the foregoing opinion based upon our review of such proceedings and documents as we deem necessary to approve the validity of the Series 2021 Bonds and the tax-exempt status of the interest thereon.

This opinion is rendered as of the date hereof. We are under no obligation to, nor will we, update or revise this opinion due to events occurring after the date hereof which change the facts or law upon which this opinion is based.

Respectfully submitted,

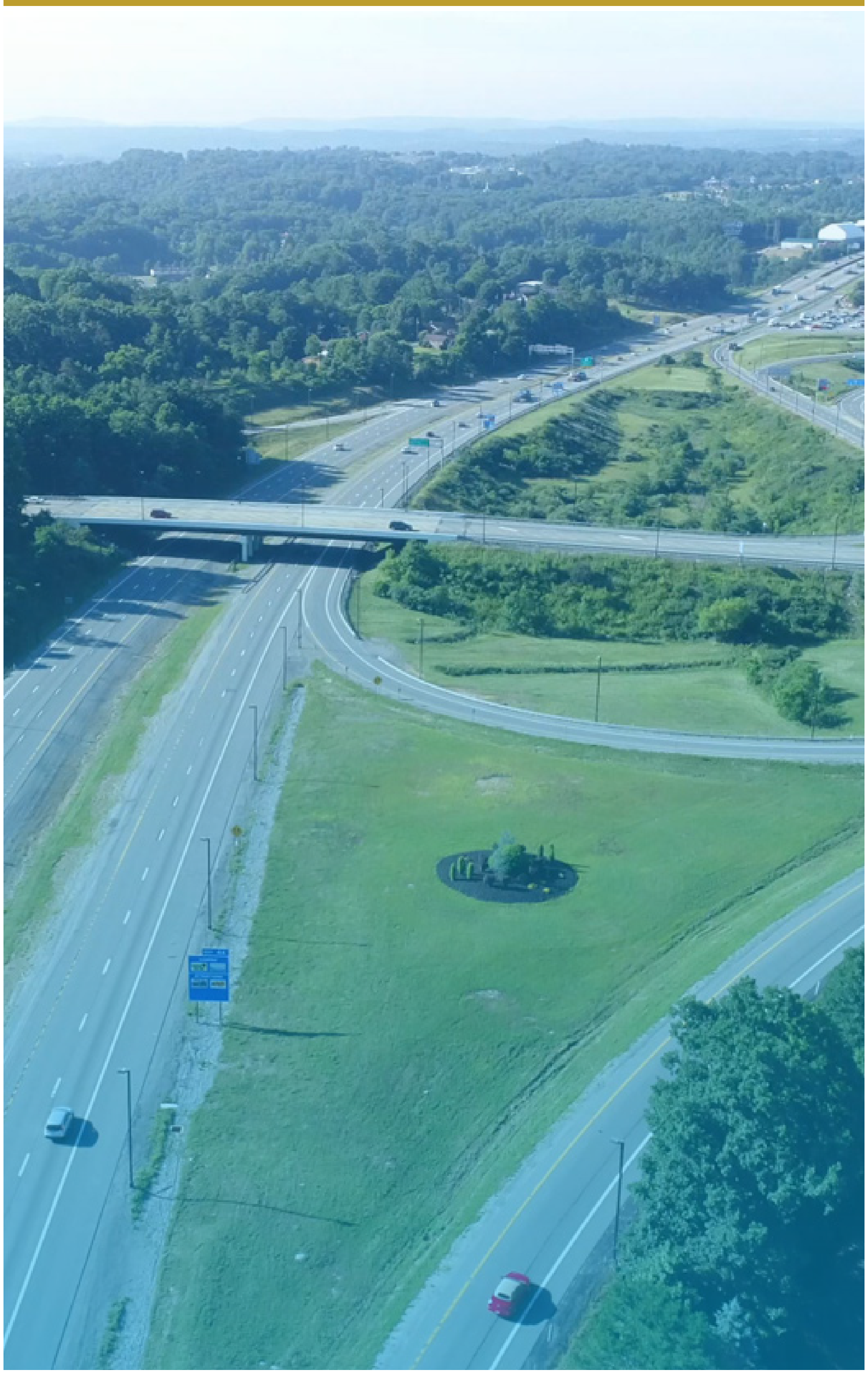
BOWLES RICE LLP

APPENDIX D

TRAFFIC AND REVENUE STUDY

West Virginia Turnpike 2020 Traffic & Revenue Study

with revisions due to COVID-19



July 2020
(as amended April 2021)

Prepared for

West Virginia Parkways Authority

CDM Smith

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77 Hartland Street, Suite 201
East Hartford, Connecticut 06108
tel: 860 529-7615

April 23, 2021

Mr. Jeffrey A. Miller
Executive Director
West Virginia Parkways Authority
3310 Piedmont Road
Charleston, WV 25306

RE: **West Virginia Turnpike Traffic and Revenue Forecast Update**

Dear Mr. Miller:

CDM Smith is pleased to provide the **West Virginia Turnpike Traffic and Revenue Study** report dated April 2021 (T&R Study). The T&R Study report consists of a comprehensive T&R report completed in early 2020 (Pre-COVID-19 Study) and this T&R forecast update letter report (T&R Update). The Pre-COVID-19 Study was substantially complete in draft form in early 2020 and utilized the most recent available data at that time. The estimates, documented in the Pre-COVID-19 Study and attached to this letter, describe actual T&R conditions for the period through calendar year 2019 and forecasts of T&R from 2020 through 2050. Estimates in the Pre-COVID-19 Study did not account for negative impacts on transactions and revenue, and corresponding recovery due to the COVID-19 pandemic. The estimates in the Pre-COVID-19 Study do, however, reflect the changes in toll policy introduced at the beginning of 2019 (essentially a doubling of toll rates and the introduction of the single fee discount program). There is a detailed summary of the effect of these new toll policies in the attached report.

As part of the T&R Update, CDM Smith prepared revised base case T&R estimates for the West Virginia Turnpike (the Turnpike) which include the following changes to forecast inputs and assumptions:

- Forecasts were re-benchmarked to 13 months of additional actual traffic and revenue data on the West Virginia Turnpike from December 2019 through January 2021
- Socioeconomic forecasts used in the T&R study were reviewed by CDM Smith to check if they were still suitable for long-term growth projections
- The estimated negative impacts on traffic demand and corresponding recovery due to the COVID-19 pandemic were incorporated into the traffic and revenue forecasts

This letter report documents the revised T&R estimates along with the information and methods used to produce them.

The events surrounding the COVID-19 pandemic have been highly unusual, and unique in modern experience. As a result, there is a heightened degree of uncertainty concerning the T&R estimates. Our strategy has been to test a range of potential impacts and focus primarily on the pessimistic side. In addition to the base case forecasts, CDM Smith developed several scenarios to estimate the T&R impacts accounting for potential of delayed recovery in passenger car traffic, increased rates of work-related trips, and reduced truck traffic.

1. COVID-19 Timeline and Impacts on West Virginia Turnpike T&R

Beginning in March 2020, the COVID-19 pandemic has impacted nearly all aspects of society and the economy, including travel. The pandemic caused significant reductions in transactions and revenue on toll facilities around the U.S., including the West Virginia Turnpike. **Table 1** provides the timeline of events, mandates, and other announcements related to COVID-19 potentially affecting travel on the West Virginia Turnpike. This table includes not only actions taken by the federal government and the State of West Virginia, but also by three nearby states (North Carolina, Ohio, and Virginia) that are a source or destination for much of the traffic utilizing the Turnpike.

The pandemic was first declared a national emergency by the federal government on March 13, 2020. Over the next few days and weeks, the State of West Virginia instituted a number of restrictions that resulted in decreased travel and therefore fewer Turnpike transactions. Among these restrictions were the closure of restaurants, bars, and casinos on March 17 and the closure of all non-essential businesses in on March 24. Between March 22 and March 30, all four states issued stay-at-home orders that lasted through at least the month of April and into early May. Restrictions were gradually lifted through the late spring and early summer, and West Virginia reopened all K-12 schools on September 8. On December 16, West Virginia administered its first vaccinations to residents and staff at long-term care facilities and has ramped up the vaccination distribution efforts in the following months.

2020 Annual T&R - **Table 2** shows the annual change in transactions and revenue by market segment experienced in 2020 on the West Virginia Turnpike compared to 2019. These results reflect changes brought about by the Covid-19 pandemic, which started in March 2020.

All toll classes experienced a decline in transactions. However, the impact was more severe for Class 1 vehicles than for larger vehicles. Class 1 transactions experienced a reduction of almost 22 percent in 2020 compared to 2019. The reduction was similar for Class 1 single fee transactions and Class 1 tolled transactions. Class 2-4 transactions experienced a more moderate reduction at 9.6 percent, while Classes 5-10 only experienced a 3 percent reduction in annual transactions. Overall, annual transactions declined by about 17 percent.

The impact on revenue follows the same trend by market segment, but the overall impact is less severe because commercial vehicles represent a higher share of total revenues. The total systemwide revenue declined by about 10 percent in 2020. The revenue generated by Class 5-10 vehicles was down by less than 2 percent. Toll revenue described here includes the fees paid for joining the single fee discount program but does not include fees paid for acquiring a transponder.

Table 1: National, West Virginia, Virginia, North Carolina, and Ohio Mandates Related to COVID-19

Date	Location	Description
March 11	U.S.A.	- International travel is halted (excluding Great Britain).
March 11 - 12	OH	- Governor bans large indoor gatherings of 100 or more & announces school closures.
March 13	U.S.A.	- National Emergency declared.
March 15 - 16	NC, VA, WV	- Gatherings of more than 100 people banned. - VA schools closed until March 27th (later extended to end of school year) per Governor order. - NC closes K-12 public schools and bans mass gatherings.
March 17	NC, VA, WV	- VA bars, restaurants and other businesses limited to 10 person capacity. - WV dining rooms, bars, and casinos closed - NC Closes sit-down service at restaurants
March 18	OH, NC	- NC Quick Pass Customer Service Centers closes to customers; CSC staff operates at reduced levels to maintain social distancing - OH Governor issues temporary closure of barbershops, hair salons, nail salons, tattoo parlors, and most BMV locations.
March 18 - 20	U.S.A.	- U.S./Canada and U.S./Mexico borders closed for non-essential travel
March 22 - 23	OH, WV	WV - Non-essential businesses closed immediately, staty-at-home order issued effective March 24 8 P.M. OH - Stay at home order issues till April 6 (extends till a further date later) and places restrictions on capacity for Children Day Care centers.
March 24	VA	- Governor ordered closure of bars, restaurants, congregations, and all other non-essential activities and businesses. Stay-at-home orders issued
March 25	NC	- Limits gaherings to less than 50 people; closes gyms, movie theaters, parlors & other similar facilities.
March 30	NC, VA,WV	- NC/ VA residents ordered to stay-at-home indefinitely, with exceptions for work, medical, and grocery trips. - WV begins "Week 1" phase, reopening various medical and health facilities - WV issues requirement of out-of-state travelers to self-quarantine for 14 days upon arrival to the state.
May 4 - 7	OH, WV	- Reopening of business with 10 or fewer emloyees, restaurants with taekaway service and outdoor dinings, and religious entities and funeral homes and personal care services.
May 9 - 13	NC, VA	- VA Governors lifted stay-at-home order - NC continues with stay at home order. Nonessential businesss allowed to open at 50% capacity and parks, outdoor worship services & childcare facilities allowed to open
May 15	VA	- Phase One of recovery plan begins with increased capacity for retailers, restaurants, and places of worship.
May 21	WV	- Reopening of indoor dining at 50% capacity, large retail stores, state park campgrounds for residents only, outdoor recreational activities. - Self-quarantine requirement for out-of-state travellers lifted.
May 23 - 26	NC, WV	-WV reopens of shopping malls, indoor and outdoor bars, museums, vistor centers, and zoos. - NC Social gatherings indoors allowed for 10 people or less; Indoor sit-down dining reopens.
June 4 - 5	OH, VA	- VA: Phase Two of recovery plan begins with maximum number of people at a social gathering increasing from 10 to 50 people, and restaurants and other non-essential businesses allowing indoor usage at reduced capacities. - OH: Retail, consumer, service & entertainment venues allowed to open following mandated guidelines
June 22	WV	-Outdoor activities permitted to reopen: youth sports games, outdoor sporting evens, equestrain evens, motorsport or powerspot racing, summer youth camps.
July 1	VA, WV	- VA Phase Three begins statewide, continuing to lift capacity caps on non-essential businesses and entertainment venues. - WV allows reopening of amusement parks, outdoor open-air concerts, fairs, and festivals.
July 6	WV	- Mask mandate issued for indoor spaces outside of the home
July 30	OH	- Limit on county fairs to junior fair activities & animal exhibitions
August 12	NC	- NCTA reopens Monroe and Charlotte Customer Service Centers to the public. Morrisville Service Center to remain closed to the public.
Augeust 25	OH	- Limits seat capacity to 1500 or 15% in outdoor sports venues & 300 or 15% for indoor venues
September 8	WV	- Reopening of all K-12 schools
September 23	OH	- Restaurants, bars, banquet & catering facilities/ services reopen to dine-in service with guidelines.
November 13	NC	- Face coverings in all public indoor settings, including fitness facilities and restaurants, where non-household members are present.
December 16	WV	- First vaccines distributed to residnts and staff at long-term care facilities across the state.

Table 2: Historical Transaction and Revenue for 2018, 2019 and 2020

	Calendar Year				
	2018 (1)	2019 (1)	YoY Change	2020 (1)	YoY Change
Transactions (millions)					
Class 1 Single Fee	3.92	8.26	110.8%	6.47	-21.7%
Class 1 Tolled	23.12	19.02	-17.8%	14.87	-21.8%
Class 2-4 Tolled	0.92	0.84	-8.8%	0.75	-9.6%
Class 5-10 (CV) Tolled	8.36	8.65	3.4%	8.39	-3.0%
Total Trans w/single fee	**36.32**	**36.76**	**1.2%**	**30.49**	**-17.1%**
Revenue (millions) (2)					
Class 1 Single Fee	$ 3.08	$ 1.08	-64.8%	$ 0.33	-70.0%
Class 1 Tolled	$ 39.75	$ 63.10	58.7%	$ 50.02	-20.7%
Class 2-4 Tolled	$ 2.11	$ 3.74	76.9%	$ 3.41	-8.9%
Class 5-10 (CV) Tolled	$ 45.06	$ 87.64	94.5%	$ 86.02	-1.8%
Total Revenue w/single fee	**$ 90.01**	**$ 155.56**	**72.8%**	**$ 139.77**	**-10.2%**
Total Revenue w/o single fee	**$ 86.93**	**$ 154.48**	**77.7%**	**$ 139.45**	**-9.7%**

Source: Parkways
(1) Actuals from Transcore database. Class 1 Single fee revenue estimated based on new accounts multiplied by program fee.
(2) Represents revenue collected during respective calendar year

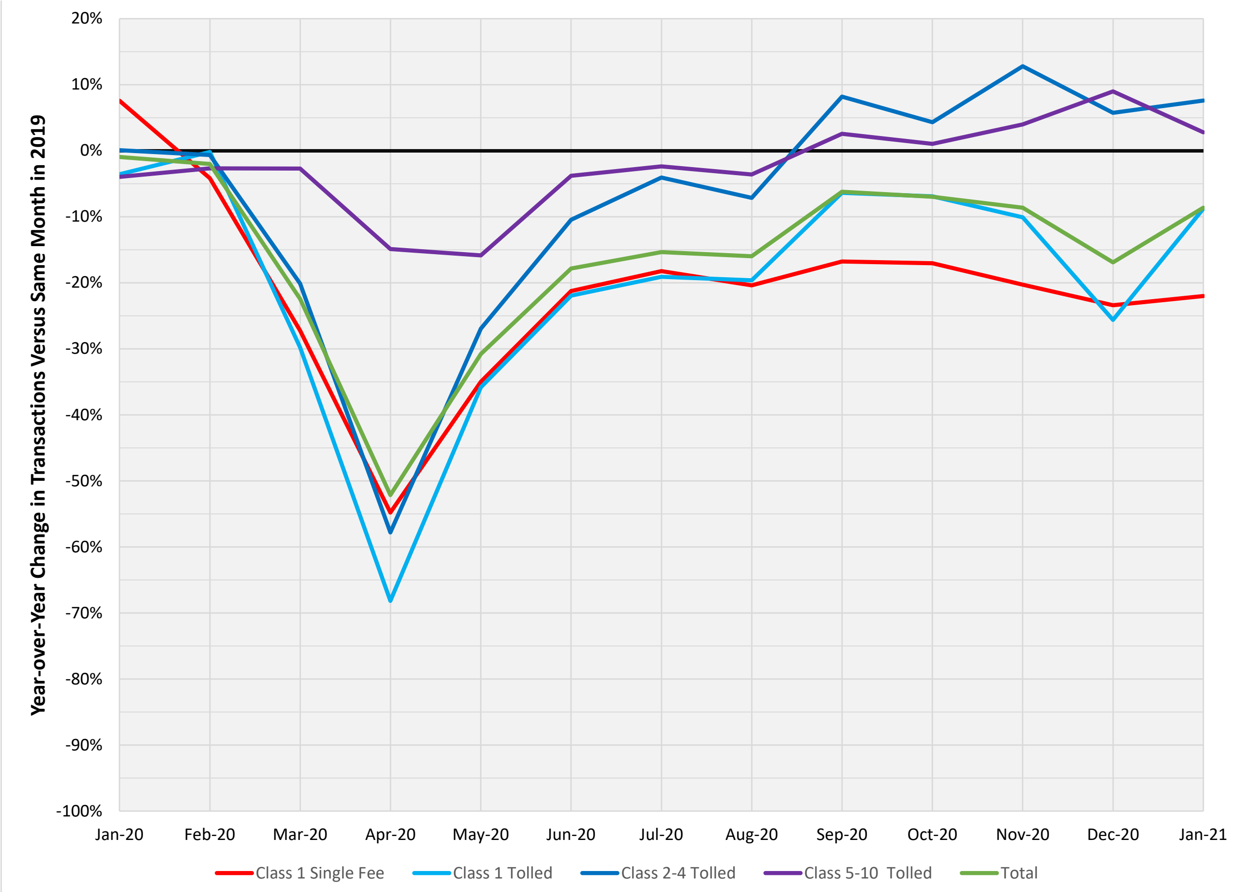
Monthly Variances – The impact of the COVID-19 pandemic on West Virginia Turnpike transactions, grouped by vehicle class, are shown in **Figure 1,** from January 2020 through January 2021, the last month of available data at the time this analysis was conducted. The impacts are shown in the chart as variances, the percent change in transactions in a given month for a given vehicle class grouping compared to the same month in the prior (pre-COVID) year.

All vehicle classes experienced a significant decrease in transactions in April 2020, which was the month during which the most severe travel and economic restrictions were in place as well as the greatest level of uncertainty about the severity of COVID-19. Class 1 tolled vehicles, all Class 1 vehicles not enrolled in the WVPA single fee discount program, experienced the steepest decline with April 2020 transactions being 68.2 percent lower than in April 2019. Transactions for Class 1 vehicles in the single fee discount program and Class 2-4 vehicles declined more than 50 percent compared with April 2019. Class 5-10 vehicles experienced a year-over-year decline of only 14.9 percent during April 2020 as demand for freight movement remained strong.

As businesses began to reopen and stay-at-home orders were lifted, there was a gradual recovery of traffic levels through the summer and fall, with total transactions in September 2020 being only 6.2 percent below 2019 levels. In the fall and early winter, as much of the country experienced increased infection rates and public health authorities advised people to remain home over the holidays, transaction levels fell again, with total traffic in December 2020 being 16.9 percent below December 2019 levels. However, transactions improved again in January 2021 to 8.6 percent below 2020.

Throughout the pandemic, commercial vehicle traffic has remained much more stable than passenger vehicle traffic, which is generally more discretionary. In fact, while passenger vehicle traffic has yet to reach pre-pandemic levels, commercial vehicles (both Class 2-4 and Class 5-10) have experienced year-over-year growth each month since September 2020.

Figure 1: West Virginia Turnpike Estimated COVID-19 Transaction Impacts by Market Segment



Source: TransCore database of West Virginia Turnpike Transactions

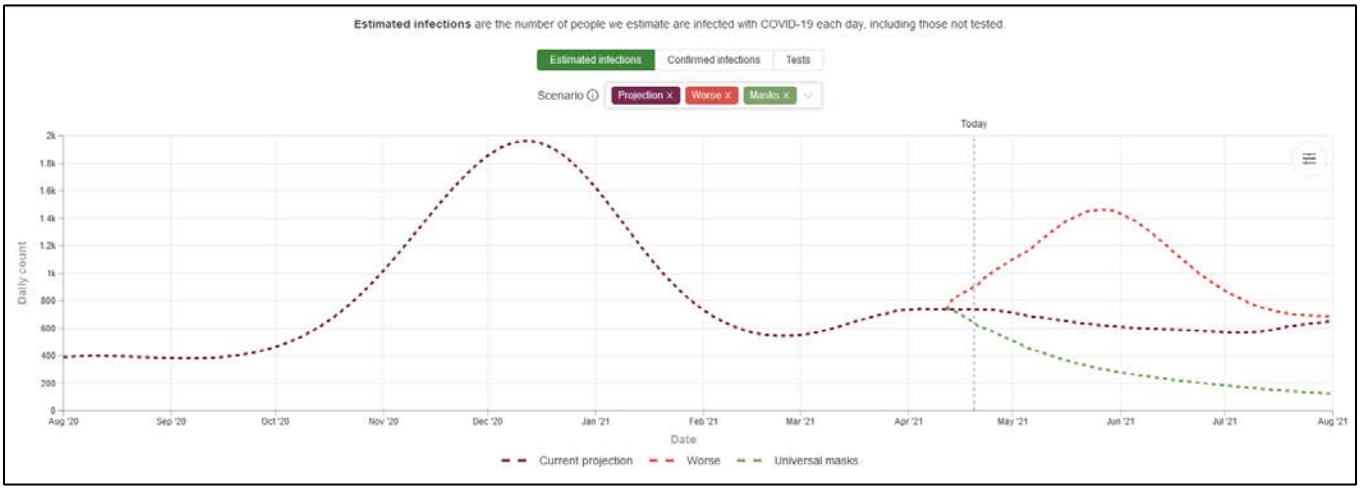
2. Near-Term Recovery Outlook and Long-Term Growth Considerations

Near-Term Recovery Outlook – The Institute for Health Metrics and Evaluation (IHME) at the University of Washington has kept track of the impacts of COVID-19 on public health. They have also developed and regularly update forecasts for every country, including every state in the United States. Like most other states, West Virginia first started seeing an uptick in COVID-19 cases in mid-March 2020. **Figure 2** contains historical information and projections about the estimated number of infections in West Virginia. Estimated cases[1] rose through the end of March, peaking at 7.32 per 100,000 on March 31, which was a mild peak compared to many other states. (For comparative purposes, the estimated case count in New York State peaked at 368.48 per 100k on March 22.) Throughout April and May, which was the period with the most restrictions on travel and economic activity, the estimated infection rate fell to as low as 2.75 and remained below 5.0 from mid-April through mid-June. The summer brought steadily increasing infection rates through June and July, before settling at a fairly consistent rate of between 20 and 21 cases per 100k throughout August and most of September.

[1] Case counts are estimated by IHME and include the estimated number of people that are infected each day, including those not tested.

As the weather turned colder, infection rates began to rise throughout the fall, peaking at 105.35 per 100k (about five times higher than the summer peak) on December 12. Fortunately, the infection rate also began to fall fairly quickly after this peak, aided by the vaccination effort that began later that month. By mid-February 2021, the infection rate fell below 30 per 100k, still higher than the summer peak but much lower than December 2020. In the two months since then, despite increasing vaccination rates, the infection rate rose slightly, although it has remained steady at about 39 cases per 100k since late in March 2021.

Figure 2: West Virginia COVID-19 Estimated Infections



Source: https://covid19.healthdata.org/united-states-of-america/west-virginia?view=daily-deaths&tab=trend, April 20, 2021

IHME's most likely projection estimates a slow but steady decrease in infection rates through early July 2021 before experiencing a slight uptick at the end of the month. A worse-case[2] scenario could see another surge in cases in the coming months, while mask usage increasing to 95% of the population could result in rapidly declining infection rates that dip below 7.0 per 100k by August 2021.

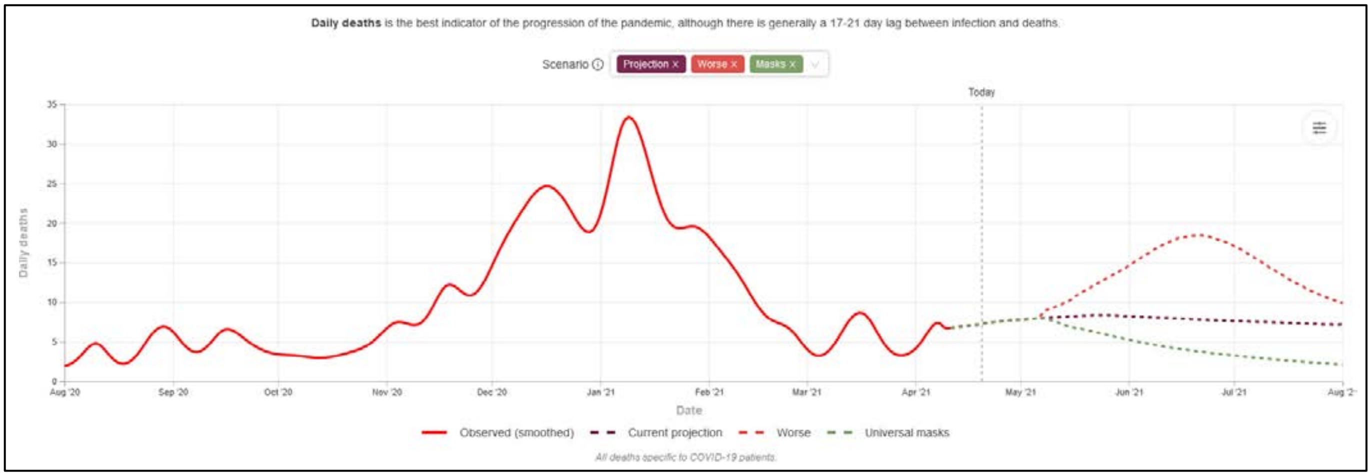
The daily death rate followed a largely similar pattern, but with a 17–21-day lag as a result of the time it takes an infected person to die from the infection. **Figure 3** contains historical information and projections of daily death rate in West Virginia. The death rate in West Virginia peaked at 1.79 per 100k on January 9, 2021 and has since fallen to 0.36 on April 12, 2021. Concerningly, in early April the death rate has doubled from 0.18 at the end of March, although IHME's most likely projection estimates that this will stay flat through the spring and summer. Like with the infection rate, a worse-case scenario could result in another surge of deaths in June 2021, while universal adoption of masks would cut the daily death rate to only 0.1 by the end of July 2021.

As of April 20, 2021, 26.6% of West Virginia residents have been fully vaccinated, while 34.6% of the population has received at least one dose. While the portion of the West Virginia population that is fully vaccinated is above the national average of 25.7% and comparable to neighboring states, the portion of the population that has received at least one dose is noticeably lower than the U.S. average of 39.9% and

[2] The "worse-case" scenario assumes that the mobility of all vaccinated people returns towards pre-COVID-19 levels, lower vaccine effectiveness and increased spread of variants, and declining mask usage among the vaccinated population within 30 days of vaccination.

all surrounding states, indicating West Virginia have relatively fewer residents waiting to get their second dose. West Virginia also has a lower percentage of its senior citizen (65+) population vaccinated, 61.1%, than do neighboring states and the U.S. as a whole. Considering that, in most states, senior citizens were among the first people eligible to be vaccinated, they have had more time to get their vaccinations and the remaining unvaccinated population may be vaccine adverse. West Virginia has also administered 80% of the doses it has received, right in line with the U.S. average, indicating that there is not likely a distribution problem that is suppressing vaccination rates.

Figure 3: West Virginia COVID-19 Daily Deaths



Source: https://covid19.healthdata.org/united-states-of-america/west-virginia?view=daily-deaths&tab=trend, April 20, 2021

Considering these factors (above average fully vaccinated rates, few people waiting for a second dose, below average rate of vaccinated seniors, and average rate of administered doses) together, it seems as if much of the West Virginia population that is willing and eager to be vaccinated has already done so. Therefore, vaccinating enough of the remaining population to reach herd immunity[3] may take longer in West Virginia than in other locations. This is borne out by the Center for Disease Control and Prevention's (CDC) estimate that 50% of the West Virginia population will not be fully vaccinated until June 26, 2021, with 85% vaccination not reached until October 6, 2021. These dates are noticeably behind the estimated 50% and 85% vaccination dates for both the U.S. (June 8, 2021 and August 19, 2021, respectively), as well as all neighboring states.

Long-term Growth Rates Considerations – After completing the Pre-COVID-19 Study and as part of the updated for COVID-19 impacts, CDM Smith considered reevaluating and updating the long-term growth rates underlying traffic and revenue projections. Long-term growth rates were econometrically developed in 2017 and then updated in 2019 for passenger and commercial vehicles separately. This work is explained in the Pre-COVID-19 Study report.

CDM Smith considers the COVID-19 pandemic an unprecedented event and an aberration in the long-term historical patterns. We thought about incorporating this event into the established econometric

[3] According to a February 3 NPR article ("A Rocky Road On The Way to Herd Immunity For COVID-19"), scientists estimate that between 70% and 85% of people need to be immune, either from having developed antibodies from becoming infected or receiving a vaccination, to reach herd immunity.

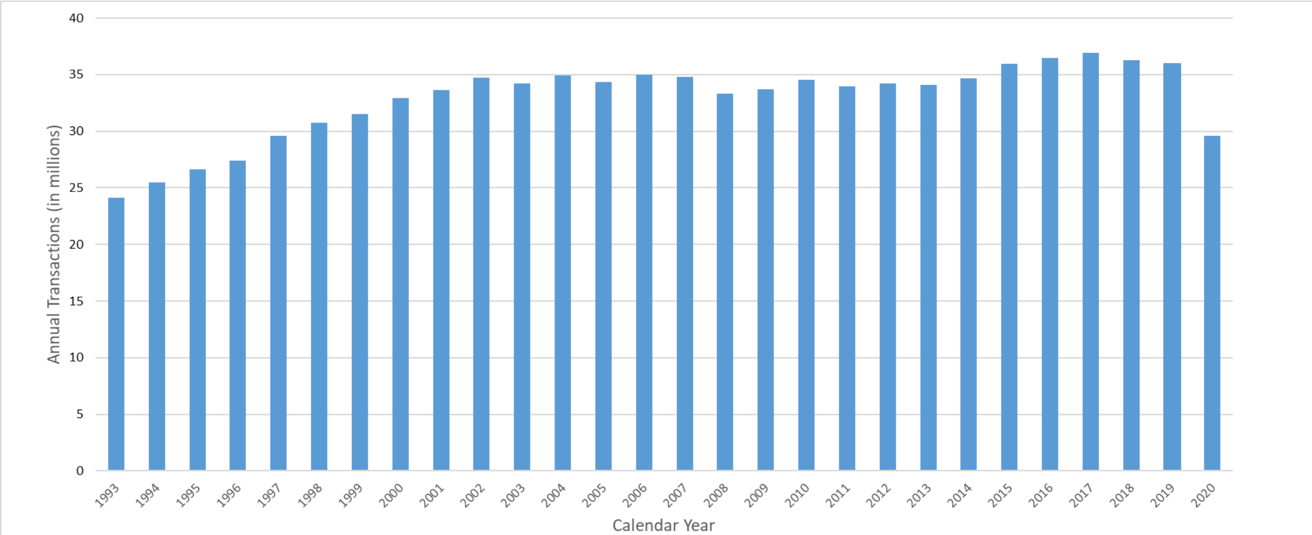
equations through the use of a dummy variable (binary 0/1 occurrence). It was deemed imprudent as this type of econometric revision would probably not appreciably alter the equations statistics or the sociodemographic/macroeconomic relationships in the long-term. Including a dummy-variable would simply serve as a “catch-all” for any observed annual variance in transactions, including COVID-19, the behavioral responses to COVID-19, as well as any cotemporaneous factors that may be independent of COVID-19. And while the inclusion would likely be statistically relevant and defensibly logical, it would not substantially change the long-term post-COVID-19 timeframe. Furthermore, any changes stemming from econometric reassessment would not be large-enough to alter the previously established growth rates.

Additionally, COVID-19 should not fundamentally alter long-term traffic patterns relative to underlying sociodemographic and macroeconomic data, excepting as noted elsewhere regarding shifts in consumer purchasing patterns (e.g., shift to online) affecting commercial vehicles and telecommuting shifts affecting passenger vehicles. As noted, the COVID-19-induced paradigm shift from in-person retailers to online purchases likely will have a one-time/short-term increase, and thereafter resume longer-term and steadier growth patterns. A paradigm shift towards selective telecommuting would be more long-term/institutionalized; however, few West Virginia Turnpike customers are commuters traveling to and from work. The work from home phenomena would have a limited overall dampening effect on the Turnpike. Such commuting-related changes are addressed separately from the econometric, long-term growth calculations.

West Virginia Turnpike Historical Traffic and Revenue Trends – The West Virginia Turnpike has proven resilient in response to prior historic events including the Great Recession. While still subject to broader regional and national economic trends, the Turnpike’s position as an important north-south interstate travel corridor without competition from viable high-speed alternative routes, contributed to limited transaction decreases during recessions and major toll increases. The Turnpike experienced limited transaction and revenue decreases in 2007 and 2008 in the face of severe economic downturn. Large toll rate increases implemented in the second half of 2009 and again in January 2019 resulted in small decreases in traffic and large increases in toll revenue.

Figure 4 contains a plot of total annual transactions by calendar year on the Turnpike between 1993 and 2020. Systemwide toll transactions increased from 24.2 million in 1993 to 36.0 million in 2019, representing a compound annual growth rate (CAGR) of 1.5 percent. The Turnpike experienced strong growth in transactions from 1993 to 2002, with a CAGR of 4.1 percent. Between 2002 and 2013, transactions remained stable or declined. The decline of transactions in 2008 (33.3 million compared to 34.8 million in 2007) was influenced by the Great Recession and represented only a 4.1 percent reduction. The toll rate increase of August 1, 2009, did not have a major impact on overall transaction trends. From 2013 to 2017, the Turnpike experienced an upward trend with an annual average increase of 2.0 percent. Variations in transactions are largely the result of the economic climate affecting West Virginia and the rest of the country. In recent years, transactions were down slightly in 2018 and 2019, before the significant decline in 2020 (17.7 percent drop) resulting from the pandemic.

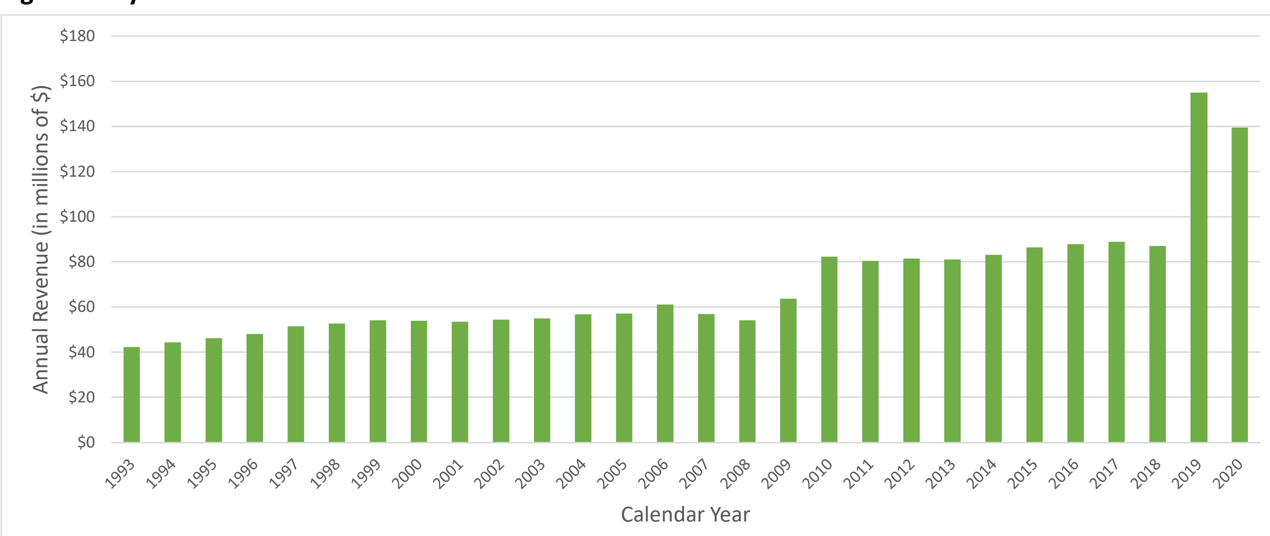
Figure 4: Annual Systemwide Transactions



Source: Parkways

Figure 5 has a graph of total annual revenue by calendar year on the Turnpike between 1993 and 2020. Over the entire period, systemwide toll revenue increased from $42.3 million in 1993 to $139.5 million in 2020, representing a CAGR of 4.5 percent. In general, the revenue trend followed the transaction pattern previously described, including a drop in 2007/2008 due to the Great Recession. The toll rate increase of 2009 resulted in a major increase in revenue, with 2010 revenue almost 30 percent higher than 2009. Variations in revenue are largely the result of the economic climate affecting West Virginia and the rest of the country, as well as the toll rate adjustments made by Parkways. In 2019, following the introduction of the single fee program and doubling of toll rates, systemwide revenue increased by 78 percent. In 2020, systemwide revenue dropped by 9.7 percent as a result of the COVID-19 pandemic but was still 60.3 percent higher than 2018.

Figure 5: Systemwide Annual Revenue



Note: Toll rate increases were implemented on August 1, 2009 and January 15, 2019.
Source: Parkways

3. Methodology

The T&R estimates for the West Virginia Turnpike produced and reported in early 2020 are the starting point for this analysis. These pre-COVID-19 forecasts anticipate future changes in the factors that directly influence T&R, such as population and employment growth. These estimates also reflect the planned toll policy changes, such as regular increases in toll rates and the cost of the single-fee discount program. The separate impacts from the COVID-19 pandemic, developed here, are estimated as variances from the pre-COVID-19 estimates. The impacts represent changes in travel patterns due to the disease, the public and private sector decisions in response to the disease and the related economic effects. The revised estimates are then derived from the Pre-COVID-19 estimates with the variances for COVID-19 applied.

Summary of the Pre-COVID-19 Estimates – The pre-COVID-19 forecasts for this analysis were described in considerable detail within the following Pre-COVID-19 Study report. **Table 3** contains the annual transaction and revenue forecasts without impacts from COVID-19. The values in this table for calendar year 2019 are actual values. Values in subsequent years (calendar years 2020 to 2050) are forecasts. There were significant changes in toll policy on the Turnpike at the beginning of calendar 2019.

To summarize, on January 15, 2019, the toll for customers driving passenger cars and paying cash doubled from $2.00 to $4.00 at each mainline toll plaza in each direction and the toll at the North Beckley ramp plazas increased from $0.40 to $0.75, a doubling rounded to the quarter for ease of collection. The toll rates for customers using other payment methods (electronic toll collection) also doubled, except that a new single fee discount program was introduced. By enrolling in this program, customers driving a passenger car (Class 1, non-commercial use) had the opportunity to obtain unlimited travel on the Turnpike for one year for an annual fee of $25 per vehicle, plus the cost of issuing a WV E-ZPass transponder if necessary. To encourage participation, a one-time early enrollment incentive was offered in 2018 and the first two weeks of 2019. During this time only, any qualifying customer could enroll in the single fee discount program and obtain unlimited travel for that vehicle on the Turnpike in calendar years 2019, 2020 and 2021 for a one-time payment of $24 per vehicle, plus the cost of a transponder if necessary.

Toll amounts for customers driving vehicles with more than two axles also doubled on January 15, 2019. Cash rates were rounded to the nearest quarter for ease of collection.

The estimates in Table 3 include the effects of these initial and future changes, such as the end of the early enrollment period in 2022 and the planned annual toll rate adjustments of 1.6 percent, also starting in 2022. The T&R estimates also include the planned increase in annual flat fee by 5 percent every third year, beginning 2022.

Calendar year 2022 is anticipated to be untypical for several reasons: the early enrollment option coverage ends prompting some customers to leave the single fee discount program and pay cash instead; all customers willing to stay in the single fee discount program have to pay the higher $26.25 annual fee; and toll rates increase for most of the toll-paying customers. As a result, the overall revenue is expected to increase by $10.8 million in 2022 (+6.8 percent). The Pre-COVID-19 Report contains a more detailed discussion about these effects.

Table 3: Pre-COVID-19 Annual Transactions and Revenue Forecasts

Calendar Year	Transactions (millions)					Revenue (millions year of collection dollars)				
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Trans w/single fee	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Revenue w/single fee
2014 (1)	3.23	22.99	0.80	7.64	**34.66**	$ 1.06	$ 39.51	$ 1.87	$ 41.79	**$ 84.23**
2015 (1)	3.13	24.11	0.87	7.84	**35.95**	$ 1.23	$ 41.53	$ 2.03	$ 42.81	**$ 87.60**
2016 (1)	3.09	24.50	0.92	7.98	**36.49**	$ 1.15	$ 42.24	$ 2.14	$ 43.46	**$ 88.99**
2017 (1)	3.31	24.55	0.93	8.11	**36.90**	$ 1.13	$ 42.37	$ 2.18	$ 44.33	**$ 90.01**
2018 (1)	3.92	23.12	0.92	8.36	**36.32**	$ 3.08	$ 39.75	$ 2.11	$ 45.06	**$ 90.01**
2019 (1)	8.26	19.02	0.84	8.65	**36.76**	$ 1.08	$ 63.10	$ 3.74	$ 87.64	**$ 155.56**
2020	8.31	18.90	0.85	8.56	**36.63**	$ 0.33	$ 63.92	$ 3.82	$ 89.46	**$ 157.53**
2021	8.39	19.09	0.86	8.68	**37.02**	$ 0.33	$ 64.53	$ 3.87	$ 90.69	**$ 159.42**
2022 (2)	6.65	20.85	0.87	8.78	**37.15**	$ 3.00	$ 70.09	$ 3.91	$ 93.24	**$ 170.24**
2023	7.01	20.66	0.88	8.88	**37.43**	$ 3.20	$ 72.65	$ 4.11	$ 95.92	**$ 175.88**
2024	7.09	20.82	0.89	8.97	**37.76**	$ 3.23	$ 73.50	$ 4.15	$ 98.48	**$ 179.36**
2025	7.02	21.10	0.89	9.06	**38.07**	$ 3.33	$ 74.70	$ 4.20	$ 101.11	**$ 183.34**
2026	7.10	21.25	0.90	9.14	**38.40**	$ 3.35	$ 75.60	$ 4.26	$ 103.40	**$ 186.61**
2027	7.48	21.04	0.91	9.22	**38.65**	$ 3.57	$ 77.94	$ 4.45	$ 106.01	**$ 191.97**
2028	7.39	21.32	0.91	9.30	**38.92**	$ 3.68	$ 79.27	$ 4.51	$ 108.69	**$ 196.15**
2029	7.47	21.46	0.92	9.37	**39.21**	$ 3.70	$ 80.18	$ 4.70	$ 111.25	**$ 199.83**
2030	7.54	21.59	0.92	9.44	**39.49**	$ 3.73	$ 81.10	$ 4.74	$ 113.97	**$ 203.54**
2031	7.89	21.29	0.93	9.51	**39.61**	$ 4.09	$ 84.11	$ 4.78	$ 116.68	**$ 209.66**
2032	7.96	21.40	0.93	9.58	**39.87**	$ 4.12	$ 85.00	$ 4.97	$ 119.43	**$ 213.52**
2033	8.02	21.51	0.93	9.64	**40.11**	$ 4.14	$ 85.93	$ 5.01	$ 122.18	**$ 217.26**
2034	8.21	21.36	0.94	9.71	**40.21**	$ 4.49	$ 88.28	$ 5.05	$ 125.04	**$ 222.86**
2035	8.27	21.45	0.94	9.77	**40.44**	$ 4.52	$ 89.19	$ 5.23	$ 127.88	**$ 226.81**
2036	8.33	21.54	0.94	9.84	**40.64**	$ 4.54	$ 90.09	$ 5.40	$ 131.00	**$ 231.03**
2037	8.50	21.36	0.94	9.90	**40.70**	$ 4.91	$ 92.18	$ 5.45	$ 134.01	**$ 236.55**
2038	8.55	21.43	0.94	9.96	**40.89**	$ 4.93	$ 93.08	$ 5.47	$ 137.05	**$ 240.52**
2039	8.60	21.50	0.94	10.03	**41.08**	$ 4.94	$ 93.96	$ 5.66	$ 140.08	**$ 244.65**
2040	8.76	21.30	0.95	10.09	**41.10**	$ 5.33	$ 95.89	$ 5.69	$ 143.19	**$ 250.10**
2041	8.83	21.35	0.95	10.15	**41.27**	$ 5.36	$ 96.70	$ 5.72	$ 146.40	**$ 254.17**
2042	8.90	21.39	0.95	10.21	**41.44**	$ 5.38	$ 97.60	$ 5.89	$ 149.51	**$ 258.39**
2043	9.07	21.15	0.94	10.26	**41.43**	$ 5.80	$ 99.24	$ 6.05	$ 152.99	**$ 264.07**
2044	9.13	21.19	0.94	10.32	**41.59**	$ 5.82	$ 100.15	$ 6.09	$ 156.36	**$ 268.41**
2045	9.19	21.23	0.94	10.38	**41.75**	$ 5.85	$ 101.06	$ 6.10	$ 159.67	**$ 272.68**
2046	9.34	20.99	0.94	10.43	**41.71**	$ 6.28	$ 102.57	$ 6.29	$ 163.11	**$ 278.24**
2047	9.56	20.82	0.94	10.49	**41.80**	$ 6.35	$ 103.89	$ 6.28	$ 166.80	**$ 283.32**
2048	9.98	20.36	0.94	10.54	**41.82**	$ 6.72	$ 104.22	$ 6.45	$ 170.29	**$ 287.68**
2049	9.75	20.61	0.94	10.59	**41.89**	$ 6.82	$ 106.27	$ 6.47	$ 173.84	**$ 293.40**
2050	9.81	20.65	0.93	10.65	**42.04**	$ 6.84	$ 107.34	$ 6.63	$ 177.72	**$ 298.53**

(1) 2014-2019: Actuals derived from Transcore database
(2) 2022: Early enrollment option coverage ends 12/31/2021, toll rates escalate 1.6% annually, flat fee increases 5% every third year
Source: CDM Smith Analysis

Input and Assumptions – CDM Smith developed a base case T&R forecast taking into account: 1) estimated negative impacts on traffic demand due to the COVID-19 pandemic, 2) estimated near-term recovery as restrictions are lifted and vaccination rates increase, and 3) potential lasting effects travel patterns including the level at which people commute to work. The following section describes the inputs and assumptions used in developing the base case T&R forecast.

COVID-19 Impacts on Monthly T&R – The impacts of COVID-19 are revealed as either the monthly transactions or revenue during COVID-19 divided by the monthly transactions or revenue during pre-COVID-19 times. This year-over-year variance controls reasonably well for seasonal variations in traffic. The impacts from COVID-19 were clearly visible in March 2020, with different trajectories by the four market segments identified earlier. These are customers in Class 1 vehicles participating in the single-fee discount program; customers using Class 1 vehicles paying toll; customers traveling in Class 2 to 4 vehicles (small trucks); and customers driving Class 5 to 10 vehicles (large trucks). As shown in **Table 4**, COVID-19 had very different effects on each of these market segments. During the timeframe shown in Table 4, almost 70 percent of Class 1 transactions paid the toll, with the remainder being toll free under the single fee discount program.

Table 4: Historical Transaction and Revenue Variance

Month	Transactions					Revenue			
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 Tolled	Total	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 Tolled	Total
Mar-20	-27.3%	-29.8%	-20.1%	-2.7%	-22.4%	-31.2%	-20.3%	-2.9%	-14.5%
Apr-20	-54.8%	-68.2%	-57.8%	-14.9%	-52.1%	-69.6%	-58.9%	-15.0%	-37.7%
May-20	-35.0%	-35.8%	-26.9%	-15.8%	-30.8%	-36.4%	-27.6%	-16.0%	-24.8%
Jun-20	-21.2%	-22.0%	-10.5%	-3.8%	-17.8%	-22.4%	-10.9%	-4.6%	-13.2%
Jul-20	-18.3%	-19.1%	-4.1%	-2.4%	-15.4%	-18.5%	-4.7%	-2.7%	-10.6%
Aug-20	-20.4%	-19.6%	-7.1%	-3.6%	-16.0%	-19.4%	-6.8%	-4.5%	-11.2%
Sep-20	-16.8%	-6.4%	8.2%	2.6%	-6.2%	-6.1%	8.5%	1.8%	-1.1%
Oct-20	-17.1%	-6.9%	4.3%	1.0%	-7.0%	-6.4%	3.8%	0.1%	-2.2%
Nov-20	-20.3%	-10.1%	12.8%	4.0%	-8.7%	-9.6%	13.2%	2.8%	-1.9%
Dec-20	-23.4%	-25.6%	5.7%	9.0%	-16.9%	-24.8%	6.4%	7.3%	-6.4%
Jan-21	-22.0%	-8.8%	7.6%	2.8%	-8.6%	-7.8%	8.4%	1.5%	-1.4%

Like most other toll roads in the U.S., the main impacts from COVID-19 occurred in April 2020 with substantial recovery by August 2020 and continued recovery at a slower pace through January 2021. With the rollout of effective vaccines, other toll roads have experienced another spurt of recovery in recent months. The West Virginia Turnpike fared better than most toll roads. Overall, the year-over-year transactions at the worst in April declined by more than 50 percent and revenue by nearly 40 percent. While transactions have not yet fully recovered, revenue has very nearly recovered in full. The four market segments have behaved very differently. The impacts on customers in Class 1 vehicles has not yet recovered, especially transactions by those customers in the single fee discount program. On the other hand, transactions and revenue from customers in both small and large truck fully recovered by September 2020 and has performed better than the prior year since then. It is important to recognize that, because of the higher toll rate, revenue from large trucks is over 60 percent of total revenue. Trends in these year-over-year variances by market segment were the starting point in the development of short-term monthly estimates of the pattern of recovery in transactions and revenue on the Turnpike.

Short-Term Assumptions – CDM Smith developed short-term T&R estimates using a model with assumptions about the monthly patterns of impacts by market segment during the two-year period 2021 through 2022. The annual estimates in 2023 and beyond are defined with an assumption about variance by market segment which represents the lasting effects.

Table 5 contains a summary of the assumed monthly variances under the base case. Class 1 single fee transactions, Class 1 tolled transactions and Class 1 tolled revenue are assumed to come back with a lasting effect of -0.8 percent by December 2021. The positive variance in transactions and revenue for small and large trucks ends in December 2021. The forecasts involve assumptions about the remaining recovery of Class 1 customers. There is also the potential for more than one wave of disease and the potential for long-lasting effects. The work from home mandate during the pandemic may have accelerated the trend toward more telecommuting. As a result, some industries and employees have come to find benefits in work from home. Some portion of the increase in truck traffic on the Turnpike may be another positive lasting effect.

Table 5: Forecasts of Monthly Impacts in Base Case

Month	Transactions				Revenue		
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 Tolled	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 Tolled
Feb-21	-18.0%	-9.0%	3.0%	2.5%	-9.0%	3.0%	2.5%
Mar-21	-17.2%	-8.3%	2.7%	2.3%	-8.3%	2.7%	2.3%
Apr-21	-16.4%	-7.6%	2.4%	2.0%	-7.6%	2.4%	2.0%
May-21	-15.7%	-6.9%	2.1%	1.8%	-6.9%	2.1%	1.8%
Jun-21	-14.9%	-6.2%	1.8%	1.5%	-6.2%	1.8%	1.5%
Jul-21	-14.1%	-5.5%	1.5%	1.3%	-5.5%	1.5%	1.3%
Aug-21	-13.3%	-4.8%	1.2%	1.0%	-4.8%	1.2%	1.0%
Sep-21	-12.5%	-4.1%	0.9%	0.8%	-4.1%	0.9%	0.8%
Oct-21	-11.7%	-3.4%	0.6%	0.5%	-3.4%	0.6%	0.5%
Nov-21	-11.0%	-2.7%	0.3%	0.3%	-2.7%	0.3%	0.3%
Dec-21	-10.2%	-2.0%	0.0%	0.0%	-2.0%	0.0%	0.0%
Jan-22	-9.4%	-1.9%	0.0%	0.0%	-1.9%	0.0%	0.0%
Feb-22	-8.6%	-1.8%	0.0%	0.0%	-1.8%	0.0%	0.0%
Mar-22	-7.8%	-1.7%	0.0%	0.0%	-1.7%	0.0%	0.0%
Apr-22	-7.1%	-1.6%	0.0%	0.0%	-1.6%	0.0%	0.0%
May-22	-6.3%	-1.5%	0.0%	0.0%	-1.5%	0.0%	0.0%
Jun-22	-5.5%	-1.4%	0.0%	0.0%	-1.4%	0.0%	0.0%
Jul-22	-4.7%	-1.3%	0.0%	0.0%	-1.3%	0.0%	0.0%
Aug-22	-3.9%	-1.2%	0.0%	0.0%	-1.2%	0.0%	0.0%
Sep-22	-3.1%	-1.1%	0.0%	0.0%	-1.1%	0.0%	0.0%
Oct-22	-2.4%	-1.0%	0.0%	0.0%	-1.0%	0.0%	0.0%
Nov-22	-1.6%	-0.9%	0.0%	0.0%	-0.9%	0.0%	0.0%
Dec-22	-0.8%	-0.8%	0.0%	0.0%	-0.8%	0.0%	0.0%

Lasting Effects – Early on many analysts expected that COVID-19 would permanently change travel patterns, including the level at which people commute to work. Due to the importance of social distancing in containing COVID-19, many more people started to work from home. Several surveys from 2018 indicated that 5.3% of commuters in America "usually" work from home; 8% of commuters work from home at least once per week; and 2% of commuters work from home full time. [4] More recent, surveys indicated that between 40% and 62% of American commuters worked from home during the COVID-19 pandemic.[5] Now that effective vaccines are more readily available, it appears that some of these dislocations have passed.

Similar to consumer shopping behaviors, COVID-19 accelerated and may have institutionalized some telecommuting trends, or work from home (WFH). For many industries, the shift to universal (or near universal) telecommuting, prompted by COVID-19 restrictions, proved viable. This was especially true in services industries that do not require in-person interactions, such as finance, insurance and professional services. Work from home is not viable in services industries that require in-person interactions, such as hospitals and restaurants.

In industries where telecommuting is viable, a full reversion to fulltime in-office attendance is unlikely. Certain businesses will embrace telecommuting, reduce office-related overhead costs and achieve competitive cost-reductions. This will trickle throughout remaining businesses. Many industries will standardize telecommuting, or at least become more flexible in-office scheduling. It seems that a one-time shift in commuting demand is occurring, permanently reducing a fraction of morning and evening peak hours' traffic.

Commuter traffic on the West Virginia Turnpike is a small share of the total. Most are long-distance trips made by infrequent travelers. The telecommuting shift resulting from COVID-19 is for this reason less consequential than on other toll roads. However, a small percentage of higher frequency travelers historically, employed within certain industries, will curtail future demand. Many of these customers are enrolled in the single fee discount program.

Based on professional estimates of telecommuting potential by industry sector, and those employed within each respective industry sector, a range of telecommuting proportions can be estimated. In 2019, the permanent telecommuting percentage could range between 6 percent and 16 percent. These estimates include a 10 percent increase in telecommuting. Taking into account information about trip purpose from the Stated Preference Survey and the shares of frequent users that pay the toll and that participate in the single fee discount program, CDM Smith has determined that the 10 percent increase in telecommuting results in a 0.84 percent reduction in the Class 1 Tolled transactions and a 0.78 percent reduction in the single fee transactions. These results appear in the short term (monthly) estimates and in the annual estimates beginning in calendar year 2023.

The increase in small and large truck traffic is an interesting and somewhat unique to the West Virginia Turnpike. CDM Smith decided to treat this as a temporary change in level of activity. But in the long term, starting in calendar year 2023, the increase was limited to a 0.3 percent in transactions and revenue. One of the scenarios provides a test of this assumption.

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[4] Patricia L. Mokhtarian, "The Adoption and Travel Impacts of Teleworking: Will it be Different This Time?", Eno Center for Transportation webinar, May 14, 2020.
[5] Ibid.

4. Base Case T&R Forecast

Monthly Estimates – Using the monthly shares of transactions and revenue from pre-COVID-19 months and the annual T&R estimates, CDM Smith developed the monthly transactions estimates presented in **Figure 6.** The first two years and one month are historical values, including eleven months with COVID-19. In all four graphs, the darker color lines represent the new estimates under COVID-19 conditions. The passenger car transactions, both single fee and tolled, are negatively impacted, especially the single fee transactions. The transactions for small and large truck start with negative impacts and then become higher than pre-COVID-19 estimates.

Figure 6: Monthly Transactions (millions)

Figure 7 contains similar graphs of monthly revenue of the three market segments that pay toll. Monthly toll revenue from passenger cars is negatively impacted by the pandemic and never fully recovers. On the other hand, monthly toll revenue from small and large trucks falls behind and eventually recovers.

Figure 7: Monthly Revenue (millions)

Table 6 and **Table 7** contain the estimates of annual transactions and revenue with COVID-19 impacts for all four market segments, as well as comparisons to pre-COVID forecast from the Pre-COVID-19 T&R Study report. The numbers in calendar year 2019 are the actual transactions and revenue report in the Traffic and Revenue Study. The numbers in calendar year 2020 are actual results from the Transcore database, with 10 months of COVID-19 impacts. The estimates in calendar years 2021 and 2022 are the sum of the short-term monthly forecasts. The estimates for calendar year 2023 and beyond are the prior year estimate with the growth rate in the pre-COVID-19 estimates. The approach retains the carefully worked out T&R changes in response to toll rate and fee changes. Estimates for Class 1 single fee revenue are the estimates from the Pre-COVID-19 Study adjusted in proportion to the changes in single fee transactions. The same approach was followed in the development of sensitivity scenarios.

Table 6: Base Case Annual Transactions with COVID-19 Impacts (millions)

Calendar Year	Base Case Estimates					Pre-COVID Estimates Total (1)	% Change Base vs. Pre-COVID
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 Tolled	Total		
2014 (2)	3.23	22.99	0.80	7.64	**34.66**		
2015 (2)	3.13	24.11	0.87	7.84	**35.95**		
2016 (2)	3.09	24.50	0.92	7.98	**36.49**		
2017 (2)	3.31	24.55	0.93	8.11	**36.90**		
2018 (2)	3.92	23.12	0.92	8.36	**36.32**		
2019 (2)	8.26	19.02	0.84	8.65	**36.76**	36.76	0.0%
2020 (2)	6.47	14.87	0.74	8.39	**30.47**	36.63	-16.8%
2021	7.16	18.04	0.88	8.78	**34.85**	37.02	-5.9%
2022 (3)	6.32	20.61	0.87	8.77	**36.57**	37.15	-1.6%
2023	6.96	20.49	0.88	8.91	**37.23**	37.43	-0.5%
2024	7.03	20.64	0.89	9.00	**37.56**	37.76	-0.5%
2025	6.97	20.92	0.89	9.09	**37.87**	38.07	-0.5%
2026	7.05	21.07	0.90	9.17	**38.19**	38.40	-0.5%
2027	7.42	20.86	0.91	9.25	**38.44**	38.65	-0.5%
2028	7.34	21.14	0.92	9.32	**38.71**	38.92	-0.5%
2029	7.41	21.28	0.92	9.40	**39.00**	39.21	-0.5%
2030	7.48	21.41	0.92	9.47	**39.28**	39.49	-0.5%
2031	7.83	21.11	0.93	9.54	**39.40**	39.61	-0.5%
2032	7.89	21.22	0.93	9.61	**39.65**	39.87	-0.5%
2033	7.96	21.33	0.94	9.67	**39.90**	40.11	-0.5%
2034	8.15	21.18	0.94	9.74	**40.00**	40.21	-0.5%
2035	8.21	21.27	0.94	9.80	**40.22**	40.44	-0.5%
2036	8.26	21.36	0.94	9.87	**40.43**	40.64	-0.5%
2037	8.44	21.18	0.94	9.93	**40.49**	40.70	-0.5%
2038	8.49	21.25	0.95	9.99	**40.68**	40.89	-0.5%
2039	8.54	21.32	0.95	10.06	**40.86**	41.08	-0.5%
2040	8.70	21.12	0.95	10.12	**40.88**	41.10	-0.5%
2041	8.76	21.17	0.95	10.18	**41.05**	41.27	-0.5%
2042	8.83	21.21	0.95	10.24	**41.22**	41.44	-0.5%
2043	9.00	20.98	0.95	10.29	**41.21**	41.43	-0.5%
2044	9.06	21.02	0.95	10.35	**41.37**	41.59	-0.5%
2045	9.12	21.05	0.95	10.41	**41.53**	41.75	-0.5%
2046	9.27	20.82	0.95	10.46	**41.49**	41.71	-0.5%
2047	9.48	20.64	0.94	10.52	**41.58**	41.80	-0.5%
2048	9.90	20.19	0.94	10.57	**41.60**	41.82	-0.5%
2049	9.67	20.44	0.94	10.63	**41.68**	41.89	-0.5%
2050	9.73	20.48	0.94	10.68	**41.83**	42.04	-0.5%

(1) Transaction estimates from July 2020 Pre-COVID T&R Study
(2) 2014-2020: Actuals derived from Transcore database
(3) 2022: Early enrollment option coverage ends 12/31/2021, toll rates escalate 1.6% annually, flat fee increases 5% every third year

Table 7: Base Case Annual Revenue with COVID-19 Impacts (millions)

Calendar Year	Base Case Estimates					Pre-COVID Estimates Total (1)	% Change Base vs. Pre-COVID
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 Tolled	Total		
2014 (2)	$1.06	$39.51	$1.87	$41.79	**$84.23**		
2015 (2)	$1.23	$41.53	$2.03	$42.81	**$87.60**		
2016 (2)	$1.15	$42.24	$2.14	$43.46	**$88.99**		
2017 (2)	$1.13	$42.37	$2.18	$44.33	**$90.01**		
2018 (2)	3.08	$39.75	$2.11	$45.06	**$90.01**		
2019 (2)	$1.08	$63.10	$3.74	$87.64	**$155.56**	$155.56	0.0%
2020 (2)	$0.33	$50.02	$3.41	$86.02	**$139.77**	$157.53	-11.3%
2021	$0.28	$61.70	$3.97	$92.58	**$158.53**	$159.42	-0.6%
2022 (3)	$2.85	$70.06	$3.95	$94.09	**$170.95**	$170.24	0.4%
2023	$3.18	$72.04	$4.12	$96.20	**$175.54**	$175.88	-0.2%
2024	$3.20	$72.88	$4.17	$98.78	**$179.03**	$179.36	-0.2%
2025	$3.30	$74.07	$4.22	$101.42	**$183.00**	$183.34	-0.2%
2026	$3.33	$74.96	$4.27	$103.71	**$186.26**	$186.61	-0.2%
2027	$3.55	$77.28	$4.46	$106.32	**$191.62**	$191.97	-0.2%
2028	$3.65	$78.60	$4.52	$109.02	**$195.79**	$196.15	-0.2%
2029	$3.67	$79.50	$4.71	$111.59	**$199.48**	$199.83	-0.2%
2030	$3.70	$80.41	$4.76	$114.32	**$203.18**	$203.54	-0.2%
2031	$4.06	$83.41	$4.79	$117.03	**$209.28**	$209.66	-0.2%
2032	$4.09	$84.28	$4.99	$119.79	**$213.15**	$213.52	-0.2%
2033	$4.11	$85.21	$5.02	$122.54	**$216.88**	$217.26	-0.2%
2034	$4.46	$87.53	$5.06	$125.42	**$222.47**	$222.86	-0.2%
2035	$4.48	$88.44	$5.25	$128.26	**$226.43**	$226.81	-0.2%
2036	$4.50	$89.33	$5.42	$131.39	**$230.64**	$231.03	-0.2%
2037	$4.87	$91.41	$5.47	$134.41	**$236.16**	$236.55	-0.2%
2038	$4.89	$92.29	$5.49	$137.46	**$240.13**	$240.52	-0.2%
2039	$4.91	$93.16	$5.68	$140.50	**$244.25**	$244.65	-0.2%
2040	$5.29	$95.08	$5.70	$143.62	**$249.69**	$250.10	-0.2%
2041	$5.32	$95.89	$5.73	$146.84	**$253.77**	$254.17	-0.2%
2042	$5.34	$96.78	$5.91	$149.96	**$257.99**	$258.39	-0.2%
2043	$5.75	$98.40	$6.07	$153.45	**$263.67**	$264.07	-0.2%
2044	$5.78	$99.30	$6.11	$156.83	**$268.01**	$268.41	-0.1%
2045	$5.80	$100.21	$6.12	$160.15	**$272.28**	$272.68	-0.1%
2046	$6.23	$101.70	$6.30	$163.60	**$277.84**	$278.24	-0.1%
2047	$6.30	$103.02	$6.30	$167.30	**$282.91**	$283.32	-0.1%
2048	$6.67	$103.34	$6.47	$170.81	**$287.28**	$287.68	-0.1%
2049	$6.76	$105.38	$6.49	$174.36	**$292.99**	$293.40	-0.1%
2050	$6.79	$106.44	$6.65	$178.25	**$298.12**	$298.53	-0.1%

(1) Revenue estimates from July 2020 Pre-COVID T&R Study
(2) 2014-2020: Actuals derived from Transcore database
(3) 2022: Early enrollment option coverage ends 12/31/2021, toll rates escalate 1.6% annually, flat fee increases 5% every third year

5. Sensitivity Scenarios

CDM Smith developed four scenarios designed to stress the base case described in the previous section, highlighting different future trends in the four market segments. The scenarios are as follows:

1. **Another wave of COVID-19** – Impacts equal to half that experienced during initial wave of COVID-19-related restrictions in March and April 2020.
2. **Delayed recovery in passenger car traffic** – Single-fee transactions and Class 1 traffic paying a toll take an additional six months to recover compared to the base case
3. **Substantial change in travel patterns** – Reduction in passenger car traffic due to increased prevalence of WFH is doubled.
4. **Reduction in commercial vehicle traffic to pre-COVID-19 levels** – Commercial vehicle traffic that has increased during the pandemic reverts to pre-pandemic levels.

Table 8 contains a summary of annual transactions and revenue estimates, including the pre-COVID forecasts and various estimates with COVID impacts, specifically the Base Case and the four scenarios.

Scenario 1 – This involves the case in which there would be another wave of disease and related impacts. While the impacts are different for each market segment, the second wave in this scenario is assumed to be half the impact experienced in the initial implementation of COVID-19 related restrictions on schools, business, and travel (March and April 2020), with a recovery that requires less time. In general, the impacts are assumed to start in September 2021 and end in March 2022. All other effects, such as the lasting effects of WFH, are the same as in the Base Case. Compared to the Base Case, revenue would be $7.91 million lower in 2021 and $0.68 million lower in 2022.

Scenario 2 – This stress test concerns a delayed recovery of passenger car traffic. Under these conditions, the single-fee transactions take an extra six months to recover compared to the Base Case, as does the Class 1 traffic paying toll. The remainder of the recovery in single-fee transactions occurs in calendar year 2023. All other monthly impacts have been resolved by the end of calendar year 2022. The estimates for Class 1 single fee revenue were adjusted in proportion to the changes in single fee transactions. Once again, all other impacts are the same as in the Base Case. Compared to the Base Case, revenue would be $1.21 million lower in 2021, $0.39 million lower in 2022, and $0.08 million lower in 2023.

Scenario 3 – This stress test concerns the severity of the lasting effects on travel patterns arising from COVID-19. Specifically, the reduction in passenger car travel due to the WFH phenomena is doubled. The impacts on Class 1 transactions in December 2022 are twice the impacts in the Base Case, with slightly more impacts in between. Beginning in calendar year 2023, single fee transactions are reduced by 1.55 percent and toll paying passenger cars by 1.69 percent. Because of the increase in WFH, the T&R estimates associated with Scenario 3 are lower than the Base Case in calendar year 2023 and beyond. These estimates are also slightly lower in calendar year 2022, once again, because of the increase in WFH. Compared to the Base Case, revenue impacts are first seen in 2022, where revenue would be $0.38 million lower. Because this scenario involves a permanent paradigm shift in the tendency of workers to work from home, revenue impacts grow each year through the end of the forecast period in 2050, by which point revenue is $0.96 million lower than in the Base Case. In total, during the 29-year period from 2022 to 2050, this scenario would generate about $22.75 million less in revenue than the Base Case.

Table 8: Annual Transactions and Revenue

Calendar Year	Transactions (millions)						Revenue (millions)						Revenue Impacts over Base Case (millions)			
	Pre-COVID	Base Case	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Pre-COVID	Base Case	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2019	36.77	36.77	36.77	36.77	36.77	36.77	$155.56	$155.56	$155.56	$155.56	$155.56	$155.56	$0.00	$0.00	$0.00	$0.00
2020	36.63	30.47	30.47	30.49	30.49	30.49	$157.53	$139.77	$139.77	$139.77	$139.77	$139.77	$0.00	$0.00	$0.00	$0.00
2021	37.02	34.85	32.97	34.09	34.84	34.85	$159.42	$158.53	$150.62	$157.32	$158.53	$158.53	($7.91)	($1.21)	$0.00	$0.00
2022	37.15	36.57	36.30	36.13	36.43	36.57	$170.24	$170.95	$170.27	$170.56	$170.57	$170.95	($0.68)	($0.39)	($0.38)	$0.00
2023	37.43	37.23	37.23	37.06	37.00	37.20	$175.88	$175.54	$175.54	$175.46	$174.90	$175.24	$0.00	($0.08)	($0.64)	($0.30)
2024	37.76	37.56	37.56	37.56	37.33	37.53	$179.36	$179.03	$179.03	$179.03	$178.38	$178.72	$0.00	$0.00	($0.65)	($0.31)
2025	38.07	37.87	37.87	37.87	37.63	37.84	$183.34	$183.00	$183.00	$183.00	$182.35	$182.69	$0.00	$0.00	($0.65)	($0.31)
2026	38.40	38.19	38.19	38.19	37.96	38.16	$186.61	$186.26	$186.26	$186.26	$185.60	$185.94	$0.00	$0.00	($0.66)	($0.32)
2027	38.65	38.44	38.44	38.44	38.21	38.41	$191.97	$191.62	$191.62	$191.62	$190.93	$191.28	$0.00	$0.00	($0.69)	($0.34)
2028	38.92	38.71	38.71	38.71	38.47	38.68	$196.15	$195.79	$195.79	$195.79	$195.10	$195.45	$0.00	$0.00	($0.69)	($0.34)
2029	39.21	39.00	39.00	39.00	38.76	38.97	$199.83	$199.48	$199.48	$199.48	$198.77	$199.13	$0.00	$0.00	($0.71)	($0.35)
2030	39.49	39.28	39.28	39.28	39.04	39.25	$203.54	$203.18	$203.18	$203.18	$202.47	$202.83	$0.00	$0.00	($0.71)	($0.35)
2031	39.61	39.40	39.40	39.40	39.16	39.37	$209.66	$209.28	$209.28	$209.28	$208.54	$208.92	$0.00	$0.00	($0.74)	($0.36)
2032	39.87	39.65	39.65	39.65	39.41	39.62	$213.52	$213.15	$213.15	$213.15	$212.40	$212.77	$0.00	$0.00	($0.75)	($0.38)
2033	40.11	39.90	39.90	39.90	39.65	39.86	$217.26	$216.88	$216.88	$216.88	$216.13	$216.50	$0.00	$0.00	($0.75)	($0.38)
2034	40.21	40.00	40.00	40.00	39.76	39.97	$222.86	$222.47	$222.47	$222.47	$221.69	$222.08	$0.00	$0.00	($0.78)	($0.39)
2035	40.44	40.22	40.22	40.22	39.98	40.19	$226.81	$226.43	$226.43	$226.43	$225.64	$226.03	$0.00	$0.00	($0.79)	($0.40)
2036	40.64	40.43	40.43	40.43	40.18	40.39	$231.03	$230.64	$230.64	$230.64	$229.85	$230.23	$0.00	$0.00	($0.79)	($0.41)
2037	40.70	40.49	40.49	40.49	40.24	40.46	$236.55	$236.16	$236.16	$236.16	$235.34	$235.74	$0.00	$0.00	($0.82)	($0.42)
2038	40.89	40.68	40.68	40.68	40.43	40.64	$240.52	$240.13	$240.13	$240.13	$239.31	$239.70	$0.00	$0.00	($0.82)	($0.43)
2039	41.08	40.86	40.86	40.86	40.61	40.83	$244.65	$244.25	$244.25	$244.25	$243.42	$243.82	$0.00	$0.00	($0.83)	($0.43)
2040	41.10	40.88	40.88	40.88	40.64	40.85	$250.10	$249.69	$249.69	$249.69	$248.84	$249.25	$0.00	$0.00	($0.85)	($0.44)
2041	41.27	41.05	41.05	41.05	40.81	41.02	$254.17	$253.77	$253.77	$253.77	$252.92	$253.32	$0.00	$0.00	($0.85)	($0.45)
2042	41.44	41.22	41.22	41.22	40.97	41.19	$258.39	$257.99	$257.99	$257.99	$257.13	$257.52	$0.00	$0.00	($0.86)	($0.47)
2043	41.43	41.21	41.21	41.21	40.96	41.18	$264.07	$263.67	$263.67	$263.67	$262.79	$263.19	$0.00	$0.00	($0.88)	($0.48)
2044	41.59	41.37	41.37	41.37	41.12	41.34	$268.41	$268.01	$268.01	$268.01	$267.12	$267.52	$0.00	$0.00	($0.89)	($0.49)
2045	41.75	41.53	41.53	41.53	41.28	41.49	$272.68	$272.28	$272.28	$272.28	$271.39	$271.79	$0.00	$0.00	($0.89)	($0.49)
2046	41.71	41.49	41.49	41.49	41.24	41.46	$278.24	$277.84	$277.84	$277.84	$276.92	$277.33	$0.00	$0.00	($0.92)	($0.51)
2047	41.80	41.58	41.58	41.58	41.33	41.55	$283.32	$282.91	$282.91	$282.91	$281.99	$282.40	$0.00	$0.00	($0.92)	($0.51)
2048	41.82	41.60	41.60	41.60	41.35	41.57	$287.68	$287.28	$287.28	$287.28	$286.35	$286.75	$0.00	$0.00	($0.93)	($0.53)
2049	41.89	41.68	41.68	41.68	41.43	41.64	$293.40	$292.99	$292.99	$292.99	$292.04	$292.45	$0.00	$0.00	($0.95)	($0.54)
2050	42.04	41.83	41.83	41.83	41.57	41.79	$298.53	$298.12	$298.12	$298.12	$297.16	$297.57	$0.00	$0.00	($0.96)	($0.55)

Scenario 4 – This stress test concerns the elimination of the increase in truck traffic that came about during COVID-19. Specifically, beginning in calendar year 2023, the number of transactions by small and large trucks returns to pre-COVID-19 levels. All other factors in this scenario are the same as the Base Case, including the monthly variances and WFH. For this reason, the T&R estimates for Scenario 4 are lower than the estimates in the Base Case in calendar years 2023 and beyond. Compared to the Base Case, revenue would be $0.30 million in 2023, growing to $0.55 million lower in 2050. Over this entire 28-year period, this scenario would generate about $11.68 million less in revenue than the Base Case.

6. Conclusions

CDM Smith has prepared the updated revenue estimates contained in this letter for the bond financing and for financial planning. The events surrounding the COVID-19 pandemic have been highly unusual. While the Turnpike has weathered this storm well, there have been negative T&R impacts in 2020 and there will continue to be some minimal negative impacts in future when compared with the most recent pre-COVID estimates. Please let us know if you have any questions or require further information. Respectfully submitted,

CDM Smith

Hugh W. Miller, Jr., PhD, PE
Vice President

Adam J. Aceto, PMP, PTP
Project Manager

cc: Parrish T. French, Director of Finance, WVPA

Disclaimer

CDM Smith used currently-accepted professional practices and procedures in the development of these traffic and revenue estimates. However, as with any forecast, differences between forecasted and actual results may occur, as caused by events and circumstances beyond the control of the forecasters. The impacts of the Coronavirus, government policies protecting the public from the virus and the economic consequences (if unintended) have been changing almost daily. For these reasons, these estimates have a high degree of uncertainty. In formulating the estimates, CDM Smith reasonably relied upon the accuracy and completeness of information provided (both written and oral) by WVPA and TransCore. CDM Smith also relied upon the reasonable assurances of other independent parties and is not aware of any material facts that would make such information misleading.

CDM Smith made qualitative judgments related to several key variables in the development and analysis of the traffic and revenue estimates that must be considered; therefore, selecting portions of any individual result without consideration of the intent of the whole may create a misleading or incomplete view of the results and the underlying methodologies used to obtain the results. CDM Smith gives no opinion as to the value or merit of partial information extracted from this report.

All estimates and projections reported herein are based on CDM Smith's experience and judgment and on a review of information obtained from multiple agencies, including WVPA. These estimates and projections may not be indicative of actual or future values and are therefore subject to substantial uncertainty. Future developments cannot be predicted with certainty and may affect the estimates or projections expressed in this report, such that CDM Smith does not specifically guarantee or warrant any estimate or projection contained within this report.

While CDM Smith believes that the projections and other forward-looking statements contained within the report are based on reasonable assumptions as of the date of the report, such forward-looking statements involve risks and uncertainties that may cause actual results to differ materially from the results predicted. Therefore, following the date of this report, CDM Smith will take no responsibility or assume any obligation to advise of changes that may affect its assumptions contained within the report, as they pertain to socioeconomic and demographic forecasts, proposed residential or commercial land use development projects and/or potential improvements to the regional transportation network.

CDM Smith is not, and has not been, a municipal advisor as defined in Federal law (the Dodd Frank Bill) to WVPA and does not owe a fiduciary duty pursuant to Section 15B of the Exchange Act to WVPA with respect to the information and material contained in this report. CDM Smith is not recommending and has not recommended any action to WVPA. WVPA should discuss the information and material contained in this report with any and all internal and external advisors that it deems appropriate before acting on this information.

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Disclaimer

The impacts of COVID-19 on the traffic and revenue (T&R) for the West Virginia Turnpike have not been included in these results but will be addressed in a separate study. For this reason, the estimates contained in this report are incomplete. Travel behavior has changed in response to shifting government policies intended to protect public health and to encourage economic recovery. By all accounts, the pandemic is far from over. For these reasons, these estimates have a high degree of uncertainty.

CDM Smith used currently accepted professional practices and procedures in the development of these traffic and revenue (T&R) estimates. However, as with any forecast, differences between forecasted and actual results may occur, as caused by events and circumstances beyond the control of the forecasters. In formulating the estimates, CDM Smith reasonably relied upon the accuracy and completeness of information provided (both written and oral) by the West Virginia Parkways Authority (WVPA), Resource Systems Group, TransCore and StreetLight Data, Inc. CDM Smith also relied upon the reasonable assurances of other independent parties and is not aware of any material facts that would make such information misleading.

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Executive Summary

In August 2018, the West Virginia Parkways Authority (Parkways) issued $166.37 million in toll revenue bonds to fund transportation projects off the West Virginia Turnpike (Turnpike). These projects are located in three of the ten counties adjacent to the Turnpike, as identified in Governor Jim Justice's Roads to Prosperity program. As part of this effort, Parkways introduced significant changes in toll policy that included doubling the then current toll rates and launching a low-cost annual pass allowing unlimited travel on the Turnpike to customers in passenger cars with a West Virginia (WV) E-ZPass. To encourage participation in the new single fee discount program, Parkways offered a one-time, early enrollment option at an even lower cost and allowed for unlimited use of the Turnpike for a three-year period.

Prior to the introduction of these changes, CDM Smith conducted an investment-grade traffic and revenue (T&R) study to prepare estimates for the official statement and to support presentations to rating agencies. The report was titled West Virginia Turnpike 2018 Revenue Bond Study (2018 T&R Study), dated July 13, 2018. The purpose of the West Virginia Turnpike 2020 Traffic & Revenue Study (2020 T&R Study) presented in this report is to provide new T&R estimates based on Turnpike traffic and revenue experience following the implementation of the toll policy changes, and to prepare documentation in support of another bond issue. Note that these bonds were not issued.

The T&R results presented in this document were prepared as the nation and world seek to address the COVID-19 pandemic, an unprecedented public health crisis. It is important to note that the socioeconomic data and other key parameters used for this study predate the COVID-19 pandemic and its economic impacts. The T&R estimates presented in this report do not account for the recent downturn in Turnpike traffic and revenue or the economic impacts anticipated to occur as a result of the COVID-19 pandemic. The impacts of COVID-19 will be taken up in a separate study and report.

ES.1 Toll Policy Changes

Under the new toll schedule that became effective on January 15, 2019, the toll is $4.00 at each mainline toll plaza in each direction and $0.75 at the North Beckley ramp plazas for customers driving passenger cars and paying in cash. Prior to the policy changes, these toll rates were respectively $2.00 and $0.40. The cash toll amounts for five-axle trucks are now $13.50 at the mainline toll plazas and $3.25 at the North Beckley ramp toll plaza. Prior to the policy changes, these toll rates were respectively $6.75 and $1.60. The cash toll rates are rounded to the quarter for ease of collection.

The toll policy changes also included the introduction of the **Single Fee Discount Program** authorized under Chapter 17, Article 16A of the West Virginia Code, 1931, as amended (the "Authority Act") for Class 1 vehicle customers. A customer driving a Toll Class 1 passenger motor vehicle (non-commercial use) may obtain unlimited travel on the Turnpike for one year by enrolling in the single fee discount program. Unlimited travel is offered for an annual fee of $25 per vehicle, plus $13 cost of issuing a WV E-ZPass transponder as applicable[4]. It is valid for one year starting from the month of purchase.

A one-time early enrollment incentive was offered in 2018 and the first two weeks of 2019. During this time period only, any customer driving a Class 1 passenger motor vehicle could enroll in the single fee

[4] $13 transponder cost was not required from all participants.

discount program and obtain unlimited travel for that vehicle on the Turnpike in calendar years 2019, 2020 and 2021 for a one-time payment of $24 per vehicle, plus $13 for the cost of issuing a WV E-ZPass transponder for that vehicle.

ES.2 Study Tasks

The purpose of this report is to describe the data and methods used in the analysis and to present the updated T&R estimates for calendar years 2020 through 2050. Throughout this document all references to years are to calendar years. The scope of the study included:

- Obtain information about recent changes in toll policy, transactions and revenue, and identify the impacts of these changes on T&R;
- Update the models used to produce the forecasts (econometric model, model of trends in payment type, payment choice model and models of toll elasticity/suppression), making these models consistent with recent Turnpike performance data;
- Prepare and document new T&R estimates suitable to support financing based on the current toll regime; and
- Develop and analyze a series of sensitivity tests.

ES.3 T&R Data Analysis

As anticipated, the recent toll policy changes have significantly affected toll revenue. However, toll transactions remained fairly stable. The review of the recent performance data highlighted the following key findings:

- Overall transactions were down by 1.7 percent in 2018 and are down by 0.8 percent in 2019.
- The share of transactions by plaza has remained stable since 2016.
- The share of transactions by vehicle class did not change much in 2018 and 2019 compared to 2017.
- Passenger car transactions declined slightly in 2019 primarily due to a reduction in Class 2 transactions.
- Class 1 transactions were almost the same in 2019 compared to 2018, although a shift in payment method resulted in the ETC share of Class 1 transactions increasing from 34 to 48 percent.
- Commercial vehicle transactions increased by 0.6 percent in 2019 despite the toll rate increase.
- Cash payment represented 60 percent of the transactions in 2017 and was down to 45 percent in 2019.
- Overall toll revenue was down by 2.1 percent in 2018. In 2019, systemwide toll revenue increased by 78 percent at $154.8 million as a result of the toll rate increase.
- The proportion of toll revenue from commercial vehicles has increased from 50 percent in 2017 to 57 percent in 2019.

- In 2019, Non-WV E-ZPass revenue became the highest share of toll revenue at 49 percent of total toll revenue from all vehicles. Cash payment accounted for 42 percent of toll revenue in 2019, down from 53 percent in 2017.
- A total of 64,200 WV E-ZPass accounts were automatically converted to the single fee discount program when it started at the end of September 2018. About 65,700 additional customers joined the new single fee discount program under the early enrollment offer that ran through mid-January 2019. And about 11,500 have joined at the $25 annual fee between January and October 2019.
- The majority of WV E-ZPass passenger car customers travel on the Turnpike infrequently, and the proportion of infrequent users increased from 2016 to 2019, suggesting that customers that joined the new single fee discount program are less frequent users. The level of frequency is even lower among passenger car customers using a Non-WV E-ZPass.

ES.4 Model Updates

As part of the 2018 T&R Study, CDM Smith developed a series of mathematical models which in combination produced forecasts of future T&R. These models include the following:

- Econometric models producing baseline estimates of transactions (passenger cars and commercial vehicles) at each toll location
- Models from analysis of trends in vehicle class and payment type by toll location
- Payment choice models for six market segments of customers in passenger cars (combinations of original payment method and frequency of use) estimating the change in payment method given the planned changes in toll amount and costs/characteristics of the single fee discount program
- Toll suppression models for Toll Class 1 and Toll Classes 2 through 10

In general, for this work, CDM Smith continued to apply the model structure developed in the 2018 T&R Study. However, some model adjustments were required based on T&R performance observed after almost a year of operations under the new toll policy. The calibration was initially performed separately for each model element before the entire model chain could be validated. The validated model better replicates 2019 results and therefore is expected to produce more reliable forecasts of future years.

ES.5 T&R Forecast

This forecast assumes the following:

- Class 1 customers who are participating in the early enrollment offer will enjoy unlimited, toll-free use of the Turnpike through December 31, 2021
- The toll policies for 2020 and 2021 are the same as for 2019
- Starting in 2022 and beyond, all toll rates will increase 1.6 percent annually subject to rounding and the $25 annual flat fee will increase by 5 percent every third year, including 2022.

The T&R forecast is presented in **Table ES-1**, **Figure ES-1,** and **Figure ES-2**.

Table ES-1 Toll Transactions and Revenue Forecast

Calendar Year	Transactions (millions)					Revenue (millions year of collection dollars)				
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Trans w/single fee	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Revenue w/single fee
2014	3.23	22.99	0.80	7.64	**34.66**	$ 1.06	$ 39.51	$ 1.87	$ 41.79	**$ 84.23**
2015	3.13	24.11	0.87	7.84	**35.95**	$ 1.23	$ 41.53	$ 2.03	$ 42.81	**$ 87.60**
2016	3.09	24.50	0.92	7.98	**36.49**	$ 1.15	$ 42.24	$ 2.14	$ 43.46	**$ 88.99**
2017	3.31	24.55	0.93	8.11	**36.90**	$ 1.13	$ 42.37	$ 2.18	$ 44.33	**$ 90.01**
2018 (1)	3.92	23.12	0.92	8.36	**36.32**	$ 3.08	$ 39.75	$ 2.11	$ 45.06	**$ 90.01**
2019 (1)	8.26	19.02	0.84	8.65	**36.76**	$ 1.08	$ 63.10	$ 3.74	$ 87.64	**$ 155.56**
2020	8.31	18.90	0.85	8.56	**36.63**	$ 0.33	$ 63.92	$ 3.82	$ 89.46	**$ 157.53**
2021	8.39	19.09	0.86	8.68	**37.02**	$ 0.33	$ 64.53	$ 3.87	$ 90.69	**$ 159.42**
2022 (2)	6.65	20.85	0.87	8.78	**37.15**	$ 3.00	$ 70.09	$ 3.91	$ 93.24	**$ 170.24**
2023	7.01	20.66	0.88	8.88	**37.43**	$ 3.20	$ 72.65	$ 4.11	$ 95.92	**$ 175.88**
2024	7.09	20.82	0.89	8.97	**37.76**	$ 3.23	$ 73.50	$ 4.15	$ 98.48	**$ 179.36**
2025	7.02	21.10	0.89	9.06	**38.07**	$ 3.33	$ 74.70	$ 4.20	$ 101.11	**$ 183.34**
2026	7.10	21.25	0.90	9.14	**38.40**	$ 3.35	$ 75.60	$ 4.26	$ 103.40	**$ 186.61**
2027	7.48	21.04	0.91	9.22	**38.65**	$ 3.57	$ 77.94	$ 4.45	$ 106.01	**$ 191.97**
2028	7.39	21.32	0.91	9.30	**38.92**	$ 3.68	$ 79.27	$ 4.51	$ 108.69	**$ 196.15**
2029	7.47	21.46	0.92	9.37	**39.21**	$ 3.70	$ 80.18	$ 4.70	$ 111.25	**$ 199.83**
2030	7.54	21.59	0.92	9.44	**39.49**	$ 3.73	$ 81.10	$ 4.74	$ 113.97	**$ 203.54**
2031	7.89	21.29	0.93	9.51	**39.61**	$ 4.09	$ 84.11	$ 4.78	$ 116.68	**$ 209.66**
2032	7.96	21.40	0.93	9.58	**39.87**	$ 4.12	$ 85.00	$ 4.97	$ 119.43	**$ 213.52**
2033	8.02	21.51	0.93	9.64	**40.11**	$ 4.14	$ 85.93	$ 5.01	$ 122.18	**$ 217.26**
2034	8.21	21.36	0.94	9.71	**40.21**	$ 4.49	$ 88.28	$ 5.05	$ 125.04	**$ 222.86**
2035	8.27	21.45	0.94	9.77	**40.44**	$ 4.52	$ 89.19	$ 5.23	$ 127.88	**$ 226.81**
2036	8.33	21.54	0.94	9.84	**40.64**	$ 4.54	$ 90.09	$ 5.40	$ 131.00	**$ 231.03**
2037	8.50	21.36	0.94	9.90	**40.70**	$ 4.91	$ 92.18	$ 5.45	$ 134.01	**$ 236.55**
2038	8.55	21.43	0.94	9.96	**40.89**	$ 4.93	$ 93.08	$ 5.47	$ 137.05	**$ 240.52**
2039	8.60	21.50	0.94	10.03	**41.08**	$ 4.94	$ 93.96	$ 5.66	$ 140.08	**$ 244.65**
2040	8.76	21.30	0.95	10.09	**41.10**	$ 5.33	$ 95.89	$ 5.69	$ 143.19	**$ 250.10**
2041	8.83	21.35	0.95	10.15	**41.27**	$ 5.36	$ 96.70	$ 5.72	$ 146.40	**$ 254.17**
2042	8.90	21.39	0.95	10.21	**41.44**	$ 5.38	$ 97.60	$ 5.89	$ 149.51	**$ 258.39**
2043	9.07	21.15	0.94	10.26	**41.43**	$ 5.80	$ 99.24	$ 6.05	$ 152.99	**$ 264.07**
2044	9.13	21.19	0.94	10.32	**41.59**	$ 5.82	$ 100.15	$ 6.09	$ 156.36	**$ 268.41**
2045	9.19	21.23	0.94	10.38	**41.75**	$ 5.85	$ 101.06	$ 6.10	$ 159.67	**$ 272.68**
2046	9.34	20.99	0.94	10.43	**41.71**	$ 6.28	$ 102.57	$ 6.29	$ 163.11	**$ 278.24**
2047	9.56	20.82	0.94	10.49	**41.80**	$ 6.35	$ 103.89	$ 6.28	$ 166.80	**$ 283.32**
2048	9.98	20.36	0.94	10.54	**41.82**	$ 6.72	$ 104.22	$ 6.45	$ 170.29	**$ 287.68**
2049	9.75	20.61	0.94	10.59	**41.89**	$ 6.82	$ 106.27	$ 6.47	$ 173.84	**$ 293.40**
2050	9.81	20.65	0.93	10.65	**42.04**	$ 6.84	$ 107.34	$ 6.63	$ 177.72	**$ 298.53**

(1) 2018-2019: Actuals derived from Transcore database

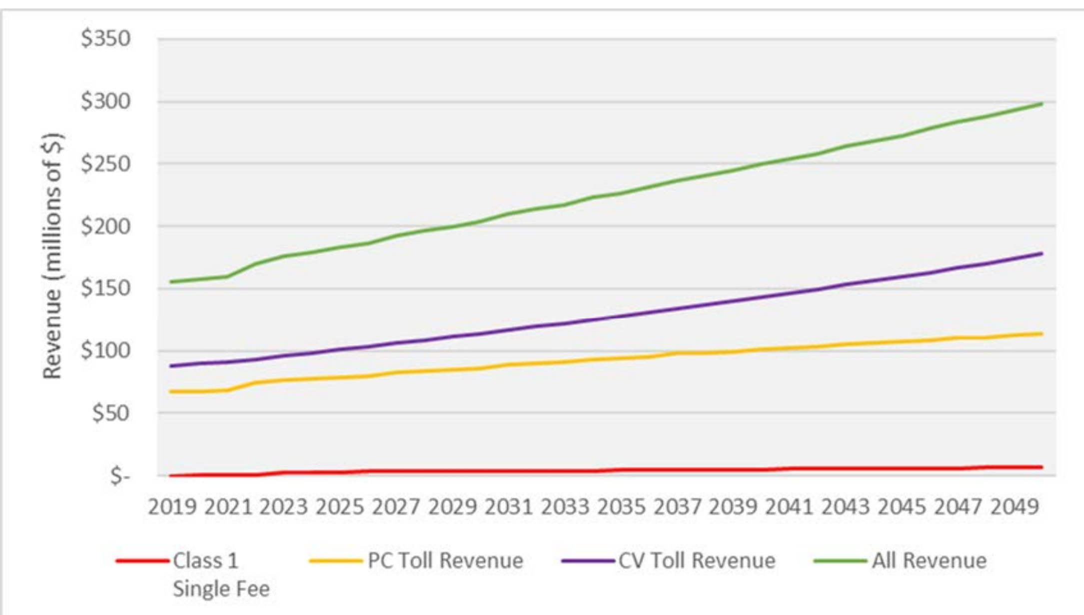
(2) 2022: Early enrollment option coverage ends December 31, 2021, toll rates escalate 1.6% annually and single fee increases 5% every third year

Source: CDM Smith Analysis

Figure ES-1 Transaction Trends

Source: CDM Smith Analysis

Figure ES-2 Revenue Trends



Source: CDM Smith Analysis

Annual transactions are estimated to grow from about 36.8 million in 2019 to 42 million in 2050. The overall compound annual growth rate over the forecasting period is 0.43 percent, with the commercial vehicle transactions growing slightly faster than overall traffic at 0.67 percent. Transaction growth rates are expected to be highest in the near-term and taper off over time primarily due to the trend in the econometric forecast that shows decreasing growth over time, with some fluctuations due to toll rate and single fee escalations. The share of commercial vehicle transactions is expected to increase from 23.5 percent in 2019 to 25.3 percent in 2050.

Annual revenue is estimated to grow from about $156 million in 2019 to $299 in 2050. The overall annual growth rate over the forecasting period is 2.12 percent, with the commercial vehicle revenue growing slightly faster than overall revenue at 2.31 percent. The share of commercial vehicle revenue is expected to increase from 56 percent in 2019 to 60 percent in 2050.

Calendar year 2022 is anticipated to be untypical for several reasons: the early enrollment option coverage ends prompting some customers to leave the single fee discount program and pay cash instead; all customers willing to stay in the single fee discount program have to pay the higher $26.25 annual fee; and toll rates increase for most of the toll-paying customers. As a result, the overall revenue is expected to increase by $10.8 million in 2022 (+6.8 percent). This revenue increase of $10.8 million is attributable to single fee revenue increasing by $2.7 million, Class 1 toll revenue increasing by 5.6 million and CV toll revenue increasing by 2.6 million.

ES.6 Sensitivity Tests

As described in CDM Smith's Disclaimer, T&R estimates are forecasts of an uncertain future. For this reason, it is important to test assumptions which might have an impact on the T&R forecasts. The assumptions chosen for the tests are those that present risks and have a potential impact on the estimates.

A sensitivity test related to regional growth assumptions was performed to measure the impact on overall T&R estimates for all vehicle classes. In the downside (pessimistic) socioeconomic forecast, annual growth rates were reduced by 25 percent starting in 2020. For 2030, under the downside regional growth scenario, total transactions and revenue are expected to be reduced by approximately 2.4 percent and 2.6 percent, respectively.

Sensitivity tests concerning toll elasticity were performed to establish the impacts on the T&R forecasts for Classes 2-10 vehicles. Higher elasticities (double the base case values) and lower elasticities (half the base case values) were tested. For 2030, under the scenario with higher elasticities, the number of Classes 2-10 transactions is reduced by 0.6 percent and the Classes 2-10 revenue decreases by 0.5 percent. As a percentage of the overall revenue, this scenario leads to a 0.3 percent reduction. Under the scenario with lower elasticities, the number of Classes 2-10 transactions is increased by 0.3 percent and the Classes 2-10 revenue increases by 0.2 percent. As a percentage of the overall revenue, this scenario leads to a 0.1 percent increase.

Different pay share proportions were tested to determine the impact on T&R forecasts. Two tests were performed for year 2030. Pay Share Test 1 involved lowering the initial cash share by 10 percent and distributing the remainder proportionally to WV E-ZPass and Non-WV E-ZPass. Pay Share Test 2 consisted of keeping the initial cash share unchanged but lowering the Non-WV E-ZPass share by 10 percent and increasing the WV E-ZPass share to compensate. As a percentage of the total revenue, Pay Share Test 1 resulted in a 0.1 percent reduction and Pay Share Test 2 resulted in a 0.6 percent reduction.

The final test was to investigate the impact of various retention rates, i.e. changing the percentage of early enrollees that stay in the single fee discount program in 2022. The sensitivity tests included four scenarios in addition to the base case, defined as follows:

- Full Retention – All early enrollees stay in the program in 2022
- Higher Retention – 20 percent more early enrollees stay in the program in 2022 (compared to the base case)
- Lower Retention – 20 percent fewer early enrollees stay in the program
- No Retention – None of the early enrollees stay in the program in 2022

With the higher/full retention scenarios, more customers stay in the single fee discount program, leading to more revenue collected from the fee, but less revenue collected from tolls; overall the revenue decreases. If all early enrollees were to stay in the program, it would generate a $4.2 million reduction in Class 1 revenue or 5.7 percent. In the higher retention case (20 percent higher than base case), the Class 1 total revenue decreases by $2.9 million or 4.0 percent.

In the lower retention case (20 percent lower than base case), the Class 1 revenue increases by $2.9 million or 3.9 percent. If all early enrollees were to leave the program in 2022, it would generate a $15.7 million increase in Class 1 revenue or 21.5 percent.

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Chapter 1

Introduction

In August 2018, the West Virginia Parkways Authority (Parkways) issued $166.37 million in toll revenue bonds to fund transportation projects near the West Virginia Turnpike (Turnpike). These projects are located in three of the ten counties adjacent to the Turnpike, as identified in Governor Jim Justice's Roads to Prosperity program. As part of this effort, Parkways introduced significant changes in toll policy that included doubling the then current toll rates and launching a low-cost annual pass with toll-free travel to customers in passenger cars with a West Virginia (WV) E-ZPass. To encourage participation in the new discount program, Parkways offered a one-time early enrollment option at an even lower cost and allowed for unlimited use of the Turnpike for a three-year period.

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1.1 Description of the West Virginia Turnpike

The Turnpike totals 88 miles in length and is comprised of four travel lanes (two in each direction) between Charleston and Princeton. The Turnpike is designated as Interstate 77 along its entire length, but also carries the Interstate 64 designation from Charleston to just south of Beckley.

The Turnpike is an important north-south interstate travel corridor linking eastern Ohio and western Pennsylvania in the north to western Kentucky, Virginia, North Carolina, and other states in the southeastern U.S. The Turnpike extends through mountainous terrain over much of its length; these mountains are a barrier to travel as shown on the regional location map (**Figure 1-1**). Posted speed limits are up to 70 miles per hour, reflecting the high design standards of the facility.

Figure 1-2 shows the Turnpike and the location of the four toll gantries. There are three mainline toll plazas at Ghent (Toll Plaza A) located at milepost 30, Pax (Toll Plaza B) at milepost 56, and Chelyan (Toll Plaza C) at milepost 83. There is also one ramp toll located on Route 19 at the North Beckley Exit (Exit 48). Tolls are collected in both directions at the mainline plazas and to and from the south at the North Beckley Plaza.

Figure 1-1 Regional Location Map

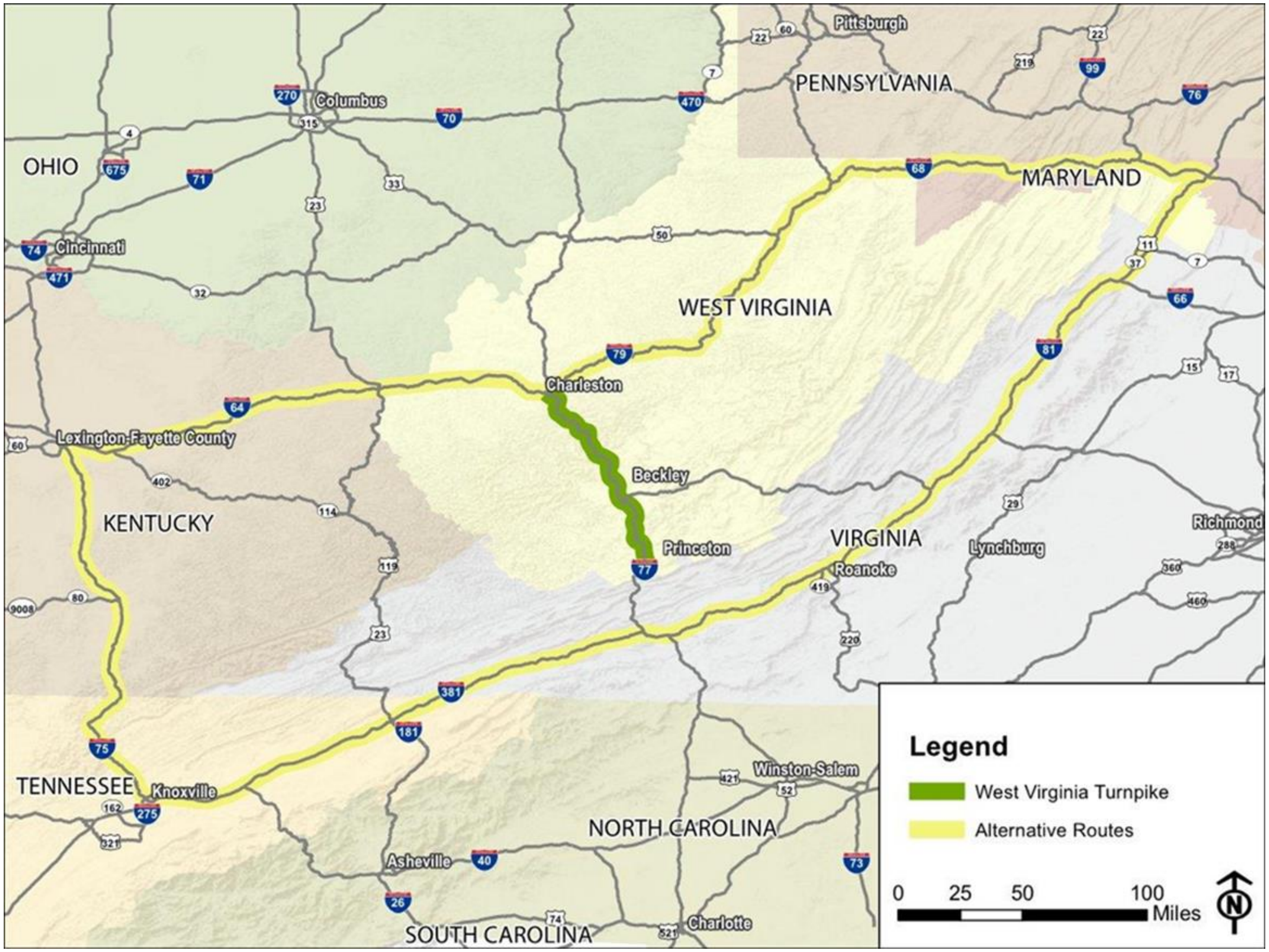
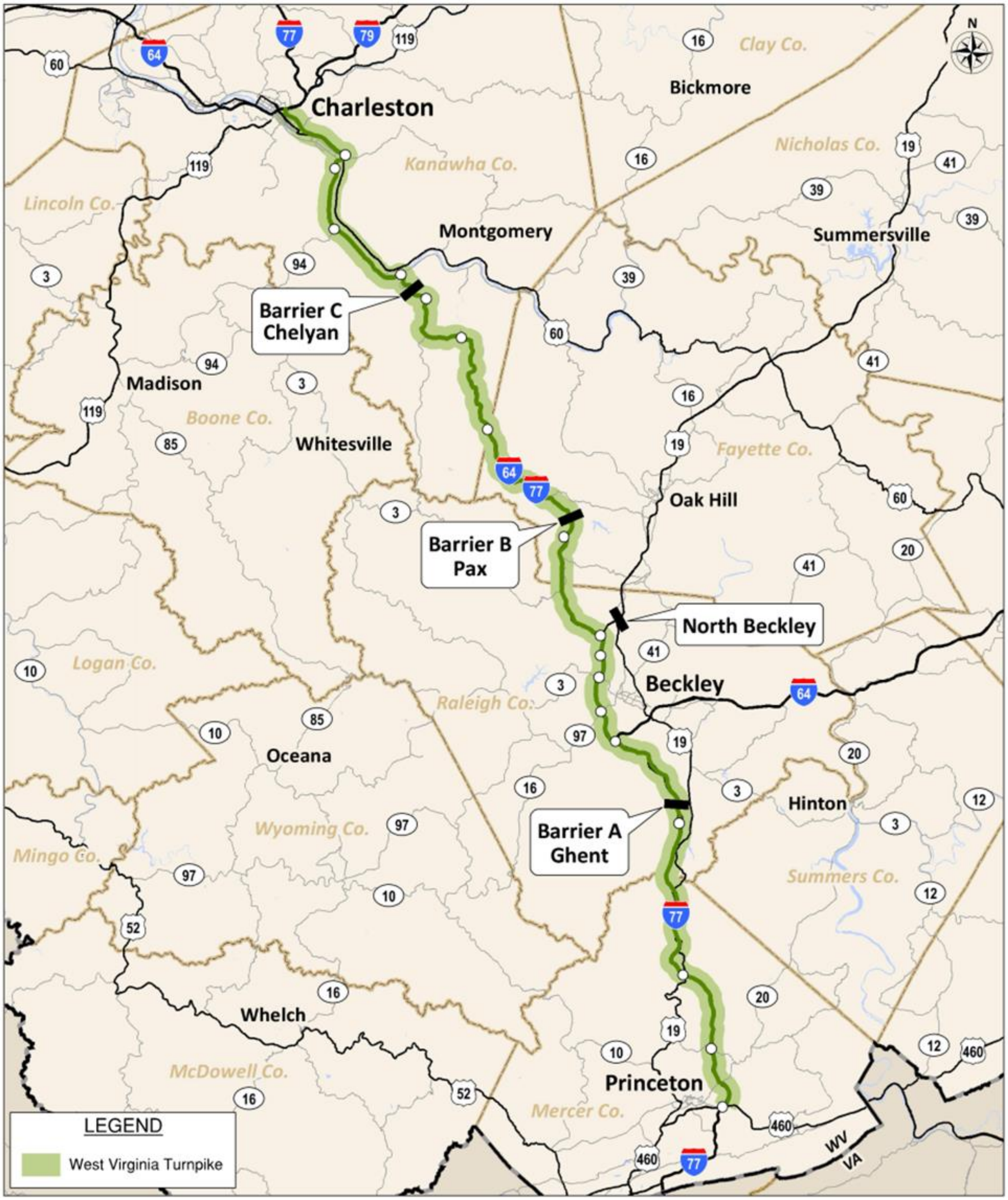


Figure 1-2 Location Map



The Turnpike passes through the West Virginia counties of Kanawha, Fayette, Raleigh, and Mercer, serving the cities of Charleston, Beckley, and Princeton. In addition to these cities, smaller communities with more localized trip origins and destinations are served. A large proportion of long-distance interstate trips are served by the Turnpike.

Figure 1-2 also shows several parallel roadways that offer toll-free alternatives to various sections of the Turnpike. These roads include:

- U.S. Route 19 between Princeton and Beckley
- U.S. Route 60 between I-64 at Exit 156 and Charleston
- S.R. 3/S.R. 94 between Beckley and Marmet
- S.R. 61 between Cabin Creek and Charleston

These routes do not offer the higher speeds and convenience provided by the Turnpike. Many of the alternative roads pass directly through local communities, are narrow, and have lower standards of vertical and horizontal geometry in comparison to the Turnpike. Because of the numerous curves and grade changes, the actual average travel speeds on these facilities are significantly lower than those that can be achieved on the Turnpike, resulting in overall longer travel times, especially for longer distance trips. These are low-volume local roads.

Also shown on Figures 1-1 and 1-2 are some additional key feeder routes connected to the Turnpike, such as:

- I-81 west of Fort Chiswell in VA
- I-77 in the south end of the state near VA
- U.S. Route 460 east of I-77 and west of I-77
- I-64 east of Beckley
- U.S. Route 19 at North Beckley
- U.S. Route 60 east of Chelyan
- I-77 north of Charleston
- I-79 north of Charleston
- U.S. Route 119 west of Charleston
- I-64 west of Charleston

1.2 2019 Toll Policy Changes

There are three mainline toll plazas on the Turnpike: Ghent (Toll Plaza A) at milepost 30, Pax (Toll Plaza B) at milepost 56, and Chelyan (Toll Plaza C) at milepost 83. There are ramp toll plazas on the ramps to and from the south in the North Beckley Interchange at milepost 48. Payment of tolls on the Turnpike can be made with cash or with E-ZPass. Debit and credit cards are not accepted at the toll plazas.

A summary of the current toll rate schedule on the Turnpike is presented in **Table 1-1**. These rates went into effect on January 15, 2019. The current toll rate schedule consists of toll rates for ten vehicle classifications based on vehicle characteristics such as the number of axles and vehicle height.

Under the new toll schedule, for customers driving passenger cars and paying in cash, the toll is $4.00 at each mainline toll plaza in each direction and $0.75 at the North Beckley ramp plazas. Prior to the policy changes, these toll rates were respectively $2.00 and $0.40. The cash toll amounts for five-axle trucks are now $13.50 at the mainline toll plazas and $3.25 at the North Beckley ramp toll plaza. Prior to the policy changes, these toll rates were respectively $6.75 and $1.60. The cash rates are rounded to the quarter for ease of collection.

Table 1-1 Current West Virginia Turnpike Toll Rates - 01/15/2019 to Present

Toll Class	Vehicle Type	Number of axles	Barriers A, B & C WV E-ZPass Personal	North Beckley WV E-ZPass Personal
1	Single Fee Discount Program	2	$0.00 with valid Single Fee Discount Plan	$0.00 with valid Single Fee Discount Plan

Toll Class	Vehicle Type	Number of axles	Barriers A, B & C Cash	Barriers A, B & C WV E-ZPass Commercial	Barriers A, B & C Non-WV E-ZPass	North Beckley Cash	North Beckley WV E-ZPass Commercial	North Beckley Non-WV E-ZPass
1	Passenger Cars/Pickup Trucks/Motorcycles and Passenger Vans (under 7'6")	2	$4.00	$2.60	$4.00	$0.75	$0.00 with Single Fee Discount Plan	$0.75
2	All Class 1 vehicles with a trailer (under 7' 6")	3+	$5.00	$3.26	$5.00	$1.50	$1.04	$1.60
3	Motorhomes only (over 7' 6")	2-3	$5.00	$3.26	$5.00	$1.50	$1.04	$1.60
4	Class 3 vehicles with a trailer (over 7' 6")	3+	$6.50	$4.22	$6.50	$2.50	$1.56	$2.40
5	2-axle trucks	2	$6.50	$5.20	$5.66	$1.50	$1.28	$1.40
6	3-axle trucks	3	$9.00	$7.20	$7.84	$2.50	$1.92	$2.08
7	4-axle trucks	4	$13.00	$10.40	$11.32	$3.25	$2.56	$2.78
8	5-axle trucks	5	$13.50	$10.80	$11.74	$3.25	$2.56	$2.78
9	6 or more-axle trucks	6+	$19.00	$15.20	$16.54	$4.75	$3.84	$4.18
10	Oversize trucks		$24.00	$19.20	$20.88	$14.50	$11.52	$12.52

Source: Parkways

The toll policy changes that became effective January 15, 2019 also included a modified flat fee option known as the **Single Fee Discount Program** authorized under Chapter 17, Article 16A of the West Virginia Code, 1931, as amended (the "Authority Act") for Class 1 vehicle customers. A customer driving a Toll Class 1 passenger motor vehicle (non-commercial use) may obtain unlimited travel on the Turnpike for one year by enrolling in the single fee discount program. Unlimited travel is offered for an annual fee of $25 per vehicle, plus applicable $13 cost of issuing a WV E-ZPass transponder. It is valid for one year starting from the month of purchase.

A one-time, early enrollment incentive was offered in 2018 and the first two weeks of 2019. During this time period only, any customer driving a Class 1 passenger motor vehicle could enroll in the single fee discount program and obtain unlimited travel for that vehicle on the Turnpike in calendar years 2019, 2020 and 2021 for a one-time payment of $24 per vehicle, plus $13 for the cost of issuing a WV E-ZPass transponder for that vehicle as applicable.

The single fee discount program (including the early enrollment offer) is open to all West Virginia and out-of-state customers driving a Toll Class 1 passenger motor vehicle equipped with a WV E-ZPass transponder.

Other discount programs continue to be offered as follows:

Classes 2 through 4 Non-Commercial Vehicles - West Virginia E-ZPass Account. This discount plan is for West Virginia (WV) E-ZPass customers with vehicles in Class 2, 3 and 4 (i.e. Vehicles greater than 7'6" in height or Class 1 vehicles towing trailers). These customers continue to receive a 35 percent discount off the cash toll rate at each toll plaza on the Turnpike. This discount plan was already in place prior to the 2019 toll policy changes.

Commercial Discount Plan - West Virginia E-ZPass Account. There is a $25.00 charge for the purchase of each E-ZPass transponder (non-refundable). Rates are shown on Table 1-1 under the column "WV Commercial E-ZPass Rate". For example, for a Class 5 truck, the cost per toll plaza of $5.20 is deducted from an E-ZPass pre-paid account as opposed to a cash rate of $6.50. This discount plan was already in place prior to the 2019 toll policy changes.

Commercial Discount Plan – Non-West Virginia E-ZPass Account. These accounts are opened and managed by other E-ZPass agencies, so there is no paperwork, account maintenance, or charge for transponders by Parkways. Rates are shown on Table 1-1 under the column "Non-WV E-Pass". For example, for a Class 5 truck, the cost per toll plaza of $5.66 is charged to the Non-WV E-ZPass account as opposed to a cash rate of $6.50. No discount is offered to Classes 1-4 for those holding a Non-WV E-ZPass. This discount plan was already in place prior to the 2019 toll policy changes.

1.3 Study Tasks

The purpose of this report is to describe the data and methods used in the analysis and to present the updated traffic and revenue (T&R) forecast for calendar years 2020 through 2050. Note that throughout the document, all annual data is presented in terms of calendar year. The scope of the study included:

- Obtain information about recent changes in toll policy, transactions and revenue, and identify the impacts of these changes on T&R;
- Update the models used to produce the forecasts (econometric model, model of trends in payment type, payment choice model and models of toll elasticity/suppression), making these models consistent with recent performance data;
- Prepare and document new T&R estimates suitable to support financing based on the current toll regime; and
- Develop and analyze a series of sensitivity tests.

1.4 Report Overview

Following this introductory chapter, the remainder of this report is organized as follows:

- **Chapter 2** provides a summary of WV Turnpike traffic and revenue performance data through 2019 to analyze trends and correlate the chronology of changes in toll policy to changes in Turnpike transactions and revenue
- **Chapter 3** presents the adjustments made to the models used to produce the forecasts. Chapter 3 contains a description of the calibration process followed for each model component, before presenting a validation of the entire model chain for 2019.
- **Chapter 4** includes the results of updated T&R analysis in the form of estimated annual transactions and revenue for the period 2020 through 2050.
- **Chapter 5** contains the results of sensitivity testing of key model parameters and assumptions.

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Chapter 2

Traffic and Revenue Data Analysis

As part of the 2018 T&R Study[1], CDM Smith collected and analyzed historical data on the Turnpike including detailed traffic and revenue data, and customer frequency of use data. Historical trends covering the last twenty-five years of operation until 2016 were reviewed. Building upon the data collected during the prior study, CDM Smith collected additional data covering the period 2017 through 2019. CDM Smith obtained and reviewed new studies conducted by/for Parkways, including recent Comprehensive Annual Financial Reports (CAFRs) and Annual Consulting Engineers Reports.

This chapter presents the most recent T&R data available at the time the study was prepared. This includes details on toll location, vehicle class and payment method distinguishing WV E-ZPass from Non-WV E-ZPass. From this data covering the period immediately preceding and following the implementation of the toll policy changes, it was possible to analyze the correlation between toll policy changes and T&R performance on the Turnpike. This chapter documents the chronology of changes in toll policy and then uses the T&R data and frequency of use data to create a history of impacts on T&R resulting from the policy changes. This information was later used to identify appropriate changes in the forecasting models to better match recent results (See Chapter 3).

For the 2019 study, Parkways provided CDM Smith with updated historical transaction and revenue data by location and payment method through the end of 2019. In addition, TransCore provided a dataset of transactions through December 2019 that included details by toll location, vehicle class and payment method distinguishing WV E-ZPass from Non-WV E-ZPass. The TransCore data initially included non-revenue transactions and violations (referred to as run-through transactions). In order to better match annual transactions and toll revenue reported by Parkways, the TransCore dataset was adjusted to filter out non-revenue transactions and violations.

This chapter is organized into the following sections:

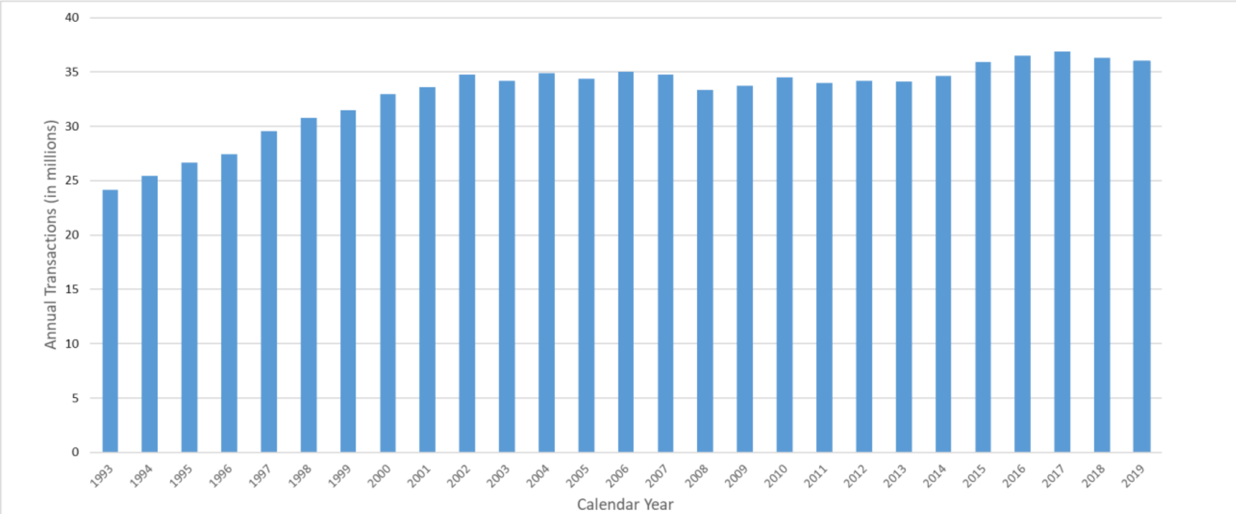
- Annual transaction trends
- Annual toll revenue trends
- Single fee discount program
- Frequency of use
- Summary of findings

2.1 Annual Transaction Trends

In 2017, systemwide toll transactions increased by 1.1 percent at 36.9 million. In 2018, transactions went down by 1.7 percent at 36.3 million. In 2019, transactions were down by 0.8 percent at 36.0 million. **Figure 2-1** contains total annual transactions on the Turnpike between 1993 and 2019. The impacts of the Great Recession can be seen beginning in 2008. It took seven years to return to the pre-Recession level of transactions.

[1] West Virginia Turnpike 2018 Revenue Bond Study. Prepared by CDM Smith for the West Virginia Parkways Authority. July 13, 2018.

Figure 2-1 Annual Systemwide Transactions

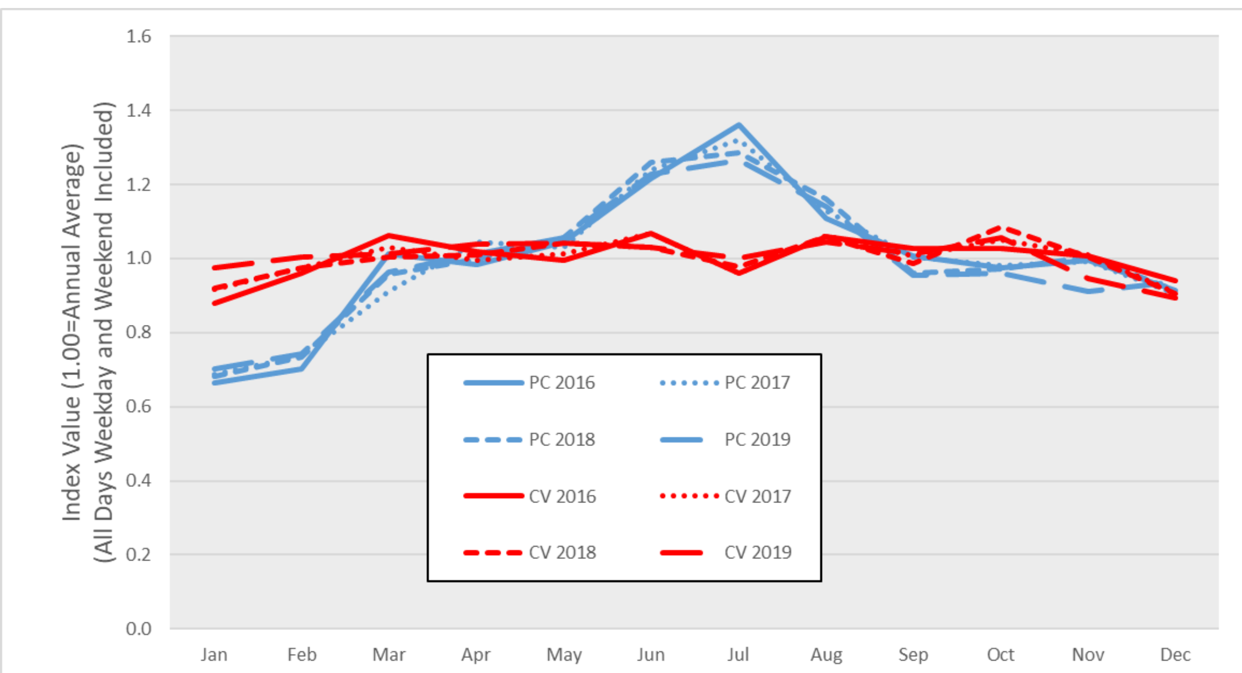


Source: Parkways

2.1.1 Seasonal Variations

Figure 2-2 provides a visual summary of the distribution of Turnpike transactions by month, between passenger cars and commercial vehicles, for 2016 through 2019. Passenger cars exhibit a distinct peaking pattern with significantly higher transactions in June through August due to the influx of summer tourists. Monthly total passenger car transactions in the peak summer month of July is approximately double that of the lowest months, January and February. Among commercial vehicles, there is considerably less variation and monthly transactions are generally stable throughout the year. Seasonal variations within these two main types of vehicles are similar during the four-year period.

Figure 2-2 Monthly Toll Transaction Variations – 2016 through 2019

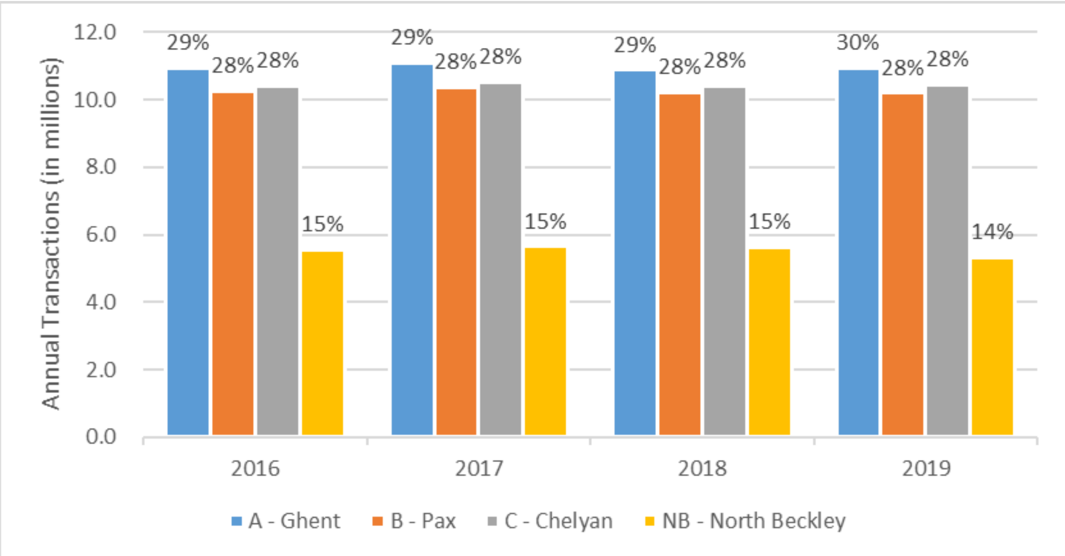


Source: Parkways (TransCore database) and CDM Smith Analysis

2.1.2 Transactions by Plaza

Figure 2-3 shows the relative contribution of each toll location to the Turnpike's total transactions starting in 2016. The three mainline plazas accounted for roughly the same share of overall transactions (about 28-30 percent) while the North Beckley ramp plaza represented about 15 percent of the total. The share of transactions by plaza has remained very stable since 2016, including the first year under the new toll policies.

Figure 2-3 Toll Transactions by Plaza – 2016 through 2019



Source: Parkways (TransCore database)

2.1.3 Vehicle Classification

The detailed breakout of transactions by toll class from 2017 through 2019 is shown in **Table 2-1**. Commercial vehicles (CV, toll classes 5-10) accounted for 22.3 percent of transactions in 2017 and 23.2 percent in 2018. For 2019, commercial vehicles are expected to represent 23.5 percent of transactions.

Overall, passenger car transactions declined slightly in 2019 mostly due to a reduction in Class 2 transactions. Truck transactions increased in 2019 mostly due to increases in Classes 6 and 8.

Table 2-1 shows the breakout between single fee and toll paying transactions for Class 1 vehicles.[2] The total number of Class 1 transactions decreased 0.5 percent in 2019 compared to 2018, although there was a significant shift in payment method. This is further discussed in the next section.

Overall, the breakout of transactions by toll vehicle class did not change significantly in 2018 and 2019 compared to what it was in 2017.

[2] Prior to the introduction of the new single fee discount program in September 2018, Parkways had a commuter discount program for high frequency users of the Turnpike that had been in place since 2000. This program is discussed in more detail on page 2-13 of this report.

Table 2-1 Transactions by Toll Vehicle Class – 2017 through 2019

Toll Class	Vehicle Type	Axles	2017 Trans.	2017 % Trans	2018 Trans.	2018 % Trans	2019 Trans.	2019 % Trans
1	Passenger cars/pickup trucks (under 7' 6") **TOLL PAYING TRANSACTIONS**	2	24,939,576	66.3%	23,549,879	63.5%	19,079,360	51.7%
1	Passenger cars/pickup trucks (under 7' 6") **SINGLE FEE TRANSACTIONS**	2	3,295,665	8.8%	3,918,076	10.6%	8,258,968	22.4%
2	All Class 1 vehicles with a trailer (under 7' 6")	3+	821,645	2.2%	804,696	2.2%	724,853	2.0%
3	Motorhomes only (over 7' 6")	2-3	67,524	0.2%	63,785	0.2%	62,326	0.2%
4	Class 3 vehicles with a trailer (over 7' 6")	3+	59,491	0.2%	56,653	0.2%	54,021	0.1%
Passenger Cars			**29,183,901**	**77.6%**	**28,393,089**	**76.5%**	**28,179,528**	**76.3%**
5	2-axle trucks	2	614,801	1.6%	653,279	1.8%	621,617	1.7%
6	3-axle trucks	3	384,189	1.0%	437,711	1.2%	477,362	1.3%
7	4-axle trucks	4	140,799	0.4%	153,821	0.4%	166,585	0.5%
8	5-axle trucks	5	7,014,972	18.6%	7,136,880	19.2%	7,173,937	19.4%
9	6 or more-axle trucks	6+	191,973	0.5%	199,099	0.5%	186,849	0.5%
10	Oversize trucks		34,098	0.1%	41,853	0.1%	45,597	0.1%
Commercial Vehicles			**8,380,832**	**22.3%**	**8,622,643**	**23.2%**	**8,671,947**	**23.5%**
Unclassified			**55,329**	**0.1%**	**91,688**	**0.2%**	**79,150**	**0.2%**
Total			**37,620,062**	**100.0%**	**37,107,420**	**100.0%**	**36,930,625**	**100.0%**

Source: Parkways (TransCore database) and CDM Smith Analysis
Note: The "unclassified" transactions were not linked to a specific toll class.

2.1.4 Method of Payment

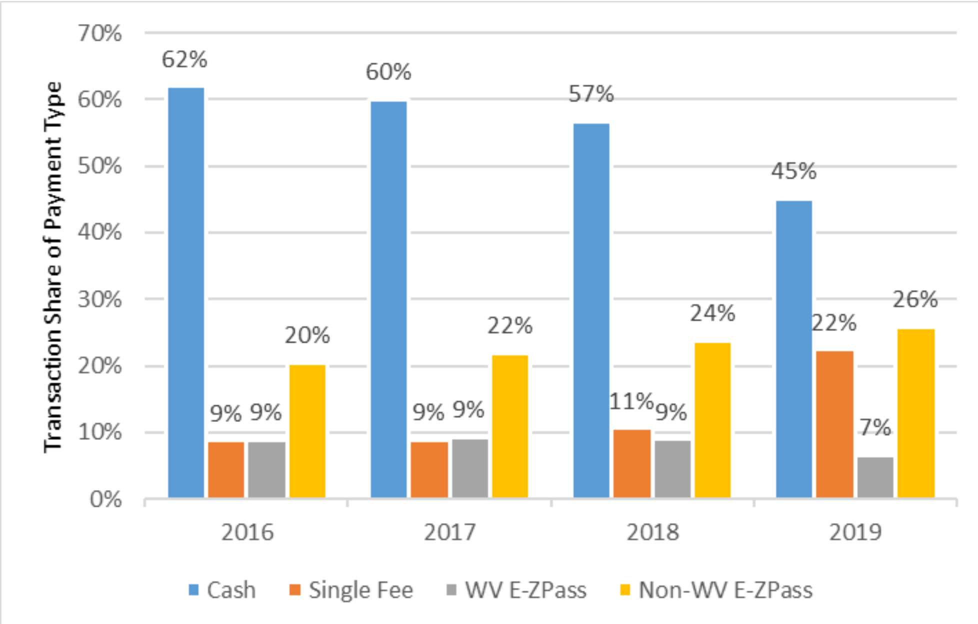
Only cash and E-ZPass can be used to pay tolls on the Turnpike. Debit/credit cards are not accepted at any toll plazas. **Figure 2-4** presents the breakout annual toll transactions by payment method (cash, single fee, WV E-ZPass, Non-WV E-ZPass) for 2016 through 2019.

The WV E-ZPass category excludes single fee discount program (single fee) transactions; it includes non-commercial Class 2-4 WV E-ZPass and commercial WV E-ZPass transactions.

About 62 percent of 2016 transactions were paid by cash, 18 percent were WV E-ZPass transactions, and the remaining 20 percent were Non-WV E-ZPass transactions. In 2016, payment via automated coin machines at the North Beckley ramp plazas accounted for about 6 percent of all systemwide transactions (included in the cash total).

Cash payment represented 60 percent of the transactions in 2017. The share of cash payment was down to 57 percent in 2018, and 45 percent in 2019. Single fee transactions represented 22 percent of all transactions in 2019, while other WV E-ZPass transactions made up 7 percent and Non-WV E-ZPass 26 percent. The modified single fee discount program and toll rate changes led to a significant change in the payment share breakout that started in 2018 and continued to completion in 2019.

Figure 2-4 Toll Transactions by Payment Type – 2016 through 2019



Source: Parkways (TransCore database) and CDM Smith Analysis

All toll plazas have experienced an increase in the share of E-ZPass transactions (combining WV and Non-WV E-ZPass, including single fee transactions) as shown in **Table 2-2**. In 2016, the E-ZPass market was about 36-37 percent at the mainline plazas and 44 percent at North Beckley. In 2019, the mainline plazas had an E-ZPass market varying between 53 and 56 percent, while the E-ZPass share reached 61 percent at North Beckley.

Table 2-2 Share of E-ZPass Transactions by Plaza

Plaza	2016	2017	2018	2019
A	36.2%	38.2%	41.8%	53.2%
B	37.2%	39.3%	43.2%	55.2%
C	37.3%	39.5%	43.6%	56.0%
NB	44.2%	46.2%	48.2%	61.3%

Source: Parkways

The number of vehicles per account in September 2017 and October 2019 is shown in **Table 2-3**. As of October 2019, the WV E-ZPass system had approximately 146,500 individual E-ZPass accounts (i.e. excluding commercial accounts). It is permitted to have several vehicles associated to an individual E-ZPass account, but each vehicle must have a separate WV E-ZPass transponder. It is no longer allowed to move a transponder between several vehicles listed on an account. As of October 2019, 70 percent of individual E-ZPass accounts had just one vehicle registered. Two-vehicle accounts represented about 23 percent, and three-vehicle accounts about 5 percent of all WV E-ZPass accounts.

The number of vehicles per account changed between 2017 and 2019, with a significant increase in accounts with multiple vehicles. The weighted average number of vehicles per account went from 1.16 in September 2017 to 1.40 in October 2019.

Table 2-3 Number of Vehicles per WV E-ZPass Individual Account

# of Vehicles	September 2017		October 2019	
	# of Accounts	Share (%)	# of Accounts	Share (%)
1	39,836	87%	102,719	70%
2	4,972	11%	33,324	23%
3	858	2%	7,653	5%
4	177	0%	2,054	1%
5	48	0%	523	0%
6			161	0%
7			46	0%
8			28	0%
9			9	0%
10			13	0%
11			1	0%
12			2	0%
14			1	0%
All	**45,891**	**100%**	**146,534**	**100%**

Source: Parkways

2.1.5 E-ZPass End-to-End Trips

The E-ZPass transactions were analyzed to estimate the share of trips traveling end-to-end on the facility i.e., between Ghent and Chelyan. It was found that in 2019 end-to-end trips represent about 31 percent of the WV E-ZPass trips and about 64 percent of the Non-WV E-ZPass trips. These percentages are based on total transactions at Ghent and Chelyan. These values are almost identical to the 2018 values, respectively 30 percent and 64 percent. In 2016, the share of end-to-end trips was 31 percent for WV E-ZPass trips and 70 percent for Non-WV E-ZPass trips.

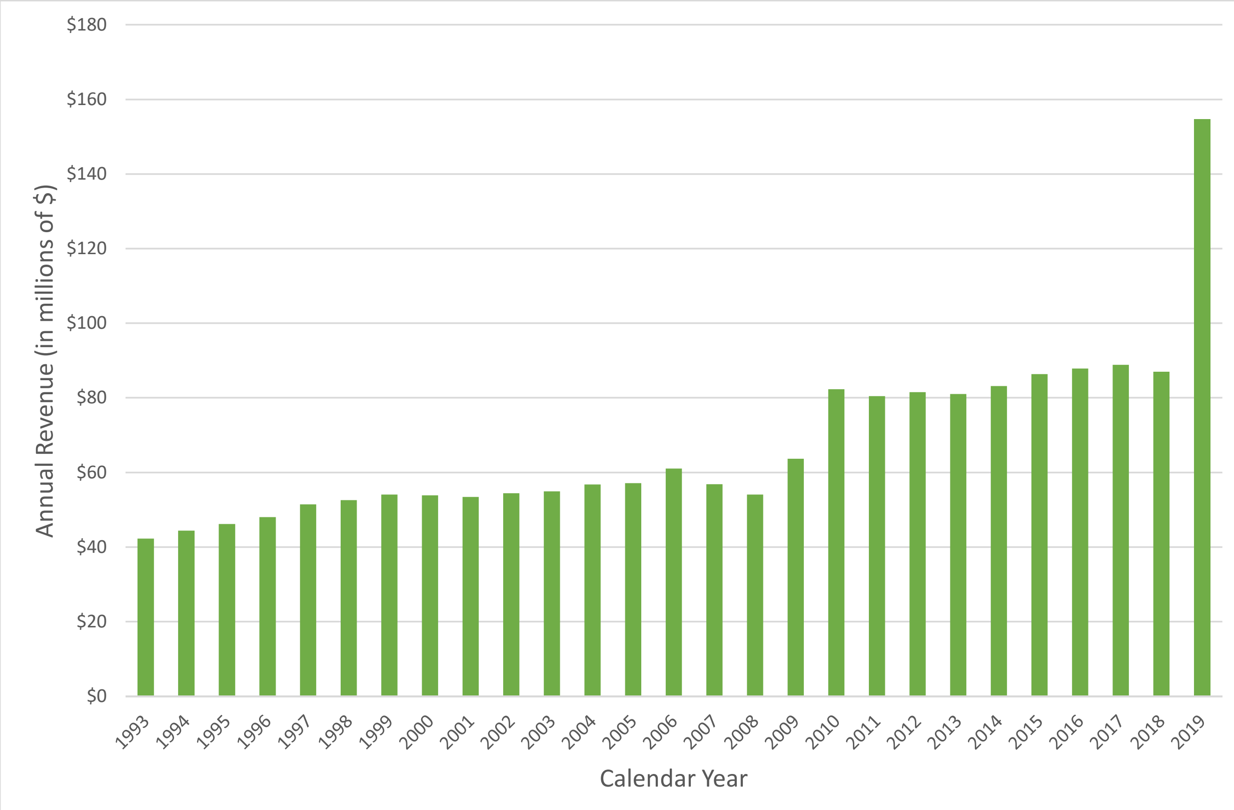
2.2 Annual Toll Revenue

Historical revenue trends on the Turnpike were reviewed and are presented in this section, including revenue by plaza, vehicle class, and payment type. Note that the toll revenue described here does not include the fees paid for acquiring a transponder or the fee for joining the single fee discount program.

In 2017, systemwide toll revenue increased by 1.2 percent at $88.9 million. In 2018, toll revenue went down by 2.1 percent at $87.0 million. Revenue growth in 2017 and 2018 closely reflect transaction growth. In 2019, systemwide toll revenue increased by 78 percent at $154.8 million.

Figure 2-5 contains a summary of total annual revenue on the Turnpike between 1993 and 2019.

Figure 2-5 Annual Systemwide Toll Revenue (in millions of $)

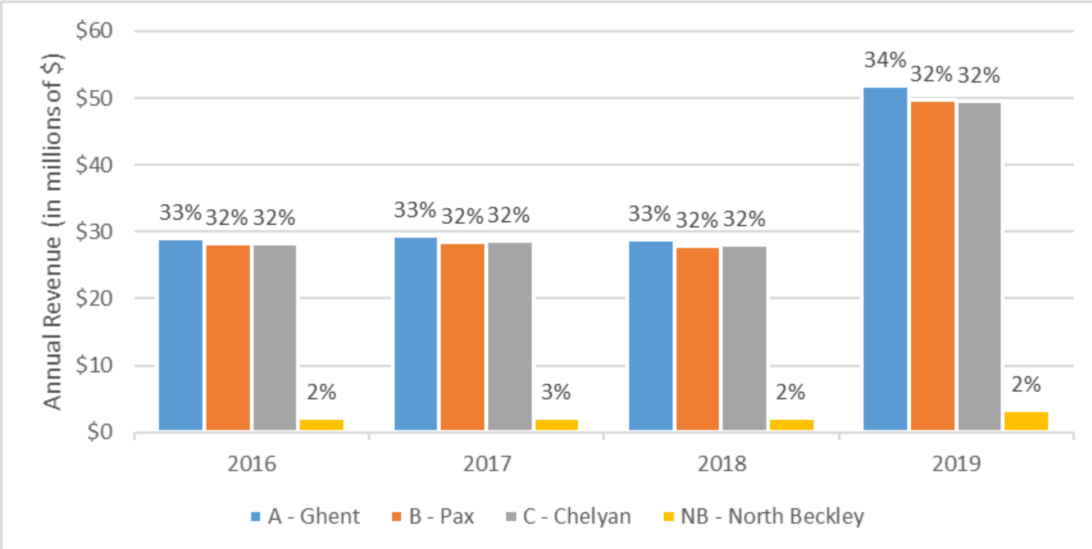


Note: Toll rate increases were implemented on August 1, 2009 and January 15, 2019.
Source: Parkways

2.2.1 Toll Revenue by Plaza

Figure 2-6 contains a graph that shows the relative contribution of each toll location to the Turnpike's total toll revenue starting in 2016. The three mainline plazas accounted for roughly the same share of overall revenue (about 32-34 percent) while the North Beckley ramp plaza represented about 2 percent of the total. The share of revenue by plaza has been stable since 2016 and remains so after the toll policy changes implemented in January 2019.

Figure 2-6 Toll Revenue by Plaza – 2016 through 2019



Source: Parkways (TransCore database) and CDM Smith Analysis

2.2.2 Toll Revenue by Vehicle Classification

Commercial vehicle toll rates have been higher than passenger car toll rates in all years, therefore the share of CVs in overall revenue is higher than the share of CVs in transactions. The breakdown by toll class for 2017 through 2019 is shown in **Table 2-4.**

Commercial vehicles accounted for 49.9 percent of revenue in 2017 and 51.8 percent in 2018. The share of revenue by commercial vehicle was 56.7 percent of the total toll revenue in 2019.

The vast majority of passenger car revenue comes from Class 1 vehicles: 95 percent in both 2017 and 2018 and 94 percent in 2019.

For commercial vehicles, Class 8 vehicles (5-axle trucks) generated 88 percent of commercial vehicle revenue in 2017, 87 percent in 2018, and 87 percent in 2019.

Table 2-4 Toll Revenue by Toll Vehicle Class – 2017 through 2019

Toll Class	Vehicle Type	Axles	2017			2018			2019		
1	Passenger cars/pickup trucks (under 7' 6")	2	$	42,297,063	47.6%	$	39,725,971	45.7%	$	63,102,362	40.8%
2	All Class 1 vehicles with a trailer (under 7' 6")	3+	$	1,848,038	2.1%	$	1,797,689	2.1%	$	3,139,646	2.0%
3	Motorhomes only (over 7' 6")	2-3	$	153,796	0.2%	$	144,952	0.2%	$	277,904	0.2%
4	Class 3 vehicles with a trailer (over 7' 6")	3+	$	179,692	0.2%	$	170,620	0.2%	$	321,127	0.2%
Passenger Cars (Classes 1-4)			$	44,478,588	50.1%	$	41,839,232	48.1%	$	66,841,039	43.3%
5	2-axle trucks	2	$	1,532,648	1.7%	$	1,594,391	1.8%	$	2,891,324	1.9%
6	3-axle trucks	3	$	1,314,650	1.5%	$	1,492,799	1.7%	$	3,167,624	2.1%
7	4-axle trucks	4	$	712,001	0.8%	$	763,072	0.9%	$	1,584,396	1.0%
8	5-axle trucks	5	$	38,972,185	43.9%	$	39,307,292	45.2%	$	76,432,018	49.5%
9	6 or more-axle trucks	6+	$	1,447,477	1.6%	$	1,470,040	1.7%	$	2,662,830	1.7%
10	Oversize trucks		$	354,819	0.4%	$	433,712	0.5%	$	901,721	0.6%
Commercial Vehicles (Classes 5-10)			$	44,333,779	49.9%	$	45,061,307	51.8%	$	87,639,912	56.7%
Unclassified			$	14,745	0.0%	$	25,993	0.0%	$	37,172	0.0%
Total			**$**	**88,827,113**	**100.0%**	**$**	**86,926,531**	**100.0%**	**$**	**154,518,123**	**100.0%**

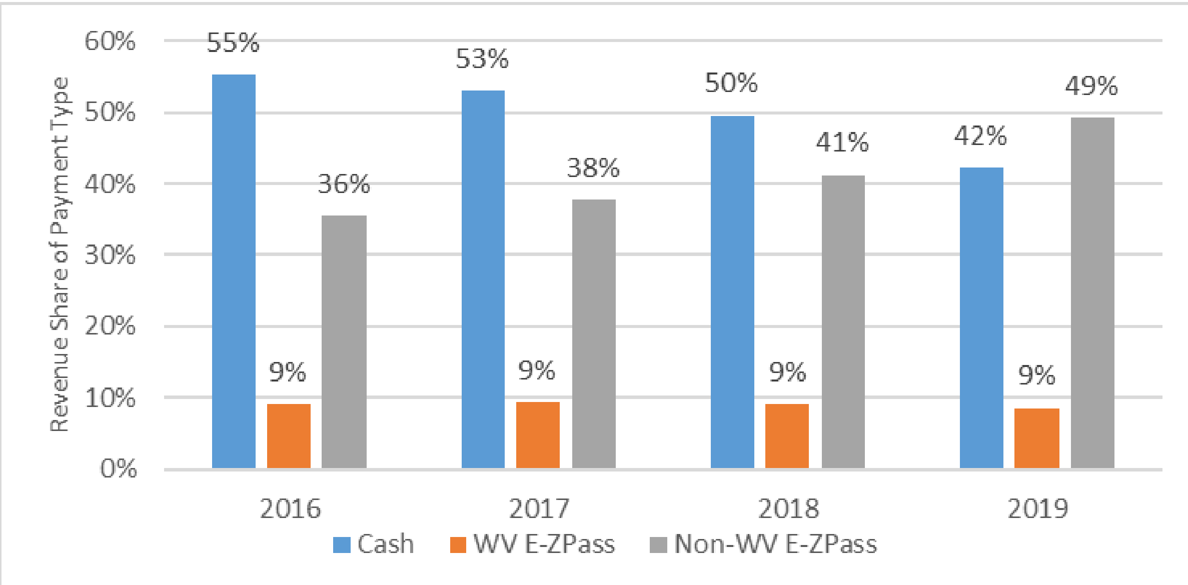
Source: Parkways (TransCore database) and CDM Smith Analysis
Note: “Unclassified” transactions were not linked to a specific toll class.

2.2.3 Toll Revenue by Payment Type

Figure 2-7 contains the breakout of annual toll revenue by payment category (cash, WV E-ZPass, Non-WV E-ZPass) for 2016 through 2019.

Cash payment represented 55 percent of the revenue in 2016 and 53 percent in 2017. The share of cash payment was down to 50 percent in 2018 and 42 percent in 2019. The modified single fee discount program and toll rate changes led to a modification of the payment share breakout of revenue that started to be observed in 2018 and continued in 2019. In 2019, Non-WV E-ZPass revenue represented the highest share of revenue, at 49 percent of total toll revenue.

Figure 2-7 Toll Revenue by Payment Type – 2016 through 2019



Note: Toll revenue does not include any revenue associated with single fee program enrollment
Source: Parkways (TransCore database) and CDM Smith Analysis

2.3 Modified Single Fee Discount Program

This section focuses on data related to the single fee discount program introduced by Parkways at the end of 2018. After entering this program, a customer driving a Toll Class 1 passenger motor vehicle (non-commercial use) is granted unlimited toll-free travel on the Turnpike for one year or for three years as part of the early enrollment option that was offered by the Authority through January 15, 2019. This section provides information on the timeline for introducing the new program, as well as various metrics describing how eligible customers have reacted to this new payment option.

2.3.1 Chronology of Events

The chronology of key events related to the start of the single fee discount program is presented in **Table 2-5.**

Table 2-5 Single Fee Discount Program – Chronology of Events

Date	Event
Early May 2018	Public meetings
Sep 24, 2018	Start of the Early Enrollment Offer for the Single Fee Discount Program
Sep 24-25, 2018	Existing Class 1 Individual WV E-ZPass customers converted into Early Enrollment Offer
Jan 15, 2019	End of the Early Enrollment Offer
Jan 15, 2019	Start of Single Fee discount at $25 per year
Jan 15, 2019	Change of toll rates

Source: Parkways

Beginning in May of 2018, Parkways held four meetings to advise the public on selling of additional bonds and the E-ZPass single fee discount program. These meetings were held in Belle, Fayetteville, Beckley and Princeton, in each of the counties the Turnpike traverses. At each meeting there was media in attendance which publicized that applicants could sign up prior to the conversion to the single fee discount program and be enrolled automatically when the plan was implemented. The benefit of signing up prior to the conversion would be a savings on the entry fee. Prior to the conversion to the single fee discount program, the cost to enroll in the North Beckley Plan was $5 and the transponder was free. If the customer waited until early enrollment in the single fee discount program was made available, the cost for a transponder was $13. Enrollment in the single fee discount program cost $24 in either case.

Also, in early June, Governor Justice issued a press release advising of the toll increases and the early enrollment incentive of the single fee discount program. Parkways began to see a significant increase in new accounts once these events took place.

The early enrollment option, with the discount program offered at $24 for three years, was available from September 24, 2018 to January 15, 2019. On September 24th and 25th of 2018. any then-current WV E-ZPass customers were automatically converted to the early enrollment option unless the customer had opted out beforehand.

The early enrollment offer ended on January 15, 2019. On that day, toll rates changed, and the single fee discount program became available for an annual fee of $25 per year per vehicle, plus $13 for the cost of issuing a WV E-ZPass transponder for that vehicle.

2.3.2 Single Fee Discount Program Enrollment

Table 2-6 contains the number of customers that joined the single fee discount program since its inception. A total of 64,200 WV E-ZPass accounts were automatically converted to the single fee discount program when it started. About 65,700 additional customers joined the new program under the early enrollment offer. And about 11,500 have joined at the $25 annual fee between January 15 and the end of October 2019. At the end of October 2019, there were 141,354 accounts within the single fee discount program.

Table 2-6 Single Fee Discount Program – Number of Accounts Enrolled

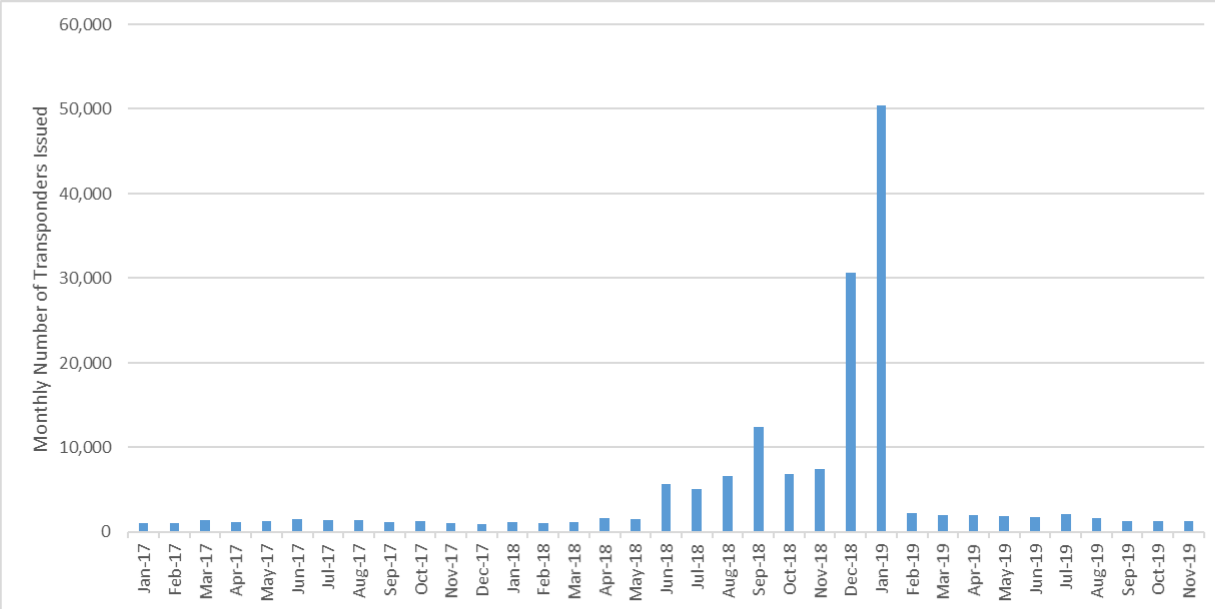
	Automatically Enrolled	Early Enrollment Option	Standard Discount	Total
Sep-18	64,233	881		65,114
Oct-18		4,197		4,197
Nov-18		4,951		4,951
Dec-18		23,977		23,977
Jan-19		31,664	2,727	34,391
Feb-19			1,130	1,130
Mar-19			1,127	1,127
Apr-19			1,064	1,064
May-19			1,008	1,008
Jun-19			982	982
Jul-19			966	966
Aug-19			952	952
Sep-19			748	748
Oct-19			747	747
Total	**64,233**	**65,670**	**11,451**	**141,354**

Source: Parkways

2.3.3 Number of WV E-ZPass Transponders Issued

Figure 2-8 is a graph of the number of WV E-ZPass transponders issued per month. While not all WV E-ZPass customers participate in the single fee discount program, all WV E-ZPass customer receive a discount over the cash toll rates. After being fairly stable in the 1,000 to 1,600 range, the number of transponders issued on a monthly basis first increased in June 2018 following the public meetings and media coverage related to the upcoming single fee discount program available through the WV E-ZPass. A second jump was observed in September 2018 with the actual start of the early enrollment offer. The peak months for issuance of new transponders were December 2018 and January 2019, which correspond to the end of the early enrollment offer. Between February 2019 and November 2019, the number of monthly transponders issued has followed a downward trend from 2,200 to 1,300 transponders issued on a monthly basis.

Figure 2-8 Number of WV E-ZPass Transponders Issued per Month (January 2017-November 2019)



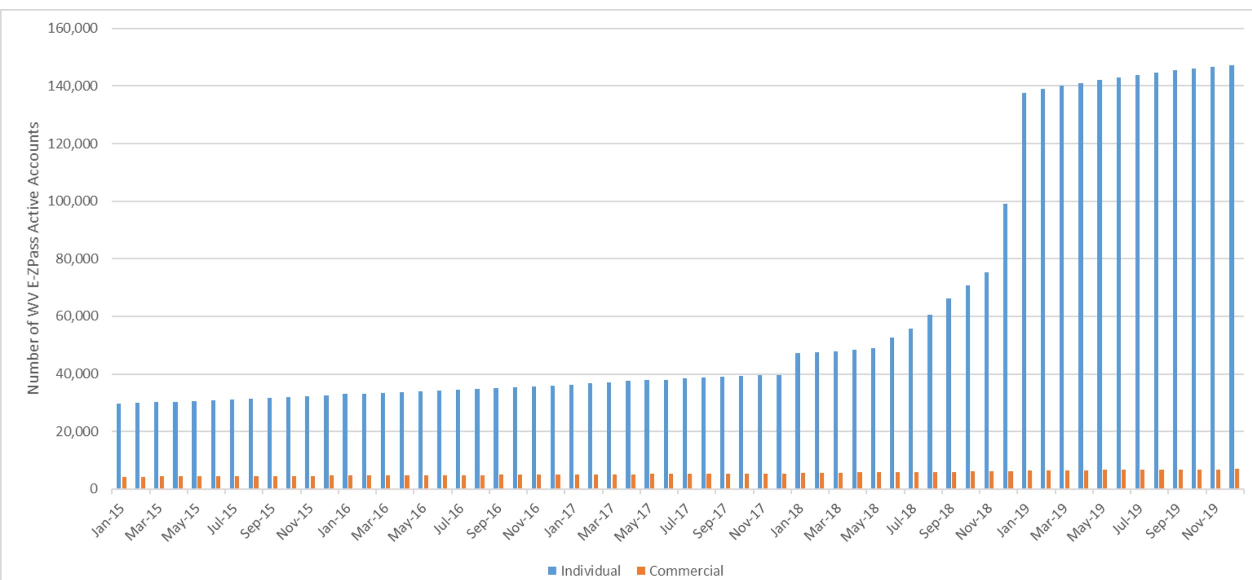
Source: Parkways

2.3.4 Number of WV E-ZPass Accounts

Figure 2-9 has a tally of the number of active WV E-ZPass accounts since 2015. The number of active WV E-ZPass individual accounts increased by about 88,600 from May 2018 to January 2019, going from 48,900 active accounts in May 2018 to 137,500 active accounts in January 2019. Since January 2019, the number of active accounts continued to increase moderately to reach 147,300 in December 2019.

During the same period, the number of commercial WV E-ZPass accounts has remained fairly stable on an upward trend. There were about 5,000 active commercial accounts in early 2017 and 6,900 commercial accounts in December 2019.

Figure 2-9 Number of Active WV E-ZPass Accounts (January 2015-December 2019)



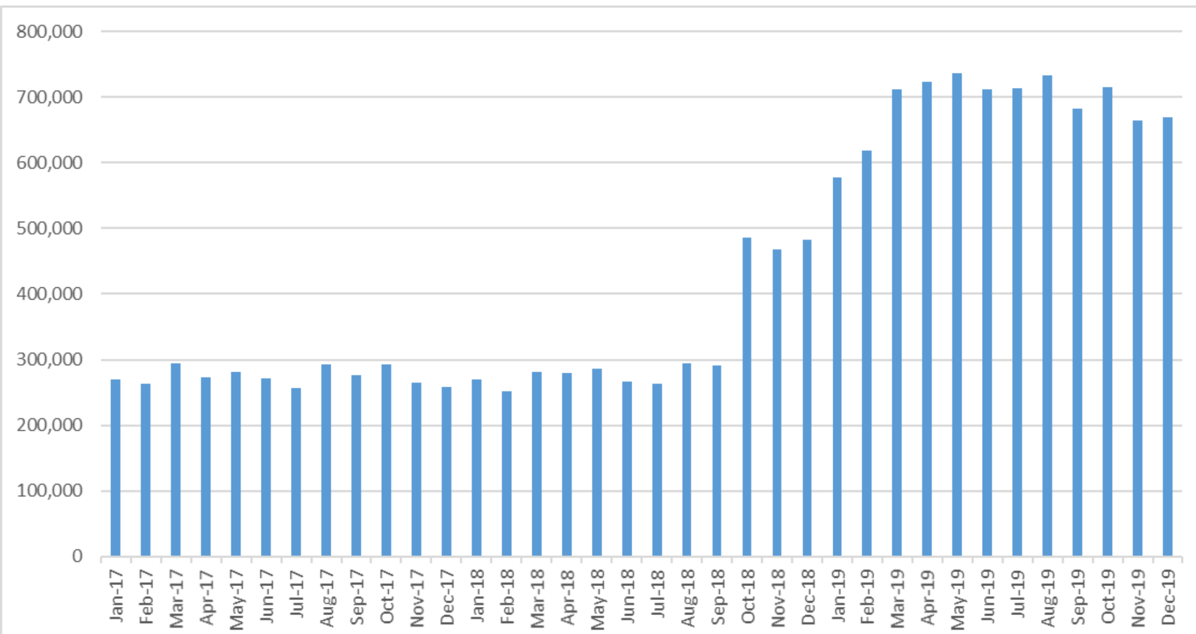
Source: Parkways

2.3.5 Transactions under the Single Fee Discount Program

Prior to the introduction of the new single fee discount program in September 2018, Parkways had a commuter discount program for high frequency users of the Turnpike that had been in place since 2000. The program was restricted to passenger cars or trucks with a gross vehicle weight of less than 8,000 pounds that are not being used for commercial or business purposes. This discount program entitled customers to unlimited travel through each plaza for which they purchase a discount program. Rates varied by plaza and duration. For each mainline plaza, the annual fee was $95. This program was eliminated when the new single fee discount program started.

Figure 2-10 contains a graph with the number of monthly transactions under these discount programs, since January 2017 under the old and new discount programs. Until September 2018, the number of monthly flat fee transactions was about 300,000. With the introduction of the new single fee discount program, the number of no-revenue transactions progressively more than doubled, increasing to about 700,000 per month in March 2019. Between March and December 2019, the number of single fee transactions remained relatively stable around 700,000 per month. There is no toll revenue from these transactions.

Figure 2-10 Monthly Transactions Under Discount Program (January 2017 - December 2019)



Source: Parkways (TransCore database, CDM Smith extracted WV E-ZPass transactions with no expected revenue)

2.3.6 Resulting Trends in Class 1 Transactions

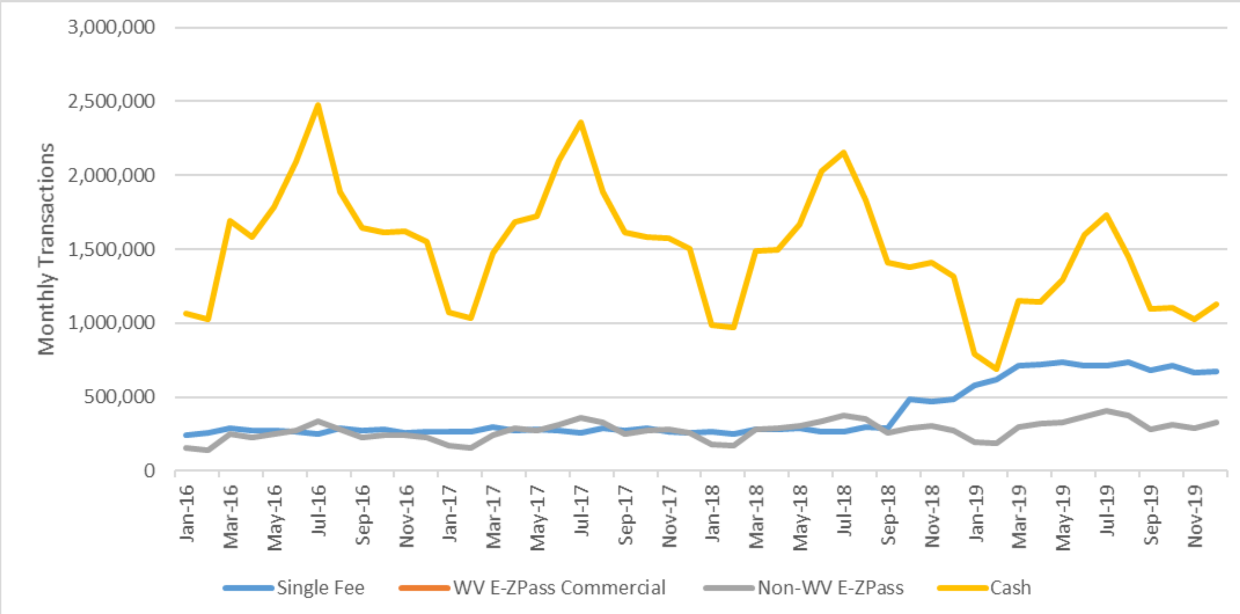
Figure 2-11 contains a graph of the number of Class 1 transactions by month prior to and after the introduction of the recent toll policy changes.

In October 2018, following the start of the early enrollment offer for the single fee discount program, the number of single fee transactions increased, as described in the previous section.

Class 1 cash transactions decreased in 2019 compared to prior years due to the toll rate increase (toll rates doubled in January 2019). The reduction in Class 1 cash transactions in 2019 compared to 2018 was 22 percent.

The primary change was a transfer of transactions by cash customers to the single fee discount program and some increase in transactions by customers paying with a Non-WV E-ZPass. The seasonal variation of transactions by customers paying with cash and Non-WV E-ZPass is evident, before and after the introduction of the toll policy changes.

Figure 2-11 Class 1 Monthly Transactions by Payment Type (January 2016 - December 2019)



Source: Parkways (TransCore database, CDM Smith analysis)

2.4 Frequency of Use

Frequency of use is an important factor to consider when studying the effects of the changes in toll policy, particularly the introduction of the new single fee discount program. The frequency of use is defined as the number of transactions each customer made at a given plaza during a year.

To estimate the existing frequency of use, CDM Smith had access to two different sources of data: a detailed record of E-ZPass transactions covering 2016 through 2019; and a dataset provided by StreetLight Data, Inc. to understand the frequency of trips by mobile devices for the period July 2016 through June 2017.The following sections provide a summary of findings for these two data sources.

2.4.1 E-ZPass Customers

The E-ZPass transaction data provided by TransCore was analyzed by CDM Smith to develop a frequency of use profile for E-ZPass customers (transponders) from 2016 to 2019. The frequency of use was derived by vehicle class (PC and CV), and E-ZPass agency (WV and Non-WV) for each toll plaza. Frequency of use data is shown for each of these groups in the following section in two ways:

- First, as the percentage of customers that fall into annual usage bins (1-10 transactions per year, 11-20 transactions per year, etc.), and
- Second, as the percentage of transactions attributable to customers in each of those annual usage bins.

As will become apparent in subsequent text, a high proportion of customers are infrequent users, but these customers make up a relatively small proportion of the transactions. Conversely, a small proportion of customers are frequent users and these customers are responsible for a high proportion of the transactions. While the details vary, this behavior is present in both vehicle classes (PC and CV) and in all payment methods (WV E-ZPass and Non-WV E-ZPass).

2.4.1.1 WV E-ZPass Passenger Car Frequency Distribution

Figure 2-12A shows the distribution of WV E-ZPass customers for classes 1-4 (passenger cars) by annual usage at each of the four toll plazas on the Turnpike. The lines shown in each chart represent the cumulative percentage of customers across the annual usage bins moving left to right. **Figure 2-12B** shows the percentage of transactions attributable to customers in each of the annual usage bins.

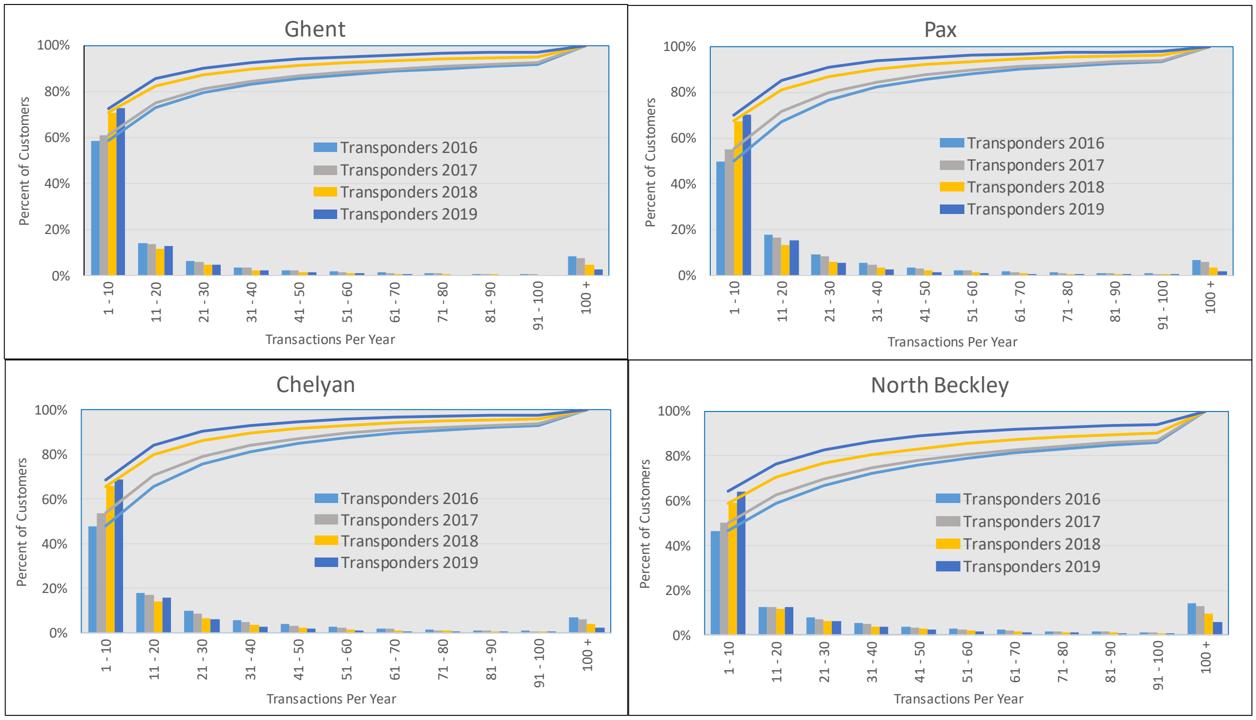
The majority of WV E-ZPass passenger car customers travel on the Turnpike infrequently, and the proportion of infrequent users increased from 2016 to 2019. The proportion of WV E-ZPass passenger car travelers with fewer than 50 transactions per year at any plaza increased from 86 to 94 percent at Ghent, from 86 to 95 percent at Pax, from 85 to 95 percent at Chelyan, and from 76 to 89 percent at North Beckley. North Beckley continues to have a relatively higher proportion of frequent users in that category.

Infrequent users were already growing as a percentage of passenger car customers who paid with a WV E-ZPass from 2016 to 2017, prior to the most recent toll policy changes. With the implementation of the single fee discount program in September 2018, this trend accelerated. Many of the more frequent users had already been taking advantage of the existing discount program in 2017. The new discount program drew more heavily from infrequent users that were not already in the older discount program. This trend led to a higher share of infrequent users.

The average number of transactions per passenger car customer that were paid with a WV E-ZPass decreased significantly between 2016 and 2019. The average number of transactions per customer decreased from 34 to 16 at the Ghent and Chelyan plazas, from 32 to 15 at Pax, and from 52 to 25 at North Beckley.

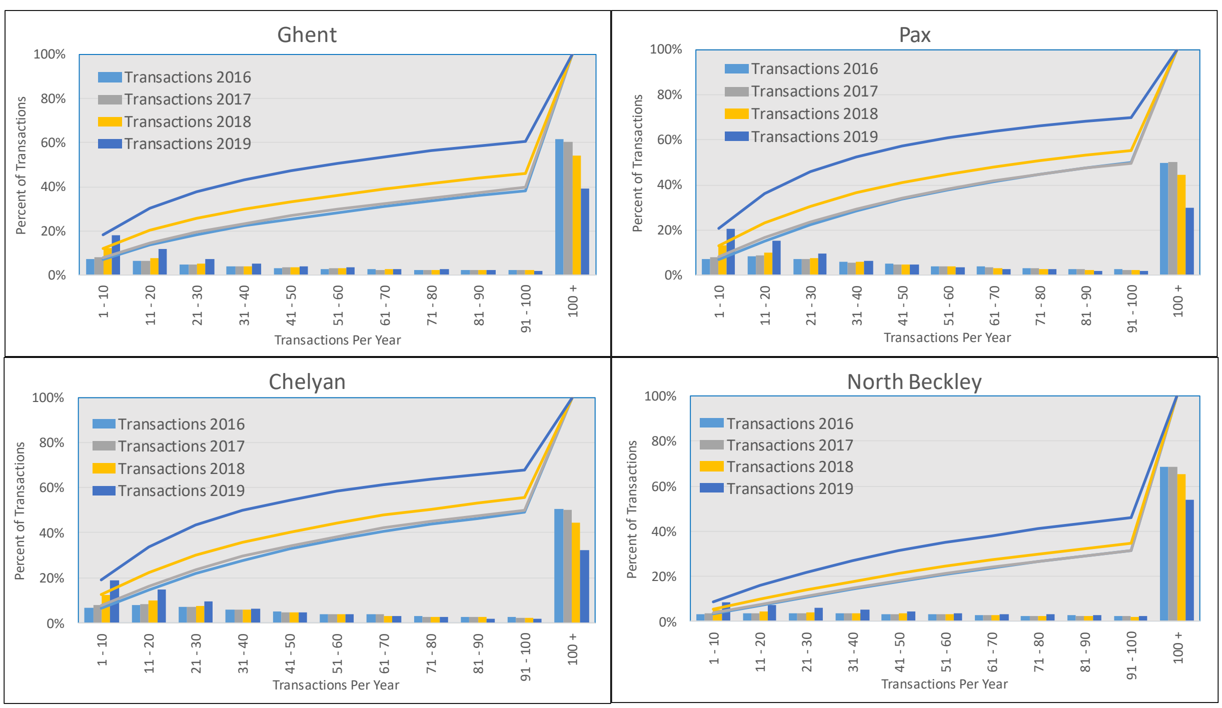
A larger portion of the transactions in this category are still made by frequent users (more than 100 transactions per year); however, the share of transactions made by these very frequent users decreased significantly over the past four years: from 62 to 39 percent at Ghent, from 50 to 30 percent at Pax, from 51 to 32 percent at Chelyan, and from 68 to 54 percent at North Beckley. A larger portion of the transactions are made by the small portion of the customers who are frequent users.

Figure 2-12A Distribution of Customers by Annual Usage – WV E-ZPass Classes 1-4



Source: Parkways (TransCore database) and CDM Smith analysis

Figure 2-12B Distribution of Annual Transactions by Customer Usage – WV E-ZPass Classes 1-4



Source: Parkways (TransCore database) and CDM Smith analysis

2.4.1.2 Non-WV E-ZPass Passenger Car Frequency Distribution

Figure 2-13A shows the distribution of non-WV E-ZPass customers for classes 1-4 by annual usage (as bars) at each of the four toll plazas on the Turnpike. The lines shown in each chart show the cumulative percentage of customers across the annual usage bins moving left to right. **Figure 2-13B** shows the percentage of transactions attributable to customers in each of the annual usage bins.

The frequency of use by customers in passenger cars who paid with a Non-WV E-ZPass is much lower than that by WV E-ZPass customers in passenger cars. Among Non-WV E-ZPass customers, the proportion of travelers using the Turnpike less than 10 times a year reached 98 percent at all four plazas in 2016 and 2019.

The average number of transactions per passenger car customer that were paid with a Non-WV E-ZPass did not change much between 2016 and 2019. The average number of transactions per customer varied between 2.4 and 2.7 in 2016 depending on the plaza, and between 2.3 and 2.6 in 2019.

The majority of the transactions in this category are made by infrequent users (1-10 transaction per year), and their proportion increased slightly from 2016 to 2019: from 82 to 84 percent at Ghent, from 81 to 82 percent at Pax and Chelyan plazas, and from 85 to 87 at North Beckley.

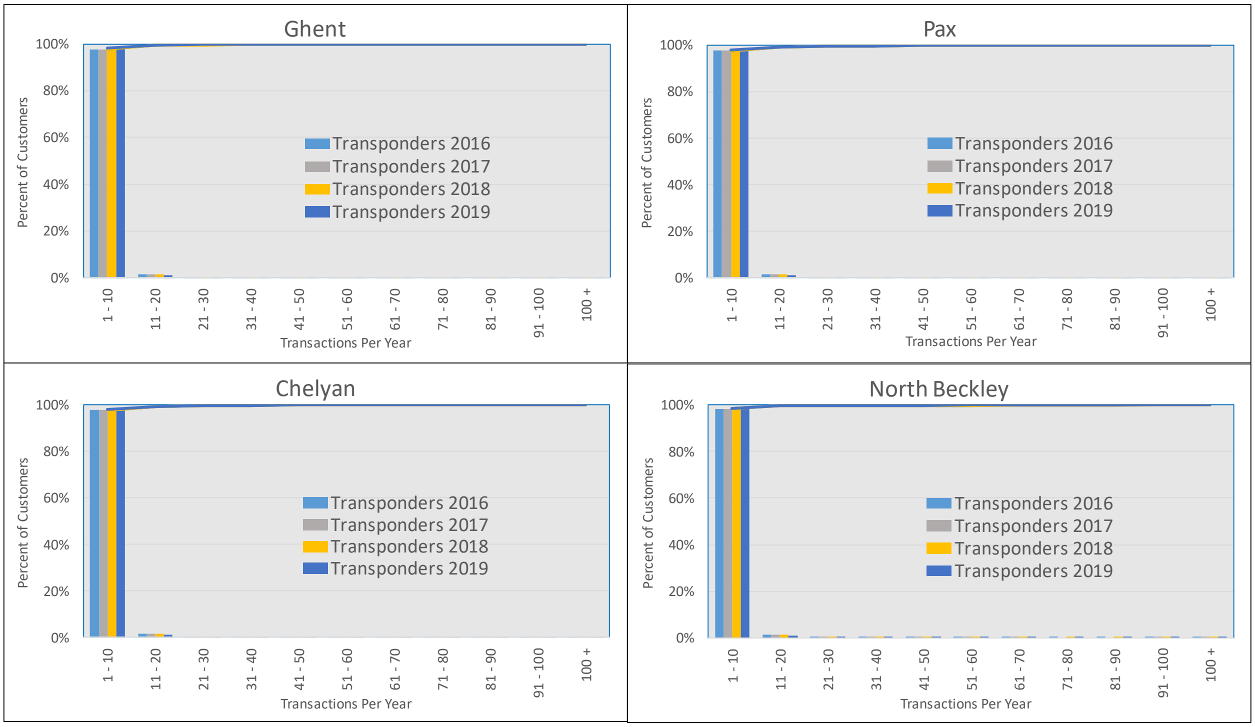
2.4.1.3 WV E-ZPass Commercial Vehicle Frequency Distribution

Figure 2-14A shows the distribution of WV E-ZPass customers for classes 5-10 (commercial vehicles) by annual usage at each of the four toll plazas on the Turnpike. The lines shown in each chart represent the cumulative percentage of customers across the annual usage bins moving left to right. **Figure 2-14B** shows the percentage of transactions attributable to customers in each of the annual usage bins. The majority of commercial vehicle customers that paid with WV E-ZPass also travel on the Turnpike infrequently, and the proportion of infrequent users increased from 2016 to 2019. The proportion of WV E-ZPass commercial vehicle travelers using the Turnpike less than 50 times a year increased from 80 to 85 percent at Ghent, from 81 to 86 percent at Pax, from 82 to 87 percent at Chelyan, and from 90 to 93 percent at North Beckley. North Beckley continues to have a lower proportion of frequent users among commercial vehicles.

The average number of transactions per commercial vehicle customers that were paid with a WV E-ZPass decreased between 2016 and 2019. The average number of transactions per customer decreased from 38 to 31 at Ghent, from 39 to 29 at Pax, from 34 to 27 at Chelyan, and from 20 to 14 at North Beckley.

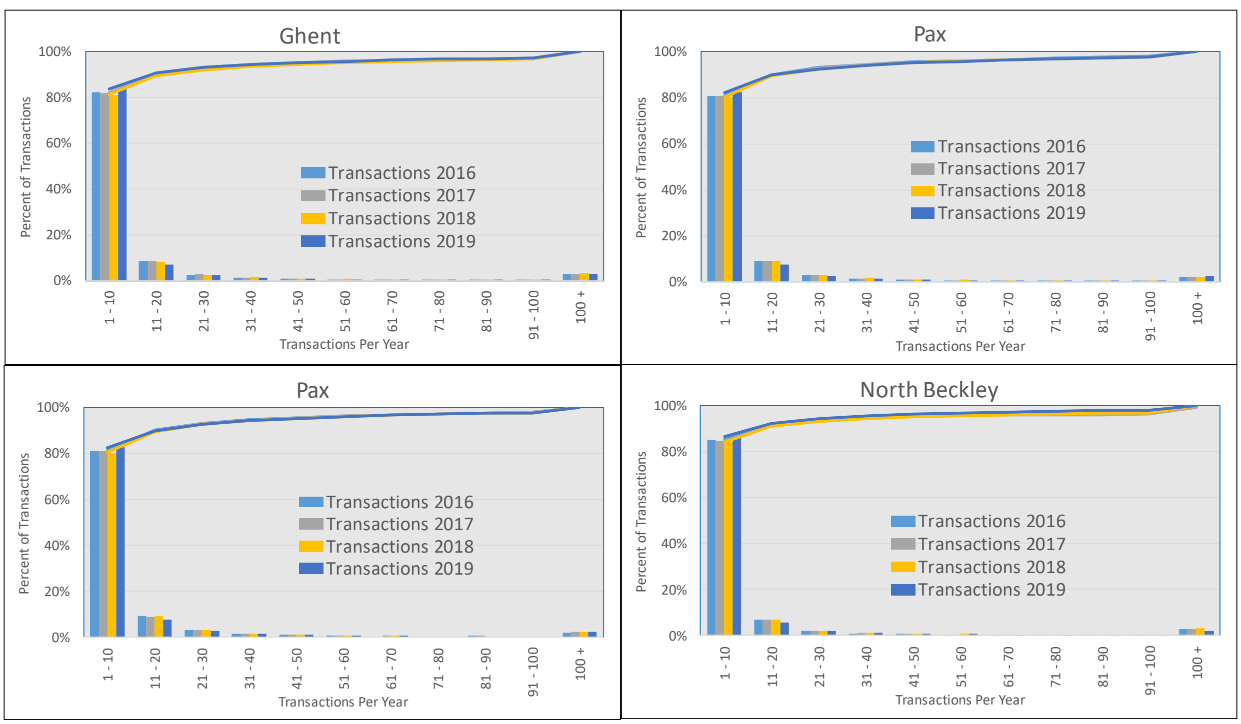
A larger proportion of the transactions by customers in classes 5-10 using WV E-ZPass are made by frequent users (more than 100 transactions per year); however, the share of transactions made by frequent users decreased over the past four years: from 56 to 54 percent at Ghent, from 56 to 49 percent at Pax, from 50 to 46 percent at Chelyan, and from 44 to 33 percent at North Beckley.

Figure 2-13A Distribution of Customers by Annual Usage – Non-WV E-ZPass Classes 1-4



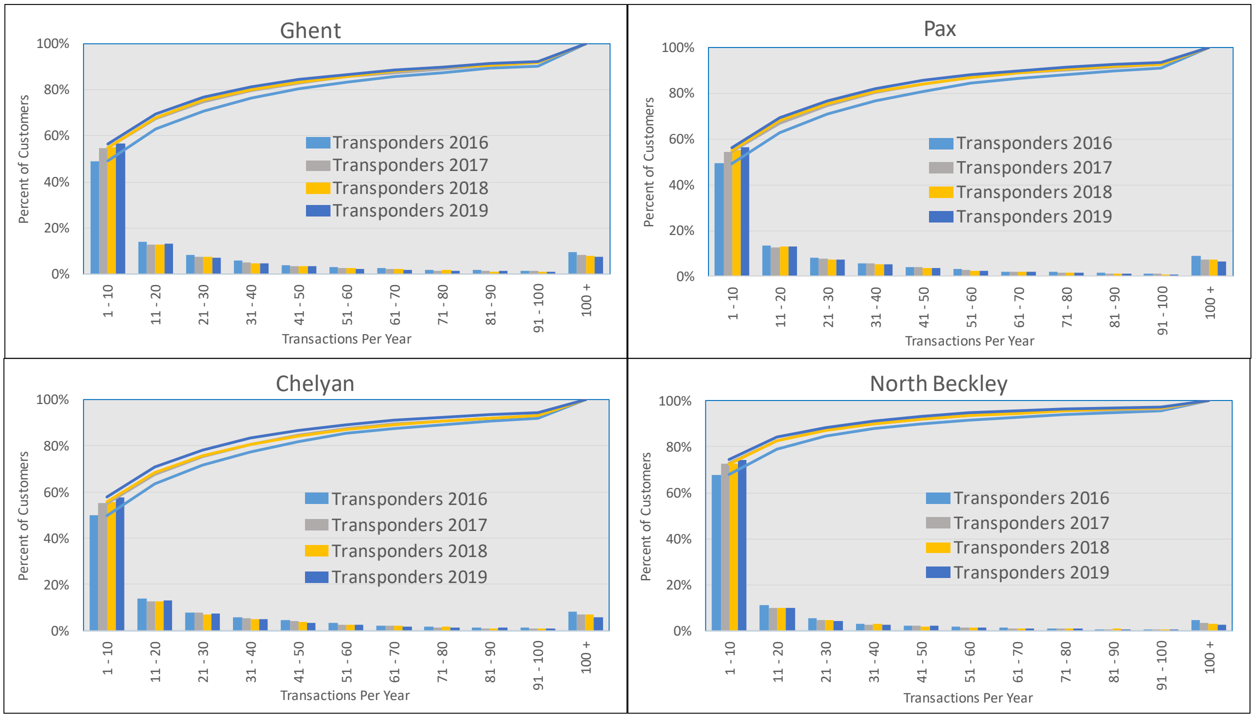
Source: Parkways (TransCore database) and CDM Smith analysis

Figure 2-13B Distribution of Annual Transactions by Customer Usage – Non-WV E-ZPass Classes 1-4



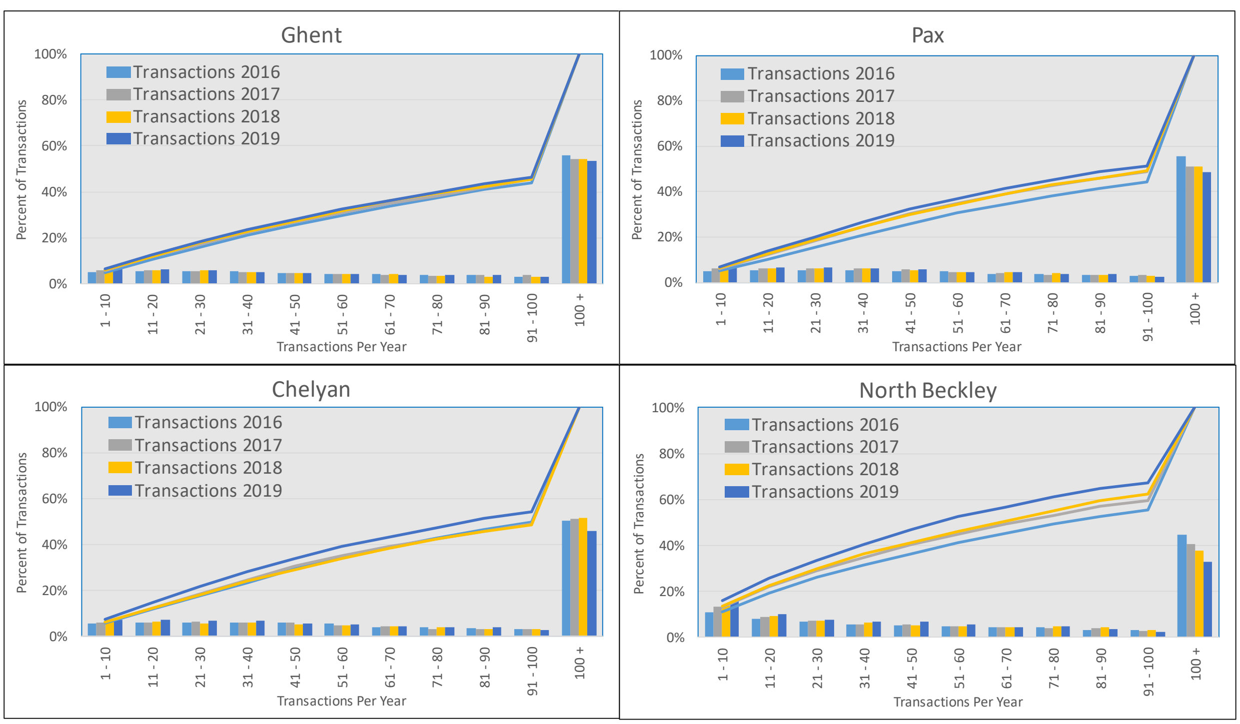
Source: Parkways (TransCore database) and CDM Smith analysis Non-WV E-ZPass Commercial Vehicle Frequency Distribution

Figure 2-14A Distribution of Customers by Annual Usage – WV E-ZPass Classes 5-10



Source: Parkways (TransCore database) and CDM Smith analysis

Figure 2-14B Distribution of Annual Transactions by Customer Usage – WV E-ZPass Classes 5-10



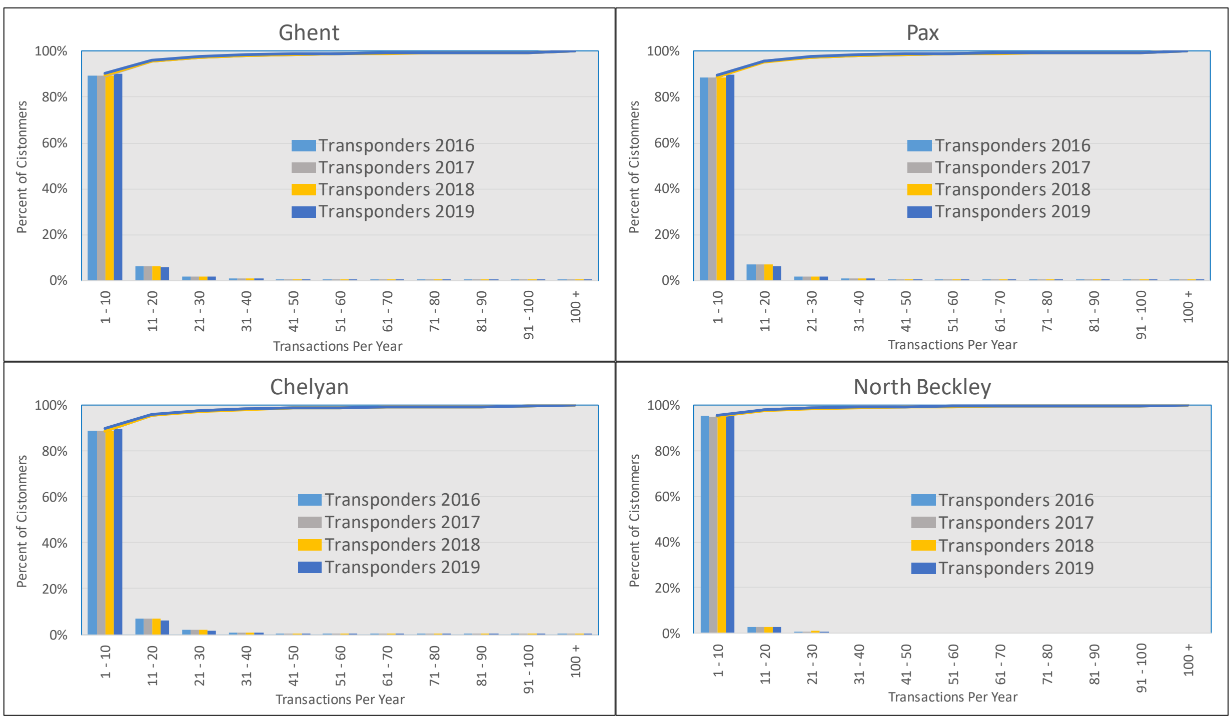
Source: Parkways (TransCore database) and CDM Smith analysis

Figure 2-15A shows the distribution of Non-WV E-ZPass customers for classes 5-10 by annual usage (as bars) at each of the four toll plazas on the Turnpike. The lines shown in each chart show the cumulative percentage of customers across the annual usage bins moving left to right. **Figure 2-15B** shows the percentage of transactions attributable to customers in each of the annual usage bins. The frequency of use at each plaza is even lower among Non-WV E-ZPass customers with commercial vehicles, compared to WV E-ZPass commercial vehicles. Among Non-WV E-ZPass commercial vehicle customers, the proportion using the Turnpike less than 10 times a year reaches about 90 percent at the mainline plazas and 95 percent at North Beckley, with not much change between 2016 and 2019.

The average number of transactions per commercial vehicle customer that paid with Non-WV E-ZPass did not change much between 2016 and 2019. The average number of transactions per customer varied between 3.4 (North Beckley) and 6.3 in 2016, and between 3.3 (North Beckley) and 5.9 in 2019.

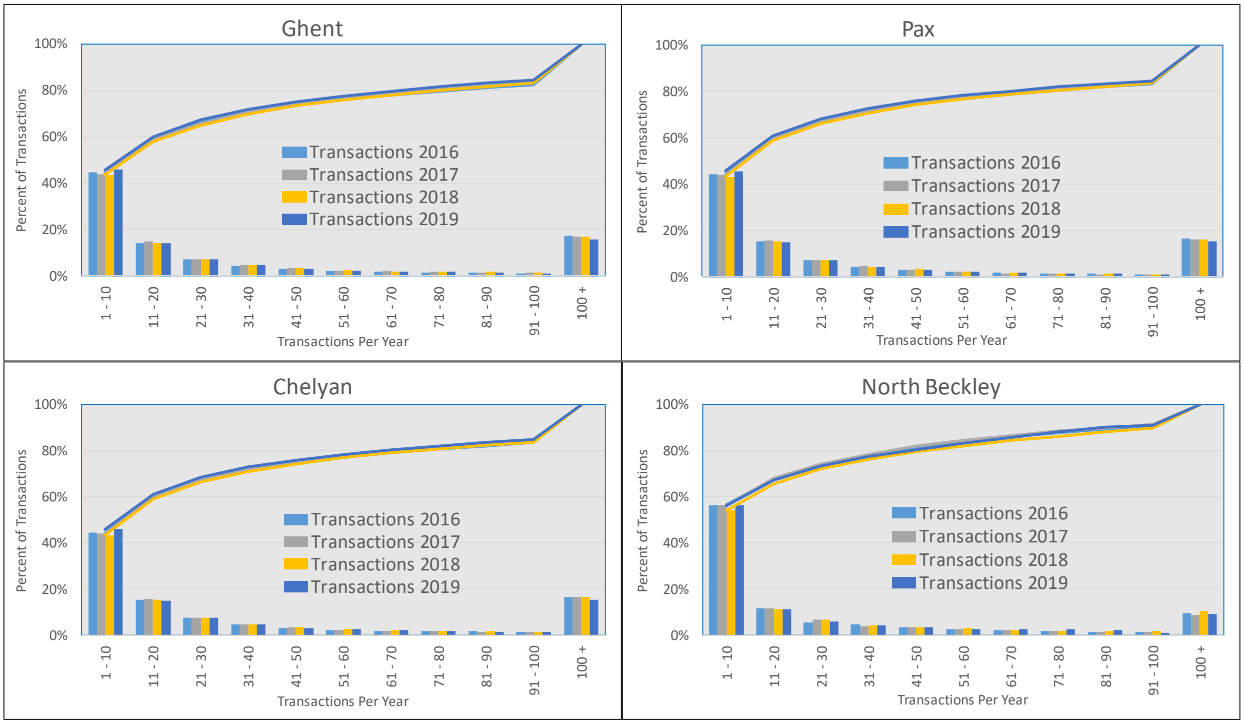
The majority of the transactions in this category are made by infrequent users (1 trip per year), and their proportion increased slightly from 2016 to 2019. The share of transactions made by infrequent users (1 trip per year) increased from 45 to 46 percent at Ghent, from 44 to 46 percent at Pax and Chelyan plazas, and remained at 56 percent at North Beckley.

Figure 2-15A Distribution of Customers by Annual Usage – Non-WV E-ZPass Classes 5-10



Source: Parkways (TransCore database) and CDM Smith analysis

Figure 2-15B Distribution of Annual Transactions by Customer Usage – WV E-ZPass Classes 5-10



Source: Parkways (TransCore database) and CDM Smith analysis

2.4.2 StreetLight Data

As part of the 2018 T&R Study, CDM Smith obtained Turnpike traveler frequency data from StreetLight Data, Inc. The data is developed from all available carriers and a variety of sources (GPC, WIFI proximity, GPS, Bluetooth proximity, and cellular triangulation). LBS data are derived from smart phones with applications that use Location-Based Services, such as weather, retail shopping, or navigation applications, all of which provide services to their users that are fundamentally linked to those users' locations. While cellular data was considered for general traveler frequency data, the main advantages of LBS data are:

- Spatial precision: On average, StreetLight's LBS data has 25-meter spatial precision or better. In contrast, cellular data tends to have 100-300-meter spatial precision.
- Ping rate: Devices using LBS generally send "pings" when the device changes location. In contrast, cellular tower "pings" are irregular.
- Privacy protection: Device users must proactively opt-in and enable LBS before they can use them. In contrast, cellular providers do not require proactive opt-in.

The data from StreetLight is considered to be a representative sample of the customers passing through each of the four tolling plaza locations from July 2016 to June 2017. Toll plaza geographic capture zones were established to filter the data to the Turnpike roadway immediately before and after each toll plaza and excluding nearby local roadways and over/under passes. **Figure 2-16** through **2-19** illustrate the zones.

Figure 2-16 Ghent Toll Plaza A StreetLight Data Zone

Figure 2-17 Pax Toll Plaza B StreetLight Data Zone

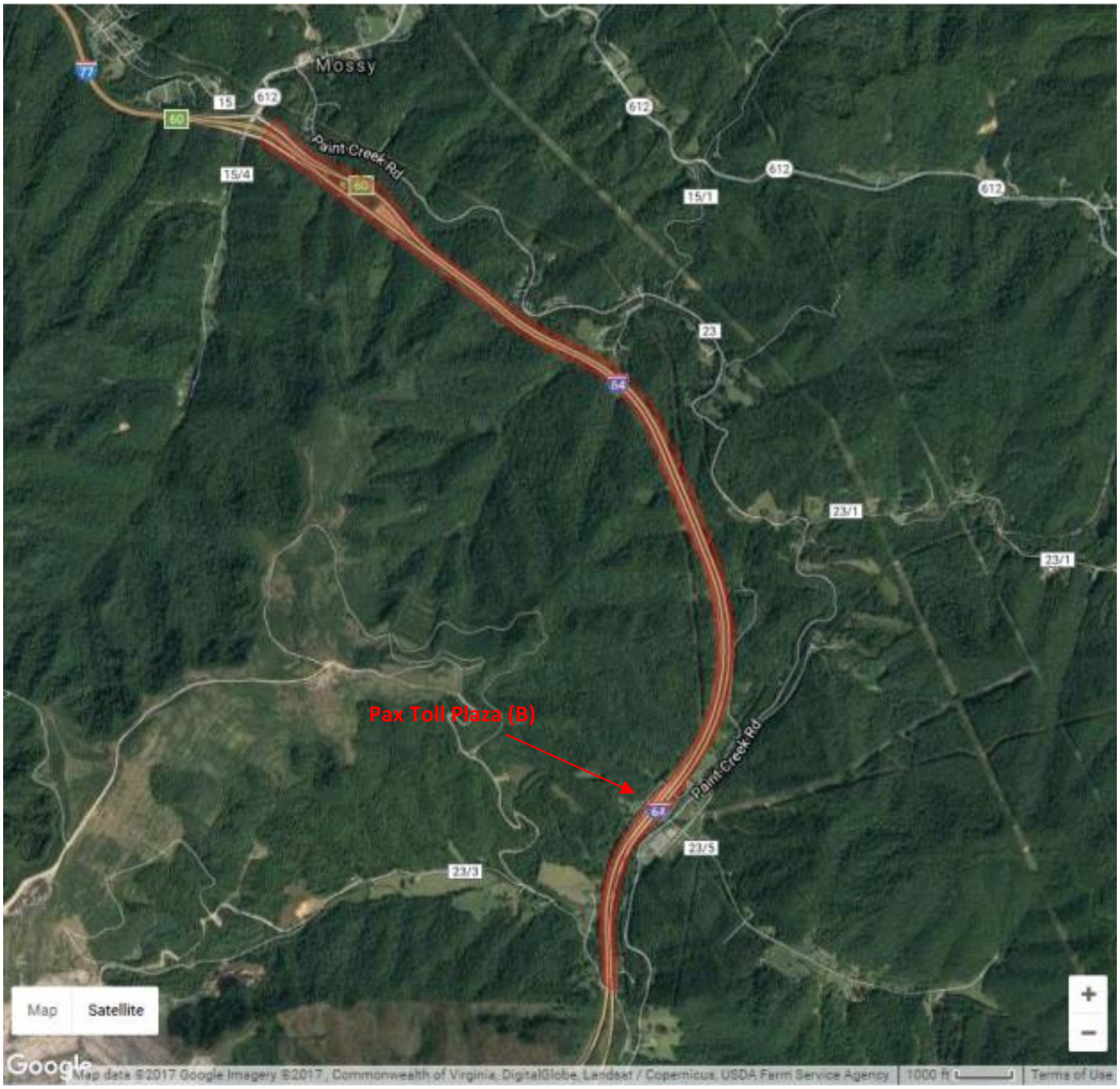


Figure 2-18 Chelyan Toll Plaza C StreetLight Data Zone

Figure 2-19 North Beckley Toll Plaza StreetLight Data Zone

The data review established the number of times the device was observed at each toll plaza zone over the year, presented as the number of occurrences per year. The data describes the frequency of use by all types of Turnpike customers within the dataset. Unfortunately, it was not possible to separate customer payment method, vehicle classification, or state of residence. However, data was only obtained from personal devices and thus does not include commercial services and commercial fleet information.

The data was filtered to retain only the most reliable device makes. Some makes of smartphones are less reliable for a variety of reasons: less frequent locations when an application is in the background, interpolated locations, incorrect geolocations, and miscellaneous other effects. Devices were also screened to those that are seen throughout the 12 months of observations, i.e., showing at least one ping somewhere on the country-wide system 300 days per year.

Each plaza was studied separately. **Table 2-7** shows how many devices were captured at each plaza as well as the number of trips. Note, due to the configuration of the nearby interchanges, the North Beckley zone was smaller (2.4 km) in length compared to the other study area zones (4.7 km or longer) which, in addition to the plaza having lower traffic volumes, likely resulted in a smaller sample size. Due to its shorter study area and proximity to other activity generators, North Beckley is expected to have less reliable results than the other three toll plazas.

Table 2-7 Sample Size from StreetLight

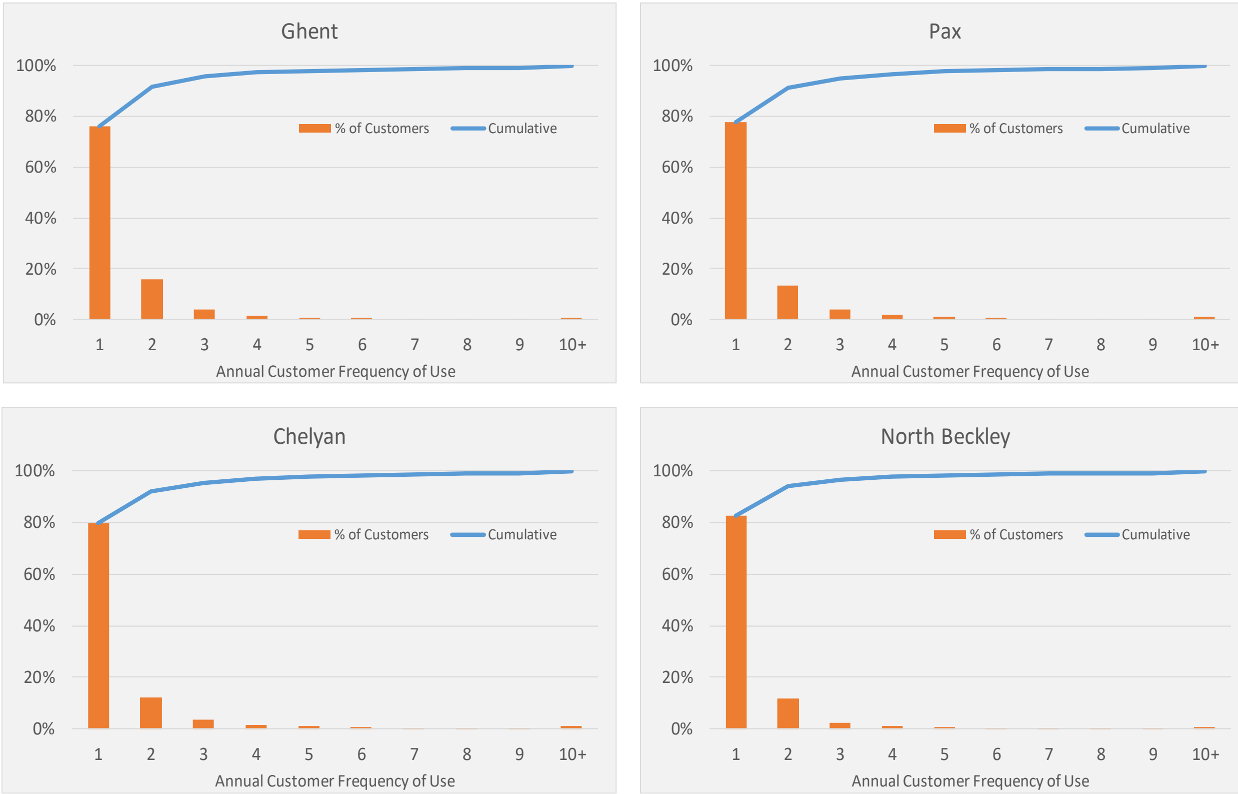
Plaza	Number of Devices	Number of Trips
Plaza A – Ghent	13,589	21,462
Plaza B – Pax	5,617	8,680
Plaza C – Chelyan	5,218	7,740
North Beckley	1,810	2,553
Total	**26,234**	**40,435**

Source: StreetLight Data

Figure 2-20 displays the frequency distribution profiles derived from the StreetLight dataset. It was found that most travelers were very infrequent users, with nearly 80% of customers making only one trip per year. About 96% of travelers make less than 4 trips per year. The frequency distribution was found to be very similar at all toll plazas.

Also note, as a secondary check, the data used for the sample was expanded to include less reliable devices which increased the sample size to over 200,000 observations for each mainline plaza and over 62,000 for North Beckley. The frequency of use was very similar to the dataset constrained to the highly reliable devices.

Figure 2-20 Frequency of Use from StreetLight Sample



Source: StreetLight Data and CDM Smith analysis

2.5 Summary of Findings

Travel on the Turnpike has been steady for several decades. The roadway serves as an important conduit for local residents as well as an important direct interstate connection between the Midwest and the southeastern United States.

As anticipated, the recent toll policy changes have significantly affected revenue trends. However, toll transactions remained fairly stable. The review of the recent performance data highlighted the following key findings:

- Overall transactions were down by 1.7 percent in 2018 and down by 0.8 percent in 2019.
- The share of transactions by plaza has remained stable since 2016.
- The share of transactions by vehicle class did not change much in 2018 and 2019 compared to what it was in 2017.
- Passenger car transactions declined slightly in 2019 mostly due to a reduction in Class 2 transactions.
- Class 1 transactions were almost the same in 2019 compared to 2018, although a shift in payment method resulted in the ETC share of Class 1 transactions increasing from 34 to 48 percent.
- Commercial vehicle transactions increased by 0.6 percent in 2019 despite the toll rate increase.

- The introduction of the new single fee discount program and toll rate changes led to a significant modification in the payment share breakout that started to be observed in 2018 and continued in 2019.
- Cash payment represented 60 percent of the transactions in 2017 and was down to 45 percent in 2019.
- Overall toll revenue was down by 2.1 percent in 2018. In 2019, systemwide toll revenue increased by 78 percent at $154.8 million as a result of the toll rate increase.
- The proportion of toll revenue from commercial vehicles has increased from 50 percent in 2017 to 57 percent in 2019.
- In 2019, Non-WV E-ZPass revenue became the highest share of toll revenue at 49 percent of total toll revenue from all vehicles. Cash payment accounted for 42 percent of toll revenue in 2019, down from 53 percent in 2017.
- A total of 64,200 WV E-ZPass accounts were automatically converted to the single fee discount program when it started at the end of September 2018. About 65,700 additional customers joined the new program under the early enrollment offer that ran through mid-January 2019. And about 11,500 have joined at the $25 annual fee between January and October 2019.
- The majority of WV E-ZPass passenger car customers travel on the Turnpike infrequently, and the proportion of infrequent users increased from 2016 to 2019, suggesting that customers that joined the new single fee discount program are less frequent users. The level of frequency is even lower among passenger car customers using a Non-WV E-ZPass.

Ongoing construction activities near Beckley may have negatively impacted traffic and revenue at the North Beckley ramp plaza starting in July 2019. According to Parkways staff, there has not been any other major events affecting recent transactions and revenue, besides the toll policy changes discussed in this report.

Chapter 3
Model Updates

As part of the 2018 T&R Study, CDM Smith developed a series of mathematical models which in combination produced forecasts of future T&R. These models include the following:

- Econometric models producing baseline estimates of transactions (passenger cars and commercial vehicles) at each toll location
- Models from analysis of trends in vehicle class and payment type by toll location
- Payment choice models for six market segments of customers in passenger cars (combinations of original payment method and frequency of use) estimating the change in payment method given the planned changes in toll amount and costs/characteristics of the single fee discount program
- Toll suppression models for Toll Class 1 and Toll Classes 2 through 10

In general, for this work, CDM Smith continued to apply the model structure developed in the 2018 T&R Study. However, some model adjustments were required based on T&R performance observed after almost a year of operations under the new toll policy.

This chapter begins with a summary of the main findings from the comparison of forecasted versus actual T&R. Then there is a description of the calibration process that was used to adjust selected model parameters so the model estimates for 2019 better match observed T&R. The calibration was initially performed separately for each model element before the entire model chain could be validated. The validated model better replicates 2019 results and therefore is expected to produce more reliable forecasts of future years. The forecasts in the 2018 T&R Study had to address the significant changes in toll policy, i.e., the doubling of toll rates and the introduction of a substantial discount program. The forecasts in the 2019 T&R Study are based on one year with the revised toll policies. The only significant changes remaining are the end of the three-year early enrollment period and the introduction of the indexed toll rates.

3.1 Prior Forecast vs. Actuals

This section contains a comparison of forecast (using the 2018 T&R Study models) to actual transactions and revenue for 2018 and 2019.

Note that the prior forecast had assumed that the early enrollment option for the single fee discount program would be available from September 1 through December 31, 2018. In fact, it started on September 24, 2018 and ended on January 15, 2019. The toll rate changes and start of the $24 annual single fee discount program did not occur until January 15, 2019 instead of January 1, 2019, the date assumed in the forecast.

Table 3-1 shows the comparison of actual vs. forecasted transactions for 2018 and 2019, broken down by vehicle type and payment type. **Table 3-2** shows the same comparison for revenue.

Table 3-1 Prior Forecast vs. Actuals – Transactions

Transactions	2018 Forecast	2018 Actuals	2018 % Diff	2019 Forecast	2019 Actuals	2019 % Diff
Class 1 Single Fee	7,006,632	3,918,076	-44.1%	15,820,013	8,258,968	-47.8%
Class 1 Cash	17,163,377	17,926,814	4.4%	7,492,821	14,210,776	89.7%
Class 1 WV E-ZPass Comm	1,823,940	1,783,246	-2.2%	1,005,811	1,114,947	10.9%
Class 1 Non-WV E-ZPass	2,902,153	3,412,437	17.6%	2,493,727	3,689,723	48.0%
Total Class 1	**28,896,102**	**27,040,573**	**-6.4%**	**26,812,372**	**27,274,414**	**1.7%**
Class 2-4 Cash	842,337	792,240	-5.9%	682,132	710,739	4.2%
Class 2-4 WV E-ZPass	44,522	49,842	11.9%	35,604	46,617	30.9%
Class 2-4 Non-WV E-ZPass	60,189	73,889	22.8%	51,449	77,850	51.3%
Total Class 2-4	**947,048**	**915,971**	-3.3%	**769,185**	**835,206**	8.6%
Total PC (Class 1-4)	**29,843,150**	**27,956,544**	**-6.3%**	**27,581,557**	**28,109,620**	**1.9%**
Class 5-10 Cash	1,889,288	1,755,979	-7.1%	1,481,521	1,624,973	9.7%
Class 5-10 WV E-ZPass	1,232,798	1,261,091	2.3%	992,502	1,254,674	26.4%
Class 5-10 Non-WV E-ZPass	5,139,119	5,347,902	4.1%	4,277,586	5,773,125	35.0%
Total CV (Class 5-10)	**8,261,205**	**8,364,972**	**1.3%**	**6,751,609**	**8,652,772**	**28.2%**
Total Tolled Trans	**31,097,723**	**32,403,440**	**4.2%**	**18,513,153**	**28,503,424**	**54.0%**
Total Trans w/Single Fee	**38,104,355**	**36,321,516**	**-4.7%**	**34,333,166**	**36,762,392**	**7.1%**

Source: Parkways (TransCore database) and CDM Smith Analysis

Table 3-2 Prior Forecast vs. Actuals – Revenue

Revenue	2018 Forecast	2018 Actuals	2018 % Diff	2019 Forecast	2019 Actuals	2019 % Diff
Class 1 Single Fee	$19,904,901	$3,080,906	-84.5%	$1,420,625	$1,083,711	-23.7%
Class 1 Cash	$30,173,449	$31,441,369	4.2%	$24,517,182	$48,042,657	96.0%
Class 1 WV E-ZPass Comm	$2,018,756	$2,265,123	12.2%	$1,998,987	$2,183,612	9.2%
Class 1 Non-WV E-ZPass	$5,078,915	$6,045,451	19.0%	$8,233,952	$12,876,080	56.4%
Total Class 1	**$57,176,021**	**$42,832,849**	**-25.1%**	**$36,170,746**	**$64,186,060**	**77.5%**
Class 2-4 Cash	$2,018,916	$1,879,429	-6.9%	$3,272,118	$3,270,818	0.0%
Class 2-4 WV E-ZPass	$64,662	$68,191	5.5%	$102,694	$123,687	20.4%
Class 2-4 Non-WV E-ZPass	$129,065	$165,639	28.3%	$220,235	$344,172	56.3%
Total Class 2-4	**$2,212,643**	**$2,113,259**	-4.5%	**$3,595,047**	**$3,738,677**	4.0%
Total PC (Class 1-4)	**$59,388,664**	**$44,946,108**	**-24.3%**	**$39,765,792**	**$67,924,737**	**70.8%**
Class 5-10 Cash	$11,160,217	$9,800,828	-12.2%	$17,476,141	$13,853,508	-20.7%
Class 5-10 WV E-ZPass	$5,600,148	$5,607,323	0.1%	$9,026,449	$10,917,160	20.9%
Class 5-10 Non-WV E-ZPass	$28,567,662	$29,653,139	3.8%	$47,554,146	$62,869,245	32.2%
Total CV (Class 5-10)	**$45,328,028**	**$45,061,291**	**-0.6%**	**$74,056,736**	**$87,639,912**	**18.3%**
Total Toll Revenue	**$84,811,791**	**$86,926,493**	**2.5%**	**$112,401,903**	**$154,480,938**	**37.4%**
Total Revenue w/Single Fee	**$104,716,692**	**$90,007,399**	**-14.0%**	**$113,822,528**	**$155,564,649**	**36.7%**

Source: Parkways (TransCore database) and CDM Smith Analysis

When comparing the forecasted and actual T&R, the following key findings were identified:

- **Passenger Cars**
  - Even with the incentive of early enrollment, fewer Class 1 customers chose to enter the discount program than were forecasted, resulting in less revenue from the single fee but more toll revenue than anticipated. The early enrollment fee of $8 for three years was less than the toll for a one-way trip.
  - The overall volume of traffic was not reduced, as anticipated in the forecast because of the doubling of tolls for customers not enrolled in the single fee discount program, resulting in more toll revenue than forecasted.
  - There was a shift from cash payment to electronic payment with E-ZPass, taking advantage of the lower toll rates.
- **Commercial Vehicles**
  - The volume of commercial vehicle traffic remained essentially the same even after toll rates doubled, i.e., the forecasted traffic suppression did not occur, and therefore toll revenue was higher than forecasted.
  - There was a shift toward electronic payment among commercial vehicles in response to higher cash toll rates on the Turnpike which resulted in an increase of Non-WV E-ZPass transactions and a decrease in cash transactions in 2019. WV E-ZPass commercial vehicle transactions were nearly unchanged.

Based on these observations, actual toll revenue in 2019 was much higher than forecasted. The models were adjusted to better match actual T&R for 2019 as described in the remainder of this chapter.

Note that 2019 transactions were not available for the entire year at the time these model adjustments were performed. Instead, 2019 actuals had to be estimated based on data provided by Parkways through November 2019. In addition, the forecast was based on a dataset of transactions through October 2019, provided by TransCore, that included details on toll location, vehicle class and payment method distinguishing WV E-ZPass from Non-WV E-ZPass. CDM Smith used this data and information to develop annual T&R estimates for 2019 based on actuals to-date and short-term estimates for the remainder of the year. Estimates for November/December 2019 were derived from monthly trends in 2017 (prior to toll policy changes) and 2019 data through October. Estimated 2019 transactions were 1.5 percent below actuals.

3.2 Updated Econometric Models

The econometric models produce baseline estimates of transactions (passenger cars and commercial vehicles) at each toll location, representative of conditions without the recent toll policy changes. As described in section 2 (modelling process), the baseline transaction forecast produced by the econometric models provides the initial input component of the T&R forecast. For purposes of the study update, the original econometric models developed for the 2018 T&R Study were updated based on the latest data available. The updating process and resulting baseline forecast are described in this section.

3.2.1 Introduction

An econometric analysis was conducted to estimate long-term travel demand for each toll plaza on the Turnpike: Ghent (A), Pax (B), Chelyan (C), and North Beckley (NB). Historical annual passenger car (PC) and commercial vehicle (CV) demand for each plaza was econometrically estimated via regression equations, applying regional socioeconomics as explanatory variables. With estimated regression equation parameters, regional socioeconomic forecasts were applied to coefficients to estimate annual future demand. In total, eight equations were derived for the combinations of four plazas and two vehicle categories. Once the regression baseline was established, consideration was given to other factors which may influence the long-range forecasts.

Such eight econometric equations were originally estimated as part of the 2018 T&R Study, with annual time series data from 1990 through 2016. Those equations were reevaluated, considering the availability of additional annual time series data (2017 and 2018), revisions to historical socioeconomic data, and updated socioeconomic data forecasts from Woods & Poole Economics, Inc. In reevaluating, the equations' statistical parameters changed slightly but the selected explanatory variables remained suitable. Due to the availability of additional data and the historical revisions, some minor adjustments were made, such as readjusting the geographic catchment area[1] for the aggregate socioeconomic variable underpinning some equations.

The econometrically derived aggregate travel demand forecasts for each plaza-vehicle combination were used as the starting point for the tolling model that considered a range of future toll policies and rate structures, including the historic doubling of toll rates and single fee discount program.

3.2.2 Econometric Modeling

Multivariate regression analysis establishes a mathematical equation for a dependent variable (e.g., annual transactions) as a function of other independent variables (e.g., annual socioeconomic data), with associated statistics explaining the equation robustness. Generally, a regression equation is expressed as follows:

$$y_t = \alpha+\beta_1 * x_{(1,t)}+\beta_2 * x_{(2,t)}+\cdots+ \varepsilon$$

Where:

- y_t is the dependent variable in timeframe t
- $x_{(1,t)}$ and $x_{(2,t)}$ etc. are the independent variables in timeframe t
- α is the intercept coefficient
- β_1 and β_2 etc. are the slope coefficients for the respective independent variables
- ε is the residual error

In each regression equation, an analysis of variation (ANOVA) table was created that explained the statistical parameters, such as adjusted R^2 (coefficient of determination) and t-statistics for each

[1] Catchment areas aggregate a regionalize socioeconomic variable as related to travel demand; however, it does not imply that travel demand is only from those geographies, but rather that the catchment is a logical, statistically valid representation for the aggregate demand

independent variable, which indicate overall equation and independent variable robustness, respectively. ANOVA results determined the statistical defensibility of the equation.

A regression equation can be leveraged for forecasting the dependent variable if ANOVA metrics are statistically significant, the equation's relationships are conceptually valid, and forecasts of independent variables are credibly available.

3.2.2.1 Regression Testing and Data

Individual highway travel occurs for myriad reasons, such as recreation, commuting, and trade. Travel is influenced by factors such as fuel prices, other travel costs, weather, trip urgency, and economics. Aggregated highway travel typically trends closely with regional socioeconomic variables over the longer-term. As such, conceptually relevant socioeconomic data were hypothesized, compiled, and regression-tested for explaining annual travel demand on the Turnpike. These variables included population, employment, and real gross regional product, compiled at various geographic levels. Additionally, the effective average annual toll rates were calculated and tested in combination with the socioeconomics.

Multiple regression equations were tested and evaluated for each plaza-vehicle class to account for the numerous possible combinations of relevant geographies (county and/or state clusters) for each socioeconomic variable, and inclusion/exclusion of effective toll rates. A final equation was selected based on multiple criteria, including but not limited to the overall equation robustness (adjusted R^2), the independent variable robustness (t-statistics and p-values), the logic and reasonableness of equation coefficients (algebraic sign), the logic and reasonableness of geographic catchment area, and the credibility of the independent variable(s) and source(s). In reevaluating the original equations, consideration was made to continuity of equations structures, selected variables, etc. as well.

Data compiled for regression testing included:

- Parkways – historical transactions and revenues
- United States Census Bureau – historical population
- United States Bureau of Economic Analysis (BEA) – historical employment
- Woods & Poole Economics, Inc. (W&P) – historical and forecast population, employment, and real gross regional product (GRP)

Since the previous analysis, the Census, BEA, and W&P have all revised historical socioeconomic data, and in instances redefined the variable. Census Bureau revises intercensal population estimates (e.g., 2011-2019) annually, albeit typically not too significantly. BEA annually revises historical data, typically the preceding few years. However, about every five years, the BEA revises the real-dollar denomination of monetized variables, resulting in both a definitional change and more significant and further-back historical revisions to the socioeconomic data than the annual updates. Since 2017, the BEA instituted such a larger-scale change and converted real monetized terms from 2009$ to 2012$. Such changes to BEA data cascade through W&P's revisions and updated forecasts, as the BEA data are the basis of W&P's socioeconomic database. Socioeconomic data revisions changed the coefficients of the equations and their statistical properties (even without extending the annual time series through 2018), resulting in some adjustments to the underlying assumptions of some equations.

3.2.2.2 Regression Caveats

Econometrically derived, long-term demand forecasts served as the basis for further modeling of annual transactions. The regression growth forecasts do not explicitly consider route choice assumptions, the existing roadway network and planned improvements, existing and anticipated roadway capacities, origin-destination pairing, peak and directional factors, traffic diversions, or future toll pricing changes, including the major structural changes in late 2018 and early 2019. The price changes are handled elsewhere in the combined model structure.

As this regression analysis attempts to estimate aggregate travel demand, the equations cannot account for all potentially influencing factors, especially any small-scale, qualitative/difficult-to-quantify, and/or irregularly occurring factors. Also, a regression analysis is incapable of forecasting unprecedented factors (positive or negative influence) such as catastrophic climate change, health epidemics, terrorism, natural disasters, or any other significantly destabilizing factors. Additionally, short-term factors that are not well-reflected in the explanatory variables result in residual errors. Forecasts are estimates, limited by the availability and robustness of input data, both historical and projected. Data unavailability, discrepancies, aberrations, and inaccuracies can hinder the robustness and results of econometric forecasting.

3.2.2.3 Regression Equations and Forecasting

A final regression equation was estimated for each plaza-vehicle class combination, relating historical annual demand (plaza transactions) with a regional socioeconomic variable, and in some instances, average effective toll rates, over a 29-year horizon (1990 to 2018, inclusively). **Table 3-3** identifies the general regression characteristics, including the explanatory socioeconomic variable and corresponding geographic scale of the socioeconomic catchment area, as well as whether the average effective toll rates are included in the equation, and the adjusted R^2 statistics.

Geographic combinations of counties are the most logical and statistically valid catchment areas for PC transactions for all four plazas. While the combinations of each catchment area vary slightly between the plazas, the areas of statistical influence include counties between the city of Charleston and the Monongahela, Washington, and Jefferson National Forests along the Appalachian Mountains (southeastern West Virginia and northwest Virginia).

CV transactions at the mainline plazas are related to the socioeconomics with a cluster of states, which include West Virginia, Virginia, Ohio, and Kentucky. The geographic catchment for North Beckley (NB) is more-closely related to a county cluster like the PC-related catchment.

PC transactions along the mainline plazas are related to real GRP, whereas for North Beckley (NB) PC and all CV transactions for all plazas, the socioeconomic variable is employment. Average effective annual toll rates are statistically significant for Pax (B) and Chelyan (C) CV transactions. Adjusted R^2 (overall statistical robustness) is between 86.0 and 95.8 percent, indicating very good relationships.

Table 3-3 Regression Equation Summary

Plaza	Vehicle Type	Catchment	Variable	Toll Rate	Adj. R^2
Ghent (A)	PC	Counties	GRP	Irrelevant	95.2%
Pax (B)	PC	Counties	GRP	Irrelevant	91.1%
Chelyan (C)	PC	Counties	GRP	Irrelevant	89.8%
North Beckley (NB)	PC	Counties	Employment	Irrelevant	92.0%
Ghent (A)	CV	States	Employment	Irrelevant	95.1%
Pax (B)	CV	States	Employment	Relevant	94.3%
Chelyan (C)	CV	States	Employment	Relevant	95.8%
North Beckley (NB)	CV	Counties	Employment	Irrelevant	86.0%

Note: PC = Class 1-4, CV = Class 5-10
Source: CDM Smith Analysis

In applying the revised historical socioeconomic data to originally estimated equations, extending the time series with newly available annual data, and adjusting the geographic catchment areas for some equations, the overall goodness-of-fits for the equations (adjusted R^2) almost all universally declined by about one or two percentage points (between 0.1 and 2.3 percent, excepting CV Chelyan, which slightly improved with the revisions and extension).

Adjustments to the geographic catchment areas and testing other socioeconomic variables and the inclusion/exclusion of average effective toll rates as an explanatory variable was conducted to optimize the statistical robustness. In conducting the tests, the geographic catchments for the passenger car mainline equations were narrowed from those selected previously to a smaller subset cluster mostly comprising adjacent counties/cities in West Virginia and Virginia at the southern end of the Turnpike. Additionally, the average effective toll rate for passenger cars on the North Beckley ramp were dropped as statistically insignificant. Previously, it was just marginally statistically significant.

With the final regression equations, forecasts of the regional socioeconomic variables were applied to the regression coefficients to estimate future long-term travel demand. Socioeconomic forecasts compiled from W&P were compared with historical patterns. In the 2018 T&R Study, CDM Smith treated the W&P socioeconomic data forecasts as the high-side sensitivity test. These forecasts were generally more aggressive than the long-term historical patterns (1990 to 2016) and certainly more aggressive than more-recent timeframes (2000 to 2016). However, given the changes to the BEA data underlying the W&P database and forecasts, and with some methodological and/or assumption changes, the W&P forecast data from 2019 are more reasonable relative to historical patterns and more tempered relative to the vintage forecasts that were known to be generally aggressive relative to other sources. As such, the revised and updated socioeconomic forecasts from W&P were designated as the baseline scenario in this new forecast.

3.2.3 Econometric Growth Forecasts

Econometrically derived travel demand forecasts for the Turnpike were based on regression equations with regional socioeconomic explanatory variables, forecasted from W&P. Applying socioeconomic forecasts into the equations yielded long-term toll transaction estimates for each plaza. Once established, dampening or deceleration of the long-term growth rates was added to the forecasts to smooth out the growth rates and account for unknown factors including economic changes, travel pattern changes, and travel characteristics.

A summary of the compound average growth rates (CAGR) for the plazas is provided in **Table 3-4**, depicting the average historical and forecasted toll transaction growth for various time periods.

Generally, the Turnpike exhibited 3.6 percent average growth in toll transactions during the 1990s, followed by a notable deceleration around the millennium, resulting in a 0.7 percent average growth between 2000 and 2018. Over the entire historical timeframe available from 1990 to 2018, the average toll transaction growth amounted to 1.7 percent annually.

Table 3-4 Transaction Growth Summary (CAGR)

Plaza	Vehicle Type	History			Forecast			
		1990-2000	2000-2018	1990-2018	2018-2030	2030-2040	2040-2050	2018-2050
Ghent (A)	PC	3.20%	1.00%	1.80%	0.90%	0.60%	0.40%	0.70%
Pax (B)	PC	2.40%	0.80%	1.40%	0.70%	0.50%	0.30%	0.50%
Chelyan (C)	PC	2.60%	0.80%	1.40%	0.70%	0.40%	0.20%	0.40%
North Beckley (NB)	PC	3.40%	0.30%	1.40%	0.80%	0.30%	0.10%	0.50%
Ghent (A)	CV	6.10%	0.80%	2.60%	1.10%	0.70%	0.60%	0.80%
Pax (B)	CV	5.90%	0.60%	2.50%	1.20%	0.70%	0.60%	0.90%
Chelyan (C)	CV	6.00%	0.70%	2.50%	1.20%	0.70%	0.60%	0.90%
North Beckley (NB)	CV	8.90%	-0.60%	2.70%	0.80%	0.30%	0.20%	0.40%
Total PC	All	**2.90%**	**0.80%**	**1.50%**	**0.80%**	**0.50%**	**0.30%**	**0.50%**
Total CV	All	**6.20%**	**0.60%**	**2.60%**	**1.10%**	**0.70%**	**0.60%**	**0.80%**
Total PC + CV	All	**3.60%**	**0.70%**	**1.70%**	**0.90%**	**0.50%**	**0.40%**	**0.60%**

Note: PC = Class 1-4, CV = Class 5-10; Source: CDM Smith Analysis

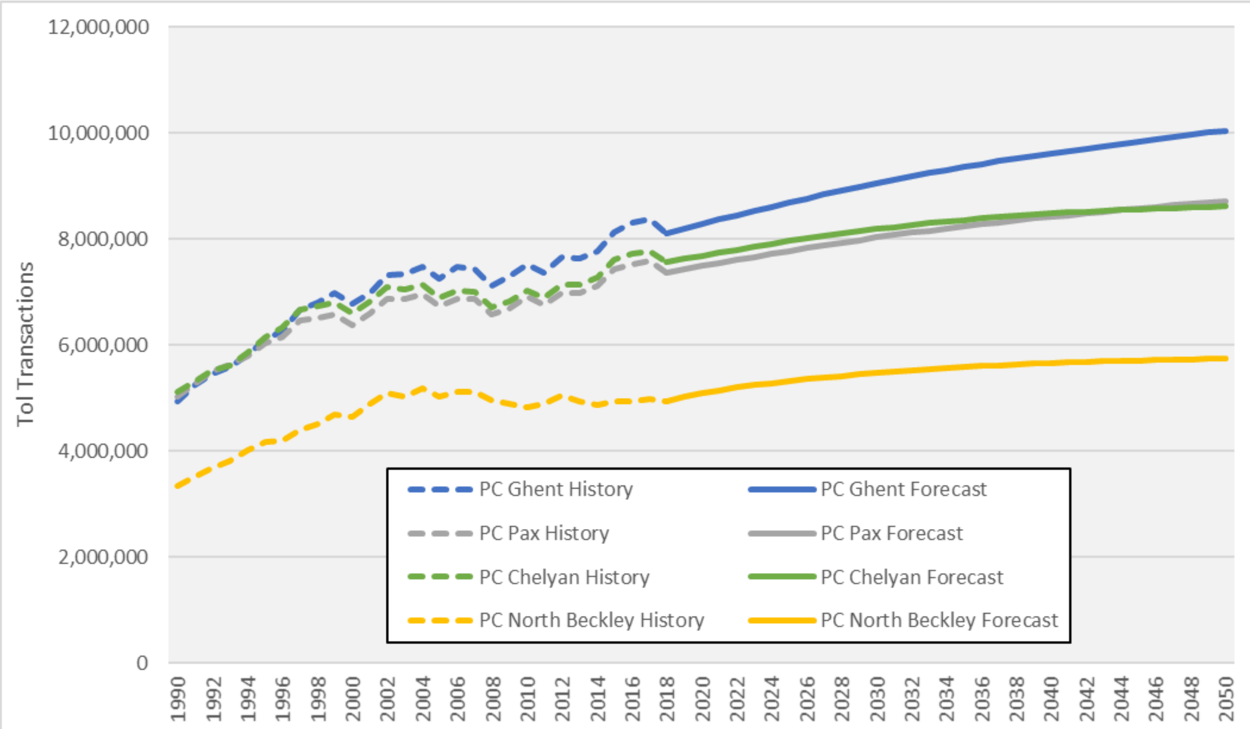
Over the future horizon through 2050, total transactions are projected to increase by 0.6 percent per year. CV transactions during this period are projected to grow faster than PC transactions for all plazas, at 0.8 percent per year versus 0.5 percent per year. **Table 3-5** shows the expected total transactions. A visual summary of the transaction history and forecast for each plaza is provided in **Figures 3-1 and 3-2**, respectively for passenger cars and commercial vehicles. **Figure 3-3** illustrates the total historic and projected baseline transactions.

Table 3-5 Baseline Transaction Econometric Forecast

Calendar Year	Toll Transactions (in millions) *Annual Growth Rate (percent)*					
	Passenger Cars		Commercial Vehicles		Total	
2019	28.28		8.62		36.90	
2020	28.55	*1.0%*	8.74	*1.5%*	37.30	*1.1%*
2021	28.81	*0.9%*	8.86	*1.3%*	37.67	*1.0%*
2022	29.05	*0.9%*	8.97	*1.2%*	38.03	*0.9%*
2023	29.29	*0.8%*	9.08	*1.2%*	38.37	*0.9%*
2024	29.52	*0.8%*	9.17	*1.1%*	38.69	*0.8%*
2025	29.74	*0.7%*	9.27	*1.0%*	39.01	*0.8%*
2026	29.95	*0.7%*	9.35	*1.0%*	39.31	*0.8%*
2027	30.16	*0.7%*	9.44	*0.9%*	39.60	*0.7%*
2028	30.36	*0.7%*	9.52	*0.9%*	39.88	*0.7%*
2029	30.55	*0.6%*	9.60	*0.8%*	40.15	*0.7%*
2030	30.74	*0.6%*	9.67	*0.8%*	40.41	*0.7%*
2031	30.91	*0.6%*	9.75	*0.8%*	40.66	*0.6%*
2032	31.08	*0.5%*	9.82	*0.8%*	40.91	*0.6%*
2033	31.25	*0.5%*	9.90	*0.7%*	41.14	*0.6%*
2034	31.40	*0.5%*	9.97	*0.7%*	41.37	*0.5%*
2035	31.55	*0.5%*	10.04	*0.7%*	41.58	*0.5%*
2036	31.69	*0.4%*	10.11	*0.7%*	41.79	*0.5%*
2037	31.82	*0.4%*	10.18	*0.7%*	42.00	*0.5%*
2038	31.94	*0.4%*	10.25	*0.7%*	42.19	*0.5%*
2039	32.06	*0.4%*	10.32	*0.7%*	42.38	*0.4%*
2040	32.17	*0.4%*	10.38	*0.7%*	42.56	*0.4%*
2041	32.28	*0.3%*	10.45	*0.6%*	42.73	*0.4%*
2042	32.39	*0.3%*	10.52	*0.6%*	42.90	*0.4%*
2043	32.48	*0.3%*	10.58	*0.6%*	43.07	*0.4%*
2044	32.58	*0.3%*	10.65	*0.6%*	43.23	*0.4%*
2045	32.68	*0.3%*	10.71	*0.6%*	43.38	*0.4%*
2046	32.77	*0.3%*	10.77	*0.6%*	43.54	*0.4%*
2047	32.86	*0.3%*	10.83	*0.6%*	43.69	*0.4%*
2048	32.95	*0.3%*	10.90	*0.6%*	43.85	*0.3%*
2049	33.04	*0.3%*	10.96	*0.6%*	44.00	*0.3%*
2050	33.13	*0.3%*	11.02	*0.6%*	44.15	*0.3%*

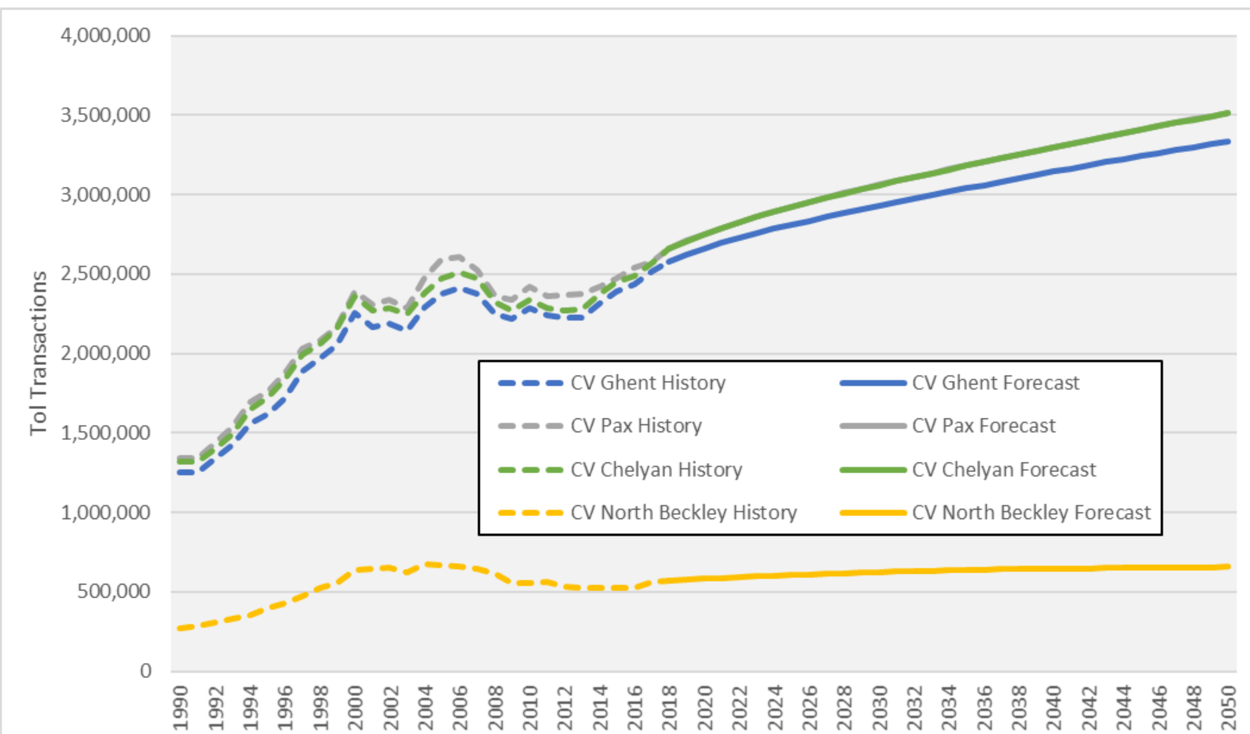
Source: CDM Smith Analysis

Figure 3-1 Passenger Car Transactions Summary by Plaza



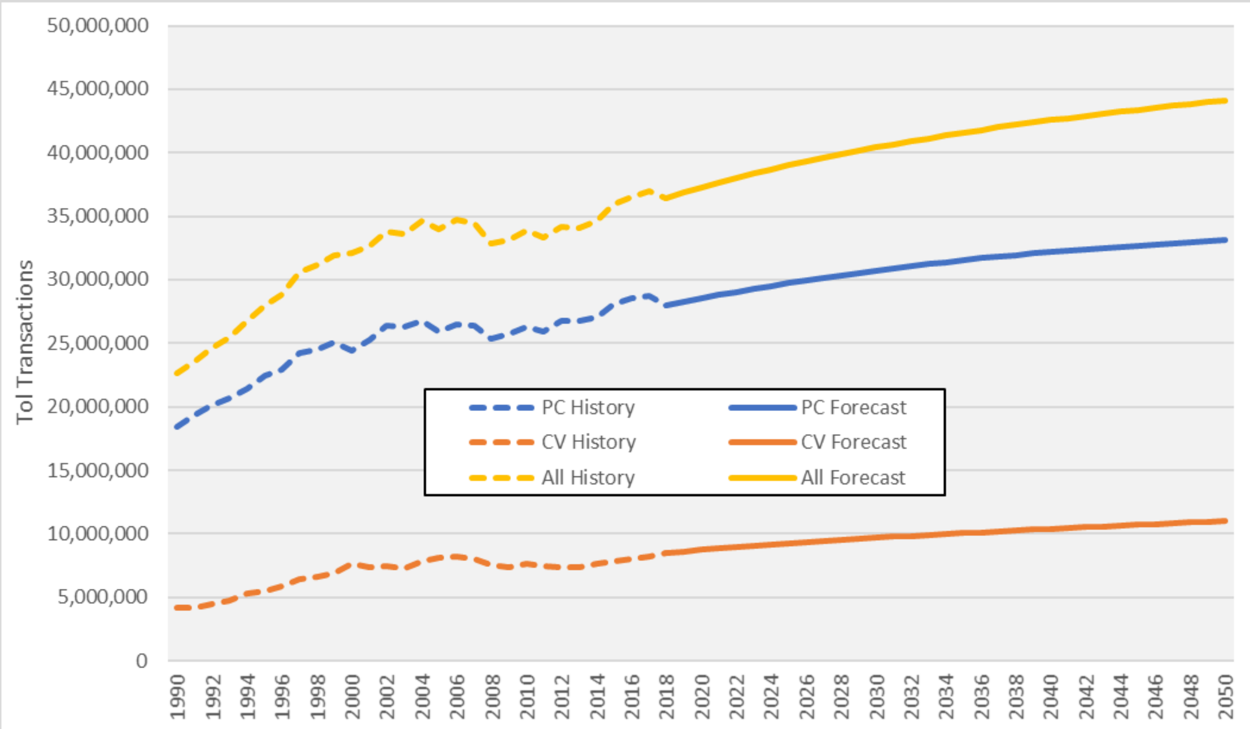
Source: CDM Smith Analysis

Figure 3-2 Commercial Vehicle Transactions Summary by Class



Source: CDM Smith Analysis

Figure 3-3 Baseline Transaction Econometric Forecast



Note: Passenger = Class 1-4, Commercial = Class 5-10
Source: CDM Smith Analysis

The econometrically derived aggregate travel demand forecasts for each plaza-vehicle class combination represents the likely possible trajectory of long-term demand under the historically observed tolling structure. It does not include short-term or long-term adjustments outside the econometric forecasting process and does not reflect the changes in tolling implemented in late 2018. Such additional considerations are applied in the toll modeling, which takes these presented forecasts as guiding inputs.

3.2.4 Summary

Transaction and revenue growth on the Turnpike have shown periods of growth in the early 1990s, steady traffic with fluctuations in the early 2000s, and more recently has been showing additional growth. The forecasts from econometric analysis indicate modest but steady growth for the forecast horizon.

3.3 Model of Trends in Vehicle Class and Payment Type

Trends in vehicle class and payment share by plaza constitute another input into the modeling process. When the prior forecast was developed, historical data was available only through the first half of 2017. As part of this study update, it was possible to revisit the trends analysis with data covering all of 2017. While data is also available for 2018 and part of 2019, those years were affected by the toll policy changes that started to be implemented in 2018 and therefore could not be directly used to inform the trends update which is a projection of what would have happened without the recent toll policy changes.

3.3.1 Trends in Vehicle Class

This section presents the trends in vehicle class used in the updated Class 1 and Class 2-10 models.

Class 1 Model

The econometric forecast provides an estimate of transactions for all passenger cars (Classes 1 through 4). It is necessary to separate Classes 2 through 4 which are not eligible to participate in the single fee discount program. Except for a small difference at Plaza C, the values assumed in the prior forecast were consistent with actual observations in 2018. Other factors considered when establishing the projected vehicle class shares also remained valid. Therefore, it was decided not to change the class share projections used in the Class 1 modelling.

Class 2-10 Model

Class share projections for Class 2-10 modelling were updated by incorporating actual data through 2019 to reflect conditions observed after the implementation of the toll policy changes. Long term (2050) projections were also revised based on latest observations.

The share of Class 2-4 transactions as a proportion of PC transactions is expected to change very little over time. The proportion of Class 2-4 among PC transactions at the mainline plazas was around 3.5 to 3.7 percent in 2018; in 2050, it is still expected to be around 3.5 to 3.8 percent.

In this study, the 2019 shares of Class 8 transactions among CV transactions are derived from actual observations. They are slightly lower than what was assumed in the 2018 T&R Study for all plazas. The proportion of Class 8 transactions among CV transactions is around 83 to 84 percent at the mainline plazas in 2019. The shares at the mainline plazas are projected to go down by 1.1 percent between 2019 and 2050. At North Beckley, the share is projected to go up by 4 percent from about 73 percent in 2019 to 77 percent in the outer years of the forecast.

3.3.2 Trends in Payment Type

This section presents the trends in payment type used in the updated Class 1 and Class 2-10 models.

Class 1 Model

Baseline pay shares constitute another input to the Class 1 model. In general, pay shares used for Class 1 modelling were left unchanged from the model of trends developed in the 2018 T&R Study. However, it was recognized that some adjustments were needed to increase the number of Non-WV E-ZPass transactions in 2019 and beyond based on the most recent trends observed. This was achieved by using 2019 actuals to increase the share of Non-WV E-ZPass and reduce the share of cash users accordingly.

For the baseline forecast (i.e., without toll policy changes) at the mainline plazas, the transaction cash share for Class 1 is assumed to decline from 70 percent in 2019 to 51-52 percent in 2050, while WV E-ZPass share is assumed to increase from about 15-16 percent to 19-20 percent and Non-WV E-ZPass is assumed to increase from about 14-15 percent to 28-30 percent.

At North Beckley, the Class 1 transaction cash share is assumed to decline from about 56 to 41 percent, WV E-ZPass share is assumed to increase from about 34 to 47 percent, and the share of Non-WV E-ZPass transactions is assumed to slightly increase from 11 to 12 percent.

Class 2-10 Model

Minor revisions were made to baseline pay share projections for Class 2-10 modelling based on recent Turnpike historical trend data. Projections indicate a switch in payment type from cash to E-ZPass. These trends reflect industry trends, recognize the distinct character of the WVT and are generally conservative in nature for revenue forecasts.

With the updated model of trends, the Non-WV E-ZPass share of transactions at the mainline plazas for Class 8 is assumed to increase from 75-76 percent in 2019 to 79-80 percent in CY 2050, while cash share is assumed to decrease from about 14 to 11-12 percent and WV E-ZPass share is assumed to decrease from about 10-12 percent to 9 percent.

At North Beckley, Class 8 transaction Non-WV E-ZPass share is assumed to increase from about 69 to 72 percent over this time period, cash share is assumed to decrease from about 19 to 15 percent, and the share of WV E-ZPass transactions is assumed to slightly decrease from 12 to 13 percent.

3.4 Class 1 Payment Choice Models

The payment choice model represents the way Class 1 customers choose amongst payment options: single fee discount program, cash, WV E-ZPass, and Non-WV E-ZPass. The payment choice model was originally built based on the Stated Preference (SP) survey performed for the 2018 T&R Study. The payment choice model variables include: annual fee; issuance fee; number of vehicles that can be registered with an annual pass, and toll cost with segmentation based on trip frequency and current payment methods.

As part of the calibration process, payment choice model coefficients developed from the results of the prior SP survey were adjusted based on revealed preferences, meaning that choices among the various payment options are now based on modified payment choice coefficients calibrated to match 2019 observations. This was achieved by adjusting the Alternative Specific Constants (ASCs) for customers that would otherwise pay cash or be in the WV E-ZPass program.

For the “Pay Toll” and “Stop Using” alternatives, Alternative Specific Constants were included in the original model to capture the utility (or disutility) for these alternatives that cannot be attributed to any other variables in the model.

To calibrate the model against 2019 actual data, the “Toll ASC” and “Stop Trips ASC” constants were modified in the following way:

- By reducing “Stop Trips ASC”, the option of discontinuing use of the Turnpike becomes less likely, which reflects actual observations.
- By increasing “Toll ASC”, the option of paying higher tolls (rather than joining the single fee discount program) becomes more likely, which is also consistent with actual observations.

The adjustments to the ASCs were done separately for each plaza, with different values applied in order to improve the level of calibration. All other payment choice model coefficients remained unchanged.

Table 3-6 shows the prior study (2018 T&R Study) coefficients and the updated coefficients. The three broad categories (WV E-ZPass, cash low frequency, and cash high frequency) correspond to the market segmentation based on payment method/frequency level before toll policy changes were introduced. In each case, the new coefficients have the same algebraic sign and order of magnitude as the value from the prior study. All other payment choice coefficients were left unchanged from the prior study, as shown in Table 3-5.

Table 3-6 Calibration of Payment Choice Model Coefficients

Coefficient	Prior Study*	Study Update			
		Plaza A	Plaza B	Plaza C	Plaza NB
Alternative Specific Constant - Toll per Plaza					
WV E-ZPass	-0.933	-0.933	-0.933	-0.933	-1.443
Cash - Low Freq	3.26	4.66	4.66	4.66	0.56
Cash - High Freq	0.575	2.895	2.902	2.758	0.52
Alternative Specific Constant - Stop Making Trips					
WV E-ZPass	-3.41	-4.41	-4.41	-4.41	-3.41
Cash - Low Freq	-1.07	-2.01	-1.37	-2.17	-1.07
Cash - High Freq	-2.75	-3.75	-3.05	-3.75	-1.95
Annual Fee					
WV E-ZPass	-0.0434	-0.0434	-0.0434	-0.0434	-0.0434
Cash - Low Freq	-0.0468	-0.0468	-0.0468	-0.0468	-0.0468
Cash - High Freq	-0.0372	-0.0372	-0.0372	-0.0372	-0.0372
Issuance Fee					
WV E-ZPass	-0.0335	-0.0335	-0.0335	-0.0335	-0.0335
Cash - Low Freq	-0.0424	-0.0424	-0.0424	-0.0424	-0.0424
Cash - High Freq	-0.0294	-0.0294	-0.0294	-0.0294	-0.0294
Vehicles					
WV E-ZPass	0.0799	0.0799	0.0799	0.0799	0.0799
Cash - Low Freq	0.104	0.104	0.104	0.104	0.104
Cash - High Freq	0.077	0.077	0.077	0.077	0.077
Toll per Plaza					
WV E-ZPass	-0.343	-0.343	-0.343	-0.343	-0.343
Cash - Low Freq	-0.761	-0.761	-0.761	-0.761	-0.761
Cash - High Freq	-0.471	-0.471	-0.471	-0.471	-0.471

*In the 2018 T&R Study, all coefficients were the same at all plazas

3.5 Toll Suppression Models

Toll suppression models provide estimates of trip reductions for customers that are facing higher toll rates per plaza. Different trip suppression rates are incorporated in the Class 1 and Class 2-10 models. The toll suppression model parameters were adjusted in light of actual observations on the Turnpike following the implementation of the toll rate increase that became effective on January 15, 2019.

Class 1 Model

In the 2018 T&R Study, the Stated Preference (SP) survey results had been used to test how the proposed payment structure with increased per plaza toll cost might negatively affect total travel trips on the Turnpike. Note that respondents who would stop making trips altogether on the Turnpike were not included in these estimated suppression rates. Instead, the trip suppression rates apply to respondents who selected the “Pay Toll” alternative. The regressions showed that as toll costs increase, trip reduction rates increase, particularly for West Virginia residents. The resulting trip suppression rates varied between 0 percent for infrequent cash users and Non-WV E-ZPass users to about 20 percent for frequent cash users and WV E-ZPass users.

Actual observations after the toll policy changes indicated that trip suppression among Class 1 toll paying customers was lower than anticipated. Based on those observations, the trip suppression rates originally derived from the SP survey were recalibrated to the values shown in **Table 3-7.**

Columns in Table 3-6 correspond to payment categories prior to the toll policy changes. For instance, at the mainline plazas, trip suppression rate for customers that switched from WV E-ZPass to paying cash was revised to 0.5 percent. For customers that used to pay cash and continue to do so with the higher tolls, trip suppression rates vary with the level of usage, with higher suppression among infrequent users.

Table 3-7 Class 1 Trip Suppression Rates

	WV E-ZPass	Non-WV E-ZPass	Cash
Plaza A	0.5%	0.0%	1.0% at 1 trip per year 0.9% at 2 trips per year 0.5% at more than 2 trips per year
Plaza B	0.5%	0.0%	1.0% at 1 trip per year 0.9% at 2 trips per year 0.5% at more than 2 trips per year
Plaza C	0.5%	0.0%	1.0% at 1 trip per year 0.9% at 2 trips per year 0.5% at more than 2 trips per year
Plaza NB	3.0%	0.0%	5% at all frequency levels

Class 2-10 Model

For Classes 2-10, a toll rate elasticity is used to estimate customer response to higher toll rates, resulting in fewer transactions. The elasticity reflects the observed effect of the toll rate increases implemented in January 2019. The elasticities were developed by estimating 2019 transactions using historical data (2012 -2018) and comparing with actual 2019 transactions. **Table 3-8** shows the resulting toll elasticities by type of plaza and toll class category. These elasticities are used in the forecasting process to estimate the impact on transactions of future toll rate increases.

Table 3-8 Toll Elasticities for Class 2-10

	Class 2-4	Class 5-10
Mainline Plazas	-0.111	-0.012
Ramp Plaza NB	-0.099	-0.008

3.6 Class 2-10 T&R Calibration for 2019

As described in Section 3.1, the actual transactions were extracted and summarized from TransCore dataset through October 2019. The remaining two months of 2019 were estimated based on monthly variations in 2017. In order to match the numbers from TransCore dataset with the Parkways audited annual transactions and revenue estimates, non-revenue transactions (including run-through transactions) were removed from the TransCore data set prior to use in the model.

The following steps were followed to calibrate Class 2-10 transactions for 2019:

- The baseline econometric forecast, developed as described in Section 3.2, provided annual passenger car (Classes 1-4) and commercial vehicle (Classes 5-10) transaction estimates by plaza, representative of conditions without the recent toll policy changes. This was used as an input to the Class 2-10 modelling process.
- Vehicle class shares and payment method shares were calculated using the TransCore dataset for each plaza, as mentioned in Section 3.3. These proportions were then applied to annual transactions from the baseline econometric forecast to compute Class 2-10 transactions disaggregated by payment type and class.
- Calibration adjustment factors were applied in order to match 2019 actual transactions at each plaza, for each class category (2-4 and 5-10) and payment type. When applying those calibration adjustment factors, the modeled transactions for 2019 exactly matched actuals at each plaza and for each class category (2-4 and 5-10).

The 2019 toll revenue was then computed by multiplying 2019 actual transactions by actual toll rates (after accounting for the recent toll rate increase). In order to match 2019 actual toll revenue, the estimated revenue was adjusted to reflect effective toll rate values. This ensures that the modeled toll revenue for 2019 exactly matched actuals at each plaza and for each class category (2-4 and 5-10).

3.7 Validation of the Entire Model Chain for 2019

Prior sections of this chapter discussed the calibration process that was followed for each forecasting element, including the econometric models, model of trends in vehicle class and payment type, payment choice models, and toll suppression models. As part of the study update, the different models were adjusted so the model outputs for 2019 match the updated T&R observations after the implementation of the toll policy changes. This “calibration” process focused on each model component independently before the entire model chain could be validated.

Table 3-9 shows the aggregate results, respectively for transactions and revenue, with all vehicle classes combined. As shown in this table, the revised model is calibrated to match 2019 actual transactions and revenue for each class category and payment type within 0.05 percent. This indicates that the model is validated and can be used to produce forecasts of future transactions and revenue that are informed by 2019 results after the implementation of the toll policy changes.

Table 3-9 Calibrated Model vs. Estimated Actuals for 2019

2019	Transactions			Revenue		
	Calibrated Model	Est. Actuals	% Diff	Calibrated Model	Est. Actuals	% Diff
Class 1 Single Fee	8,234,545	8,234,478	0.0%	$1,083,631	$1,083,711	0.0%
Class 1 Cash	14,031,767	14,031,119	0.0%	$48,242,948	$48,240,519	0.0%
Class 1 WV E-ZPass Comm	997,761	997,761	0.0%	$2,231,466	$2,231,466	0.0%
Class 1 Non-WV E-ZPass	3,691,199	3,691,127	0.0%	$12,854,877	$12,854,723	0.0%
Total Class 1	**26,955,272**	**26,954,485**	**0.0%**	**$64,412,922**	**$64,410,419**	**0.0%**
Class 2-4 Cash	706,562	706,562	0.0%	$3,285,902	$3,285,902	0.0%
Class 2-4 WV E-ZPass	52,170	52,170	0.0%	$123,934	$123,934	0.0%
Class 2-4 Non-WV E-ZPass	80,319	80,319	0.0%	$356,510	$356,510	0.0%
Total Class 2-4	**839,052**	**839,052**	0.0%	**$3,766,345**	**$3,766,345**	0.0%
Total PC (Class 1-4)	**27,794,324**	**27,793,536**	**0.0%**	**$68,179,267**	**$68,176,764**	**0.0%**
Class 5-10 Cash	1,355,718	1,355,718	0.0%	$14,100,162	$14,100,162	0.0%
Class 5-10 WV E-ZPass	1,268,964	1,268,964	0.0%	$10,955,577	$10,955,577	0.0%
Class 5-10 Non-WV E-ZPass	5,811,842	5,811,842	0.0%	$63,073,206	$63,073,206	0.0%
Total CV (Class 5-10)	**8,436,523**	**8,436,523**	**0.0%**	**$88,128,946**	**$88,128,946**	**0.0%**
TOTAL	**36,230,847**	**36,230,060**	**0.0%**	**$156,308,213**	**$156,305,710**	**0.0%**

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Chapter 4

Traffic and Revenue Forecast

This chapter contains the updated T&R estimates for calendar years 2020 through 2050 developed using the forecasting models described in Chapter 3. The primary outputs are long-term forecasts of annual transactions and toll revenue and estimates of revenue from fees for entry into the single fee discount program. The T&R forecast is presented in **Table 4-1**, **Figure 4-1,** and **Figure 4-2**.

This forecast assumes the following:

- Class 1 customers who are participating in the early enrollment offer will enjoy unlimited, toll-free use of the Turnpike through December 31, 2021
- The toll policies for 2020 and 2021 are the same as for 2019
- Starting in 2022 and beyond, all toll rates will increase 1.6 percent annually subject to rounding and the $25 annual flat fee will increase by 5 percent every third year, including 2022.

Annual transactions are estimated to grow from about 36.8 million in 2019 to 42 million in 2050. The overall compound annual growth rate over the forecasting period is 0.43 percent per year, with the commercial vehicle transactions growing slightly faster than overall traffic at 0.67 percent. Transaction growth rates are expected to be highest in the near-term and taper off over time primarily due to the trend in the econometric forecast that shows decreasing growth over time, with some fluctuations due to toll rate and single fee escalations. The share of commercial vehicle transactions is expected to increase from 23.5 percent in 2019 to 25.3 percent in 2050.

Approximately 22 percent of transactions are from customers that opted for the single fee discount program early enrollment and those expected to join the annual single fee discount program through 2021. In 2022, annual single fee transactions decrease to approximately 18 percent of all transactions since the early enrollment option coverage ends and fewer customers are expected to choose the single fee discount program at the cost of $26.25 per year ($25.00 plus 5 percent escalation). Customers leaving the single fee discount program in 2022 also contribute to increasing tolled transactions. Starting in 2023, the single fee discount program share of transactions progressively increases to about 23 percent by 2050 reflecting the relative attractiveness of the single fee discount program despite escalation in the fee amount.

Annual revenue is estimated to grow from about $156 million in 2019 to $299 million in 2050. The overall annual growth rate over the forecasting period is 2.12 percent, with commercial vehicle revenue growing slightly faster than overall revenue at 2.31 percent. The share of commercial vehicle revenue is expected to increase from 56 percent in 2019 to 60 percent in 2050.

During the period 2020 and 2021, total revenue increases slightly and is moderated by the early enrollment option. In 2022, a noticeable increase in revenue accompanies the end of the early enrollment coverage when some Class 1 customers are expected to leave the single fee discount program because they now have to pay a higher annual fee of $26.25 for one year. Those Class 1 customers leaving the single fee discount program now have to pay higher cash toll rates to travel on the Turnpike. Also, toll revenue increases in 2022 due to escalating toll rates for commercial vehicles; for instance, the Class 8 cash toll rate at the mainline plazas increases from $13.50 to $13.75 in 2022. Single fee discount program revenue also increases in 2022 because all program participants will incur the higher annual fee of $26.25, including early enrollees.

From 2023 to 2050, annual growth in total revenue is expected to decrease, which is consistent with the transaction trend. The single fee share of total revenue is expected to slightly increase from 1.8 percent in 2023 to 2.3 percent in 2050. Every third year, the 5 percent increase in the annual single fee generates an increase in the collected fee revenue.

Table 4-1 Toll Transactions and Revenue Forecast

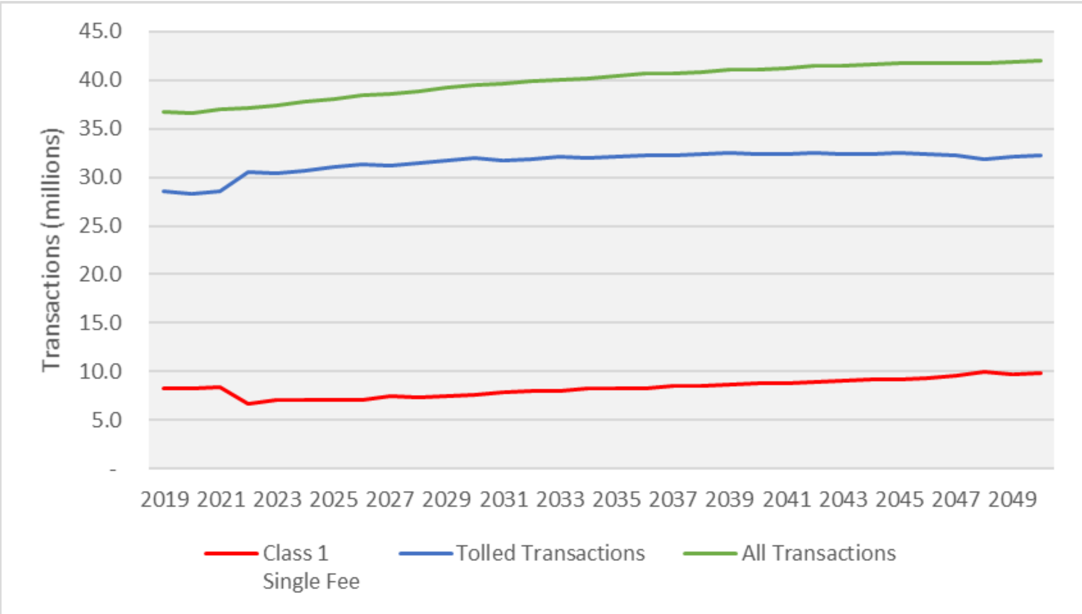
Calendar Year	Transactions (millions)					Revenue (millions year of collection dollars)				
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Trans w/single fee	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Revenue w/single fee
2014 (1)	3.23	22.99	0.80	7.64	**34.66**	$ 1.06	$ 39.51	$ 1.87	$ 41.79	**$ 84.23**
2015 (1)	3.13	24.11	0.87	7.84	**35.95**	$ 1.23	$ 41.53	$ 2.03	$ 42.81	**$ 87.60**
2016 (1)	3.09	24.50	0.92	7.98	**36.49**	$ 1.15	$ 42.24	$ 2.14	$ 43.46	**$ 88.99**
2017 (1)	3.31	24.55	0.93	8.11	**36.90**	$ 1.13	$ 42.37	$ 2.18	$ 44.33	**$ 90.01**
2018 (1)	3.92	23.12	0.92	8.36	**36.32**	$ 3.08	$ 39.75	$ 2.11	$ 45.06	**$ 90.01**
2019 (1)	8.26	19.02	0.84	8.65	**36.76**	$ 1.08	$ 63.10	$ 3.74	$ 87.64	**$ 155.56**
2020	8.31	18.90	0.85	8.56	**36.63**	$ 0.33	$ 63.92	$ 3.82	$ 89.46	**$ 157.53**
2021	8.39	19.09	0.86	8.68	**37.02**	$ 0.33	$ 64.53	$ 3.87	$ 90.69	**$ 159.42**
2022 (2)	6.65	20.85	0.87	8.78	**37.15**	$ 3.00	$ 70.09	$ 3.91	$ 93.24	**$ 170.24**
2023	7.01	20.66	0.88	8.88	**37.43**	$ 3.20	$ 72.65	$ 4.11	$ 95.92	**$ 175.88**
2024	7.09	20.82	0.89	8.97	**37.76**	$ 3.23	$ 73.50	$ 4.15	$ 98.48	**$ 179.36**
2025	7.02	21.10	0.89	9.06	**38.07**	$ 3.33	$ 74.70	$ 4.20	$ 101.11	**$ 183.34**
2026	7.10	21.25	0.90	9.14	**38.40**	$ 3.35	$ 75.60	$ 4.26	$ 103.40	**$ 186.61**
2027	7.48	21.04	0.91	9.22	**38.65**	$ 3.57	$ 77.94	$ 4.45	$ 106.01	**$ 191.97**
2028	7.39	21.32	0.91	9.30	**38.92**	$ 3.68	$ 79.27	$ 4.51	$ 108.69	**$ 196.15**
2029	7.47	21.46	0.92	9.37	**39.21**	$ 3.70	$ 80.18	$ 4.70	$ 111.25	**$ 199.83**
2030	7.54	21.59	0.92	9.44	**39.49**	$ 3.73	$ 81.10	$ 4.74	$ 113.97	**$ 203.54**
2031	7.89	21.29	0.93	9.51	**39.61**	$ 4.09	$ 84.11	$ 4.78	$ 116.68	**$ 209.66**
2032	7.96	21.40	0.93	9.58	**39.87**	$ 4.12	$ 85.00	$ 4.97	$ 119.43	**$ 213.52**
2033	8.02	21.51	0.93	9.64	**40.11**	$ 4.14	$ 85.93	$ 5.01	$ 122.18	**$ 217.26**
2034	8.21	21.36	0.94	9.71	**40.21**	$ 4.49	$ 88.28	$ 5.05	$ 125.04	**$ 222.86**
2035	8.27	21.45	0.94	9.77	**40.44**	$ 4.52	$ 89.19	$ 5.23	$ 127.88	**$ 226.81**
2036	8.33	21.54	0.94	9.84	**40.64**	$ 4.54	$ 90.09	$ 5.40	$ 131.00	**$ 231.03**
2037	8.50	21.36	0.94	9.90	**40.70**	$ 4.91	$ 92.18	$ 5.45	$ 134.01	**$ 236.55**
2038	8.55	21.43	0.94	9.96	**40.89**	$ 4.93	$ 93.08	$ 5.47	$ 137.05	**$ 240.52**
2039	8.60	21.50	0.94	10.03	**41.08**	$ 4.94	$ 93.96	$ 5.66	$ 140.08	**$ 244.65**
2040	8.76	21.30	0.95	10.09	**41.10**	$ 5.33	$ 95.89	$ 5.69	$ 143.19	**$ 250.10**
2041	8.83	21.35	0.95	10.15	**41.27**	$ 5.36	$ 96.70	$ 5.72	$ 146.40	**$ 254.17**
2042	8.90	21.39	0.95	10.21	**41.44**	$ 5.38	$ 97.60	$ 5.89	$ 149.51	**$ 258.39**
2043	9.07	21.15	0.94	10.26	**41.43**	$ 5.80	$ 99.24	$ 6.05	$ 152.99	**$ 264.07**
2044	9.13	21.19	0.94	10.32	**41.59**	$ 5.82	$ 100.15	$ 6.09	$ 156.36	**$ 268.41**
2045	9.19	21.23	0.94	10.38	**41.75**	$ 5.85	$ 101.06	$ 6.10	$ 159.67	**$ 272.68**
2046	9.34	20.99	0.94	10.43	**41.71**	$ 6.28	$ 102.57	$ 6.29	$ 163.11	**$ 278.24**
2047	9.56	20.82	0.94	10.49	**41.80**	$ 6.35	$ 103.89	$ 6.28	$ 166.80	**$ 283.32**
2048	9.98	20.36	0.94	10.54	**41.82**	$ 6.72	$ 104.22	$ 6.45	$ 170.29	**$ 287.68**
2049	9.75	20.61	0.94	10.59	**41.89**	$ 6.82	$ 106.27	$ 6.47	$ 173.84	**$ 293.40**
2050	9.81	20.65	0.93	10.65	**42.04**	$ 6.84	$ 107.34	$ 6.63	$ 177.72	**$ 298.53**

(1) Historical T&R data from 2014 through 2019 derived from Transcore database

(2) 2022: Early enrollment option coverage ends December 31, 2021, toll rates escalate 1.6% annually and single fee increases 5% every third year

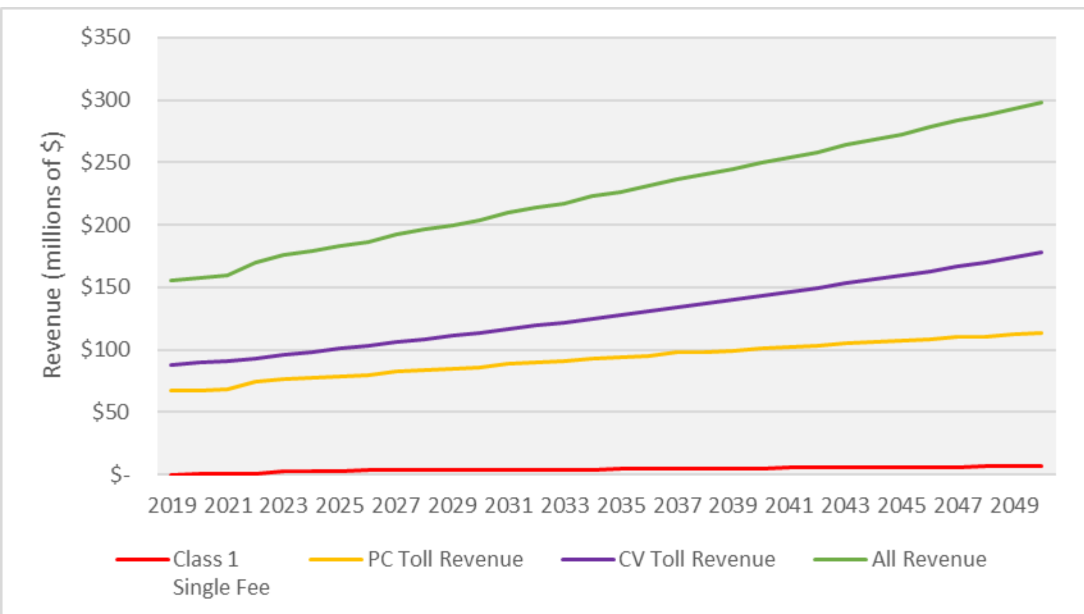
Source: CDM Smith Analysis

Figure 4-1 Transaction Trends



Source: CDM Smith Analysis

Figure 4-2 Revenue Trends



Source: CDM Smith Analysis

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Chapter 5

Sensitivity Tests

This chapter contains test results from experiments conducted to measure the sensitivity of the T&R estimates to changes in key study assumptions. As described in CDM Smith's Disclaimer, T&R estimates are forecasts of an uncertain future. The assumptions chosen for the tests are those that present risks and have a potential impact on the estimates. The purpose of the sensitivity tests is to help identify the magnitude of those risks. In general, sensitivity tests were conducted for year 2030 except for the retention test that applies to year 2022. All sensitivity test results were compared to the base scenario estimates presented in Chapter 4.

Each of the following parameters was tested individually. The sensitivity tests do not provide estimates of the overall impact if they were to occur in combinations. Parameters tested include:

- Regional growth (all classes)
- Toll elasticity (Class 2-10)
- Payment method market share (Class 2-10)
- Single Fee Discount Program retention (Class 1)

5.1 Regional Growth

A sensitivity test related to regional growth assumptions was performed to measure the impact on overall T&R estimates for all vehicle classes.

The base scenario T&R estimates presented in Chapter 4 are based on the "baseline" socioeconomic forecast derived from an econometric analysis. Along with the baseline socioeconomic forecast, a more pessimistic socioeconomic forecast was prepared, in which all annual growth rates were reduced by 25 percent starting in 2020.

Using this downside (or pessimistic) socioeconomic forecast for year 2030, transaction and toll revenue forecasts were developed and the results were compared against the base scenario. The results are presented in **Table 5-1**. For 2030, under the downside regional growth scenario, total transactions and revenue are expected to be reduced by approximately 2.4 percent and 2.6 percent, respectively.

Table 5-1 Regional Growth Sensitivity Test

2030 Regional Growth Test	Transactions (millions)					Revenue (millions year of collection $)				
	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Trans w/single fee	Class 1 Single Fee	Class 1 Tolled	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Revenue
Base Scenario	**7.54**	**21.59**	**0.92**	**9.44**	**39.49**	**$ 3.73**	**$ 81.10**	**$ 4.74**	**$ 113.97**	**$ 203.54**
Downside Socio-economic	**7.36**	**21.10**	**0.90**	**9.17**	**38.53**	**$ 3.64**	**$ 79.35**	**$ 4.65**	**$ 110.69**	**$ 198.33**
% Change	*-2.3%*	*-2.3%*	*-2.1%*	*-2.8%*	***-2.4%***	*-2.2%*	*-2.1%*	*-2.1%*	*-2.9%*	***-2.6%***

Source: CDM Smith Analysis

5.2 Toll Elasticity

Sensitivity tests concerning toll elasticity were performed to establish the impacts on the T&R forecasts for Classes 2-10 vehicles. The base scenario uses the elasticity shown in Table 3-7. As part of the sensitivity test, higher elasticity values (double the base case values) and lower elasticity values (half the base case values) were tested. The results are presented in **Table 5-2**.

Table 5-2 Classes 2-10 Elasticity Sensitivity Test

2030 Elasticity Test	Transactions (millions)			Revenue (millions year of collection $)			
	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Class 2-10	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Class 2-10	Total All Classes
Base Scenario	**0.92**	**9.44**	**10.36**	$ **4.74**	$ **113.97**	$ **118.72**	$ **203.54**
Elasticity (2x)	**0.89**	**9.41**	**10.30**	$ **4.58**	$ **113.57**	$ **118.15**	$ **202.98**
% Change	*-3.4%*	*-0.3%*	***-0.6%***	*-3.4%*	*-0.4%*	***-0.5%***	***-0.3%***
Elasticity (0.5x)	**0.94**	**9.46**	**10.39**	$ **4.82**	$ **114.17**	$ **119.00**	$ **203.82**
% Change	*1.7%*	*0.2%*	***0.3%***	*1.7%*	*0.2%*	***0.2%***	***0.1%***

Source: CDM Smith Analysis

For 2030, under the scenario with the higher elasticity, the number of Classes 2-10 transactions is reduced by 0.6 percent and the Classes 2-10 revenue decreases by 0.5 percent. As a percentage of the overall revenue, this scenario leads to a 0.3 percent reduction.

For 2030, under the scenario with the lower elasticity, the number of Classes 2-10 transactions is increased by 0.3 percent and the Classes 2-10 revenue increases by 0.2 percent. As a percentage of the overall revenue, this scenario leads to a 0.1 percent increase.

5.3 Payment Method Market Share

As described in Chapter 3, the base scenario is based on certain assumptions regarding future methods of payment (cash, WV E-ZPass, and Non-WV E-ZPass). As part of this sensitivity test, different pay share proportions were tested to determine the impact on T&R forecasts.

This sensitivity test was performed for Classes 2-10 vehicles pay share proportions, with the Class 1 shares remaining unchanged compared to the base scenario. Two tests were performed for year 2030. Pay Share Test 1 involved lowering the initial cash share by 10 percent and distributing the remainder proportionally to WV E-ZPass and Non-WV E-ZPass. Pay Share Test 2 consisted of keeping the initial cash share unchanged but lowering the Non-WV E-ZPass share by 10 percent and increasing the WV E-ZPass share to compensate.

The results of this test are presented in **Table 5-3**. Both sensitivity test result in a relatively small reduction in revenue, Pay Share Test 1 results in a 0.2 percent reduction in Class 2-10 revenue, and a 0.1 percent reduction in total revenue. Pay Share Test 2 results in a 1.0 percent reduction in Class 2-10 revenue and a 0.6 percent reduction in total revenue. The transactions remain unchanged in both tests.

Table 5-3 Classes 2-10 Pay Share Proportions Sensitivity Test

2030 Pay Share Test	Transactions (millions)			Revenue (millions year of collection $)			
	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Class 2-10	Class 2-4 Tolled	Class 5-10 (CV) Tolled	Total Class 2-10	Total All Classes
Base Scenario	0.92	9.44	10.36	$ 4.74	$ 113.97	$ 118.72	$ 203.54
Pay Share Test 1	0.92	9.44	10.36	$ 4.84	$ 113.59	$ 118.44	$ 203.26
% Change	*0.0%*	*0.0%*	***0.0%***	*2.1%*	*-0.3%*	*-0.2%*	***-0.1%***
Pay Share Test 2	0.92	9.44	10.36	$ 4.55	$ 113.04	$ 117.59	$ 202.41
% Change	*0.0%*	*0.0%*	***0.0%***	*-4.1%*	*-0.8%*	*-1.0%*	***-0.6%***

Source: CDM Smith Analysis

5.4 Single Fee Discount Program Retention

As described in Chapter 4, total revenue including single fee discount program revenue is expected to increase by about 10.8 million in calendar year 2022 compared to 2021. This is due to a combination of factors including the end of the early enrollment offer and increases in both toll rates and the annual single fee.

It is expected that many customers that joined the single fee discount program as part of the early enrollment offer ($24 for three years) will not stay in the program in 2022 when they would have to instead pay $26.25 for one year. The payment choice model treats this part of the forecasts.

The recalibrated payment choice models suggest that about half of the customers that joined the single fee discount program during the early-enrollment period will not remain in the program in 2022; however, those customers that initially had a WV E-ZPass account and were automatically enrolled are very likely to stay in the single fee discount program at the end of the early enrollment offer. Overall, the retention rate, defined as the percentage of customers automatically enrolled in the single fee discount program, is expected to be 78 percent under the base scenario.

The purpose of this test is to investigate the impact of various retention rates, i.e. changing the percentage of early enrollees that stay in the single fee discount program in 2022. The sensitivity tests included four scenarios in addition to the base case, defined as follows:

- **Full Retention –** All early enrollees stay in the program in 2022
- **Higher Retention –** 20 percent more early enrollees stay in the program in 2022 (compared to the base case)
- **Lower Retention –** 20 percent fewer early enrollees stay in the program
- **No Retention –** None of the early enrollees stay in the program in 2022

Tables 5-4 and 5-5 present the retention test results respectively for transactions and revenue in 2022.

With the higher/full retention scenarios, more customers stay in the single fee discount program, leading to more revenue collected from the fee, but less revenue collected from tolls; overall the revenue decreases. If all early enrollees were to stay in the program, it would generate a $4.2 million reduction in Class 1 revenue or 5.7 percent. In the higher retention case (20 percent higher than base case), the Class 1 total revenue decreases by $2.9 million or 4.0 percent.

In the lower retention case (20 percent lower than base case), the Class 1 revenue increases by $2.9 million or 3.9 percent. If all early enrollees were to leave the program in 2022, it would generate a $15.7 million increase in Class 1 revenue or 21.5 percent.

Table 5-4 Retention Sensitivity Test – 2022 Transactions

2022 Transactions	Percent Retention*	Class 1 Single Fee	*% Change vs. Base*	Class 1 Cash	*% Change vs. Base*	Class 1 Total	*Difference vs. Base*	*% Change vs. Base*
Full Retention	100%	7,986,366	*20.1%*	13,672,107	*-10.8%*	27,180,287	*-317,557*	*-1.2%*
Higher Retention	93%	7,593,159	*14.2%*	14,162,030	*-7.6%*	27,277,003	*-220,841*	*-0.8%*
Base Scenario	78%	6,649,095		15,326,935		27,497,844		
Lower Retention	62%	5,700,862	*-14.3%*	16,476,714	*7.5%*	27,699,389	*201,546*	*0.7%*
No Retention	0%	1,254,387	*-81.1%*	21,481,329	*40.2%*	28,257,530	*759,686*	*2.8%*

* Share of early enrollees (automatically converted and early enrollment offer) that stay in the program in 2022
Source: CDM Smith Analysis

Table 5-5 Retention Sensitivity Test – 2022 Revenue

2022 Revenue	Percent Retention*	Class 1 Single Fee	*% Change vs. Base*	Class 1 Cash	*% Change vs. Base*	Class 1 Total	*Difference vs. Base*	*% Change vs. Base*
Full Retention	100%	$ 3,751,561	*25.1%*	$ 46,883,549	*-9.5%*	$ 68,932,401	*-$4,159,809*	*-5.7%*
Higher Retention	93%	$ 3,527,657	*17.6%*	$ 48,340,780	*-6.7%*	$ 70,165,729	*-$2,926,482*	*-4.0%*
Base Scenario	78%	$ 2,999,326		$ 51,795,593		$ 73,092,210		
Lower Retention	62%	$ 2,472,179	*-17.6%*	$ 55,187,662	*6.5%*	$ 75,957,132	*$2,864,922*	*3.9%*
No Retention	0%	$ 343,281	*-88.6%*	$ 70,188,434	*35.5%*	$ 88,829,007	*$15,736,796*	*21.5%*

* Share of early enrollees (automatically converted and early enrollment offer) that stay in the program in 2022
Source: CDM Smith Analysis

APPENDIX E

CONSULTING ENGINEER'S REPORT

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CONSULTING ENGINEER'S REPORT

for the

West Virginia Parkways Authority

CONSULTING ENGINEER'S DETAILED RECOMMENDATIONS BASED ON STUDY OF WV TURNPIKE'S NEEDS FOR ESTIMATED OPERATING EXPENSES, RENEWAL AND REPLACEMENT REQUIREMENTS AND CAPITAL COSTS

Prepared by:

HNTB Corporation
41 Mission Way
Scott Depot, WV 25560

General Engineering Consultant
to the
West Virginia Parkways Authority

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EXECUTIVE SUMMARY

The purpose of this report is to provide information from the General Engineering Consultant of the West Virginia Parkways Authority (Authority) on:

(1) the current condition of the West Virginia Turnpike

(2) Recent accomplishments and investment in the Turnpike's good repair,

(3) the Turnpike's annual needs for operating expenses (see Table No.1),

(4) the Turnpike's annual needs for renewal and replacement requirements (see Table No. 2),

(5) the Turnpike's capital needs (see Table No. 3), and

(6) the recommendations of HNTB as to how to address these needs,

based on its latest inspections, its long-term familiarity with the Turnpike and its professional engineering judgment.

Turnpike operations are funded entirely by Turnpike toll revenues. Toll revenues must pay for operating and routine maintenance expenses, debt service, renewal and replacement requirements and capital needs.

This report recommends a 10-year program to address Authority needs. This report explains the reasoning behind this recommendation.

Bridge repairs and culvert repair needs comprise most of the critical needs facing the Authority. There are 116 bridges located on the Turnpike. Many of these bridge decks are approaching 30 years or older. This 10-year program calls for replacement of 40 bridge decks.

In addition, the Authority will need to upgrade its computer-based toll collection system one time over the next 10 years. Replacement or spare parts are difficult to obtain and expensive. Computer operating systems and software are at or near obsolete. Because a failure of the system would present serious and major operational and financial issues for the Authority (or any toll road), system upgrades are essential and will provide for reliable and cost-effective toll collections.

The proposed 10-year program will also address the remaining other needs. This will include, without limitation, bridge painting and repairs, guardrail replacement, culvert repairs, equipment replacement, signing and lighting repairs, paving, and pavement repairs and maintenance such as pothole patching.

This program will allow the Authority to ensure that the Turnpike is safe and properly maintained.

IN THE PROFESSIONAL ENGINEERING OPINION OF HNTB, THIS PROPOSED 10 YEAR PROGRAM IS WHAT IS NECESSARY TO MEET THE TURNPIKE INDENTURE'S "GOOD REPAIR" REQUIREMENTS IN THE FUTURE.

Summary of 10-Year Plan for R&R and Capital Investment in $Millions (rounded to $100,000)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Renewal and Replacement										
Facilities/Safety/State Police	0.9	1.3	1.0	1.4	1.0	1.5	1.0	1.6	1.1	1.7
Roadway Painting	2.7	2.8	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5
Shot-crete Repairs	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Sign Replacement	0.1	0.1	0.1	0.1	0.2	0.2	0.2	1.7	1.8	1.9
Roadway Lighting	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Full-Depth Concrete Repairs	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Guardrail Replacement	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Culvert Repairs	7.0	7.2	7.4	7.6	7.8	8.0	8.3	8.6	8.8	9.1
Bridge and Facilities Repairs	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.7	2.8	2.9
Bridge Painting R&R	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.6	2.7	5.2
Bridge Deck Sealing and Overlays	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8
Slope Conditioning	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8
Tree Clearing	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Equipment	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.2	2.3
Total R&R Costs per FY	**20.6**	**21.6**	**21.8**	**22.8**	**23.0**	**24.0**	**24.2**	**27.0**	**27.3**	**31.2**
Capital Program										
Paving										
Paving FY 2022-2031	10.6	26.9	11.6	11.6	12.0	12.3	12.7	13.1	13.5	13.9
Facilities										
Toll System Upgrade	9.0	7.0	2.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0
Buildings	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3
Total Traditional Costs	20.6	34.9	14.6	12.7	13.1	13.4	25.9	14.3	14.7	15.2
Major Future Needs										
Annual Bridge Deck Replacements	15.0	15.6	16.2	16.9	17.5	18.2	18.9	24.6	25.4	26.1
Travel Plaza Replacement	12.0	12.0	6.0	15.0	10.0	10.0	10.0	0.0	0.0	0.0
Yeager Bridge Painting NB and SB	5.0	11.0	6.0	0.0						
Bluestone Bridge Painting	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0
Barrier Wall Upgrade	1.4	1.1	1.4	2.0	1.7	1.7	0.0	0.0	0.0	0.0
Total Major Needs Costs	33.4	39.7	29.6	33.9	40.2	29.9	28.9	24.6	25.4	26.1
Total Capital Costs per FY	**54.0**	**74.6**	**44.2**	**46.6**	**53.3**	**43.3**	**54.8**	**38.9**	**40.1**	**41.3**

1.0 INTRODUCTION AND PURPOSE

The purpose of this document is to provide a report from the General Engineering Consultant of the West Virginia Parkways Authority (Authority) on the current physical condition of the West Virginia Turnpike (Turnpike), to outline projects currently in progress on the Turnpike, and to document the adequacy or inadequacy of the current programs and capital needs.

This report identifies and details these expected needs and outlines how they must be addressed in our professional engineering judgment.

2.0 THE WEST VIRGINIA TURNPIKE SYSTEM

2.1 OVERVIEW OF THE WEST VIRGINIA TURNPIKE SYSTEM

The West Virginia Turnpike is an 88-mile long toll road extending from Charleston to Princeton, West Virginia. Originally constructed during the 1950s as a two-lane toll road through rugged mountains with passing lanes on steep grades, there were originally six interchanges. Eleven additional interchanges, including the I-64 Interchange south of Beckley, were added during a 15 year long upgrading period from 1972 to 1987. This resulted in a scenic, modern four-lane divided interstate highway with construction costs of nearly $741 million. Financing was accomplished through the use of federal highway funds on a 90% to 10% matching basis. The West Virginia Division of Highways (WVDOH) supplied the 10% matching funds. The Authority repaid the 10% matching funds to the WVDOH with the last payment made in June 1994. An eighteenth interchange was constructed at Beckley utilizing Turnpike funds. It was opened to traffic May 22, 1996. It eliminated a dangerous south bound merge condition and provided access for northbound and southbound traffic to the Beckley Travel Plaza, Caperton Center, and Raleigh County Route 11 (Dry Hill Road).

The Turnpike was originally financed in the 1950s with Turnpike toll revenue bonds. Overtime the Turnpike was upgraded to interstate standards, and other interstate highway connections to the Turnpike were completed (I-64, I-77 and I-79). In 1989 the Authority was formed as the successor to the original West Virginia Turnpike Commission. That same year, the Authority issued new Turnpike revenue and refunding bonds to refinance the original 1950's bonds, to repay the WVDOH its matching funds for the upgrade of the Turnpike to interstate standards and pay issuance costs. The 1989 bonds were refunded in 1993 to take advantage of lower interest rates, and have been refunded in 2002, 2003 and 2008. Under the existing and proposed Indentures, the Authority has various specific covenants that require consideration of operation and maintenance expenses of the Turnpike (including the "good repair" covenant and the bond debt service coverage requirements).

Tolls are collected at three (3) Mainline Barrier Toll Plazas and at the US 19 Interchange Plaza. Data regarding transactions and revenue are included in the West Virginia Turnpike 2020 Traffic and Revenue Study Report for the Authority by CDM Smith (2020 Revenue Bond Study).

Turnpike operations are funded entirely by Turnpike toll revenues. Toll revenues must pay for operating and routine maintenance expenses, debt service, renewal and replacement requirements and deferred maintenance and capital needs.

Recent Turnpike Upgrades

In July 2009, the Authority voted to approve the first, across-the-board toll increase on the West Virginia Turnpike in 28 years. Following the toll increase (and as a result of the increase in funds that followed), the WVPA began road and bridge rehabilitation projects on the West Virginia Turnpike such as full depth concrete repairs, asphalt pavement overlays, bridge deck skid resistant overlays, bridge and facilities retrofit work and repairs and rehab to median barriers, retaining walls, buildings, toll plazas, culverts and pavement markings. These are much needed pavement, concrete and bridge rehabilitation projects for Kanawha, Fayette, Raleigh, and Mercer Counties. The ten-year plan from 2009 to 2019 anticipated using toll revenues of $335 million for deferred maintenance and capital costs, including $242 million for paving needs. Since 2009, the WV Turnpike has performed the following major projects:

- 11 Major paving projects consisting of 6-8-inch asphalt overlays.
- 10 Bridge Deck Replacements by Accelerated Bridge Construction method.
- 11 Major culvert repair contracts consisting of pipe and drainage structure repairs.
- 3 Maintenance/Service Building facility reconstruction projects.

2.2 TURNPIKE SYSTEM CONDITION REPORTS INCLUDING REQUIRED MAINTENANCE AND REPAIR NEEDS

As part of the West Virginia Parkways Authority's overall financial planning, HNTB has reviewed the estimated total project costs for current and proposed West Virginia Turnpike projects, and has prepared estimates of Operating Expenses and Renewal and Replacement account requirements for the next 10 years. Specifically, HNTB has evaluated costs and other aspects of the following:

- Physical Condition of the Turnpike
- Operating Expenses (Table No. 1)
- Renewal and Replacement Needs (Table No. 2)
- 2022-2031 Capital Needs (Table No. 3)

The following sections report on the current physical condition of the Turnpike and descriptions and estimated costs of the backlog of essential deferred maintenance and capital needs.

General Physical Condition

Applying Federal Highway Agency (FHWA) developed standards of comparison, 77% of Turnpike roadways are in good to very good condition while only 23% are currently rated in fair to poor condition.

Specific descriptions and characterizations of roadway and related area conditions and maintenance problems are set out below.

Pavement and Shoulders

The Turnpike has completed a 10-year program of paving projects that has raised the pavement condition rating from good to very good condition from 45% to 77%.

HNTB has been carefully inspecting and preparing accurate reports on the condition of the West Virginia Turnpike for over 50 years. Yearly inspections of bridges, pavements, culverts, signs, lighting, pavement markings and other structures along or under the Turnpike are performed. The Annual Report, prepared by HNTB, contains information on the conditions of the various assets of the Turnpike and contains HNTB's funding recommendation for Renewal and Replacement Requirements for the next fiscal year.

HNTB is also required by the Turnpike bond indenture covenants to inspect and certify that the Turnpike is being operated and maintained in a sound and economical manner consistent with sound management practices and principles, and is being kept in good repair, working order and condition. In this report, these covenants collectively are sometimes referred to as "good repair" covenants. HNTB also prepares the yearly report which details the necessary repairs needed to maintain the Turnpike.

The Turnpike mainline roadways were originally constructed in the early 1950s of Portland Cement Concrete (PCC), and substantially redone in the 1970s and 1980s when the Turnpike was upgraded to interstate standards. Currently 77% of the pavements are rated to be in good to very good condition.

The 10-year program recommended in this report will address future paving needs. Those paving needs consist of rehabilitation of the pavements and overlays to preserve existing asphalt pavements.

This proposed 10-year program will address the need to rehabilitate pavements and develop a preservation plan to preserve all the asphalt pavements. At the end of this 10-year program, all Turnpike pavements will remain in very good or good condition.

Bridges

There are 116 bridges located on the Turnpike (106 painted steel bridges and 10 concrete bridges) and they remain in relatively good condition for their age; however, they require continual sweeping of deicing salts and abrasives from the decks, washing down steelwork exposed to deicing salts, sealing deck cracks, repairing defects and damages and repainting of structures at scheduled intervals. Since the upgrade of the Turnpike to interstate standards, all of the 106 painted steel bridges including the two major bridges over the Bluestone River and the two major bridges crossing the Kanawha River near Charleston have required repainting.

All the bridges have transverse cracks that allow de-icing salt solutions onto the steelwork causing corrosion, which, in turn, causes the concrete deck to chip along the edges of the beams. Delaminated areas and spalls are forming on the bottoms of those bridge decks where the bottom layer of deck reinforcing steel was not epoxy coated. (Delaminated areas and spalls essentially are holes in the bottom of the bridge decks.) The 10-year program calls for the replacement of 40 bridge decks. Many of these decks are 30 years old or older.

The Federal Highway Administration (FHWA) mandates that these bridges be inspected every two (2) years. Approximately one half of the bridges are scheduled for inspection each year. In-Depth Bridge Inspections are required every six (6) years with Periodic Bridge Inspections at two-year intervals between. Underwater Bridge Inspections are required every five (5) years.

In addition to the bridge inspection reports, "Structure Inventory and Appraisal" forms (SIA Forms) are required by FHWA. These SIA Forms are ten (10) page reports that provide a variety of information in coded form that is required by the FHWA.

In accordance with an FHWA mandate, all the West Virginia Turnpike bridges have been rated to determine maximum safe loads for the bridges. Regarding bridges, the Authority has analyzed overweight vehicles that may use the Turnpike's bridges to ensure no damage results from the overweight vehicles. All bridges have been inventoried and rated, and are being inspected, in accordance with FHWA Standards.

Bridge Approaches

Bridge approaches located on embankments settle relative to the bridge decks which are supported by substructure units firmly founded on bedrock or supported by piling driven to bedrock. Settled bridge approaches cause vehicles to bounce and cause the bridges to vibrate excessively. Periodic mill and overlay of the approaches is required.

Embankments and Cuts

Authority personnel continually remove slide debris and maintain roadway ditches, benches and backslopes.

Drainage Facilities

Culverts are subject to corrosion due to acid water runoff. There also are broken or collapsed pipes, rusted and leaking pipe inverts, and erosion at the outlet ends of pipes. Ditches require continued maintenance and clean-out. Approximately 25% of roadway pipes will need to be replaced or rehabilitated within the next 10 years.

Guardrail and Fencing

A recent 3-year program replaced older guardrail sections that have been deteriorated with rusted beams and posts. Guardrail needs will be reduced to yearly replacement on repair of damaged guardrail.

Toll Collection and Recording System

The Authority operates four toll plazas, which includes both maned and E-ZPass lanes. The WVPA's administration headquarters continues to self-operate E-ZPass customer service and violation enforcement activities.

A failure of the toll collection system would present serious and major operational and financial issues for the Authority. Therefore, upgrades of this system are essential and will provide reliable and cost-effective toll collections.

The proposed upgrades will replace aging systems that will be reaching the limits of its projected useful life. The upgrades will address issues of reliability, spare parts, video enforcement, cameras, computer enhancements, enhanced toll collection systems, expand the capabilities of the service system, storage and distribution of transponders, management and processing toll accounts, and maintenance of back-office system for computer data and hardware.

The upgrades will reduce financial risks, demonstrate the required performance accuracy, provide state of the art services to customers and position the Authority for long term operation of the toll collection system.

Other Miscellaneous Operations and Maintenance Required

In addition to the detailed areas of maintenance, repairs and operations required to be performed by the Authority as outlined above, the Authority is responsible for State police protection on the Turnpike and for three Public Service Commission (PSC) Commercial Motor Vehicle Officers and Vehicles assigned to the Turnpike and for routine maintenance, repairs, replacements, reconstruction and renovation of the facilities referenced below. These also must be paid for from Turnpike toll revenue. Such other miscellaneous maintenance and repairs include the following:

1. Signing, lighting, delineation and pavement marking;

2. Rest areas, travel plazas and tourist information and welcome centers;

3. Toll plazas and toll equipment;

4. Maintenance areas and related equipment;

5. Communication systems;

6. Administrative headquarters; and

7. Various vehicles, equipment and heavy equipment used in the operation and maintenance of the turnpike roadway.

2.3 OPERATING EXPENSES

Operating Expenses include all the Authority's expenses in operating, maintaining and servicing the Turnpike system and otherwise carrying out and administering its related programs. Operating expenses include, for example, salaries, supplies, utilities, ordinary maintenance and repairs, insurance premiums, legal, accounting, management, traffic engineers and consulting engineers. Operating expenses do not include costs determined by the Consulting Engineers to be Renewal and Replacement requirements (see Section 2.4). Operating expenses also do not include depreciation or other non-cash accounting accruals or capital needs including major pavement rehabilitation and preservation as described further below.

The Authority has been proactive in implementing cost-saving measures. These cost-saving measures have included utilizing modern technology, utilizing the purchasing power created through statewide procurement contracts obtained and provided by the State of West Virginia's Purchasing Division, and implementing organizational efficiencies over the past 20 years. The implementation of these and other cost-cutting measures has limited the growth rate of operating expenses over the past 20 years.

A number of assumptions were used to project the Operating Expenses for the next 10 years:

1. Direct Salaries with projected growth of 2.0%.
2. Benefits with projected growth of 2.0%
3. All other operating Accounts with projected growth of 2.0%.
4. Non-departmental costs with projected growth of 2.0%.

Based upon all these factors, as well as specific knowledge of the operation of the Turnpike, projections for Operating Expenses for the fiscal years 2022 through 2031 are as follows:

Table No. 1

Year	**Estimated Operating Expenses (In thousands)**
2022	$49,816
2023	50,800
2024	51,800
2025	52,900
2026	53,900
2027	55,000
2028	56,100
2029	57,200
2030	58,300
2031	59,500

2.4 RENEWAL AND REPLACEMENT

Under the Indenture, annual Renewal and Replacement requirements must be determined and certified by the Consulting Engineers. Under the Indenture, Renewal and Replacement requirements exclude annual Operating Expenses and include those expenditures required in that year for keeping the Turnpike open to public travel and use.

Accordingly, Renewal and Replacement requirements constitute the most essential capital outlays for a given fiscal year. Renewal and Replacement requirements do not include longer-term capital needs of the Turnpike.

Based on the proposed 10-year program, our recommendations for Renewal and Replacement requirements for the fiscal years 2022 through 2031 are:

Table No. 2

Year of Expenditure	Estimated Renewal & Replacement Expenditure (In thousands)
2022	$20,600
2023	21,600
2024	21,800
2025	22,800
2026	23,000
2027	24,000
2028	24,200
2029	27,000
2030	27,300
2031	31,200

2.5 FUNDING NECESSARY TO MEET CAPITAL NEEDS

Capital Needs are those which are not necessary to keep the Turnpike open for public travel and use in the fiscal year in question but which must be addressed in a reasonable time frame in subsequent fiscal years in order to meet the Authority's Indenture covenant to operate, keep and maintain the Turnpike in "good repair, working order and condition" and in a "sound and economical manner" consistent with "sound management practices and principles." This "good repair" covenant is a separate requirement of the Indenture. These capital expenditures – which are focused on major and minor capital projects needed to reduce future maintenance expense, improve service levels and prevent future deficiencies on the Turnpike - are shown in Table No. 3 below.

Table No. 3

Year of Expenditure	**Capital Expenditure**
2022	$54,000
2023	74,600
2024	44,200
2025	46,600
2026	53,300
2027	43,300
2028	54,800
2029	38,900
2030	40,100
2031	41,300

3.0 CONCLUSION

IN THE PROFESSIONAL ENGINEERING OPINION OF HNTB, FUNDING THE OPERATING COSTS, RENEWAL AND REPLACEMENT COSTS AND CAPITAL NEEDS IDENTIFIED ABOVE OVER 10 YEARS IS WHAT IS NECESSARY TO MEET THE TURNPIKE INDENTURE'S "GOOD REPAIR" REQUIREMENT IN THE FUTURE.

4.0 ADDITIONAL IMPORTANT INFORMATION

The estimates for Capital Needs, Operating Expenses, and the Renewal and Replacement requirements contained herein have been evaluated in this analysis.

Estimates of probable costs and expenditures for the Capital Needs Program, Operating and Maintenance Expenses, and Renewal and Replacement requirements in future years are based upon such data as are available and on current construction and living cost trends. These estimates are intended to show a reasonable expense trend over a period of years, rather than exact expenses for any particular year. There could, of course, be years when these expenses could be higher or lower than indicated, depending upon economic conditions and other management and local factors that might affect costs and procedures at that time.

Neither the Authority nor HNTB has control over the cost of labor, materials or construction bidding methods. Accordingly, the Engineer cannot and does not warrant that costs will not vary from the Engineer's estimates of probable cost.

* * *

It has been a pleasure to serve as General Engineering Consultants from the conception of the West Virginia Turnpike through the retirement of the original Turnpike bonds and beyond. During our 70-year tenure, we have enjoyed an excellent relationship with the past Commission, the current Authority and the staff of the Turnpike. Each of these parties, in the respective areas of responsibility, has contributed materially to protect the bondholder's interests and to provide an excellent transportation facility for the State of West Virginia. We look forward to the continuation of this relationship.

APPENDIX F

FORM OF CONTINUING DISCLOSURE AGREEMENT

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DISCLOSURE DISSEMINATION AGENT AGREEMENT

This Disclosure Dissemination Agent Agreement (the "Disclosure Agreement"), dated as of June 23, 2021, is executed and delivered by the West Virginia Parkways Authority (the "Issuer") and Digital Assurance Certification, L.L.C., as exclusive Disclosure Dissemination Agent (the "Disclosure Dissemination Agent" or "DAC") for the benefit of the Holders (hereinafter defined) of the Bonds (hereinafter defined) and in order to assist the Issuer in processing certain continuing disclosure with respect to the Bonds in accordance with Rule 15c2-12 of the United States Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time (the "Rule").

The services provided under this Disclosure Agreement solely relate to the execution of instructions received from the Issuer through use of the DAC system and do not constitute "advice" within the meaning of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act"). DAC will not provide any advice or recommendation to the Issuer or anyone on the Issuer's behalf regarding the "issuance of municipal securities" or any "municipal financial product" as defined in the Act and nothing in this Disclosure Agreement shall be interpreted to the contrary. DAC is not a "Municipal Advisor" as such term is defined in Section 15B of the Securities Exchange Act of 1934, as amended, and related rules.

SECTION 1. Definitions. Capitalized terms not otherwise defined in this Disclosure Agreement shall have the meaning assigned in the Rule or, to the extent not in conflict with the Rule, in the Official Statement (hereinafter defined). The capitalized terms shall have the following meanings:

"Annual Filing Date" means the date, set in Sections 2(a) and 2(f) hereof, by which the Annual Report is to be filed with the MSRB.

"Annual Financial Information" means annual financial information as such term is used in paragraph (b)(5)(i) of the Rule and specified in Section 3(a) of this Disclosure Agreement.

"Annual Report" means an Annual Report containing Annual Financial Information described in and consistent with Section 3 of this Disclosure Agreement.

"Audited Financial Statements" means the annual financial statements of the Issuer for the prior fiscal year, certified by an independent auditor as prepared in accordance with generally accepted accounting principles or otherwise, as such term is used in paragraph (b)(5)(i)(B) of the Rule and specified in Section 3(b) of this Disclosure Agreement.

"Bonds" means the bonds as listed on the attached Exhibit A, with the 9-digit CUSIP numbers relating thereto.

"Certification" means a written certification of compliance signed by the Disclosure Representative stating that the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary

Financial Disclosure delivered to the Disclosure Dissemination Agent is the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure required to be submitted to the MSRB under this Disclosure Agreement. A Certification shall accompany each such document submitted to the Disclosure Dissemination Agent by the Issuer and include the full name of the Bonds and the 9-digit CUSIP numbers for all Bonds to which the document applies.

"Disclosure Dissemination Agent" means Digital Assurance Certification, L.L.C, acting in its capacity as Disclosure Dissemination Agent hereunder, or any successor Disclosure Dissemination Agent designated in writing by the Issuer pursuant to Section 9 hereof.

"Disclosure Representative" means Parrish French, the Director of Finance for the Issuer, or his designee, or such other person as the Issuer shall designate in writing to the Disclosure Dissemination Agent from time to time as the person responsible for providing Information to the Disclosure Dissemination Agent.

"Failure to File Event" means the Issuer's failure to file an Annual Report on or before the Annual Filing Date.

"Financial Obligation" as used in this Disclosure Agreement is defined in the Rule, as may be amended, as (i) a debt obligation; (ii) derivative instrument entered into in connection with, or pledged as a security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term "financial obligation" shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"Force Majeure Event" means: (i) acts of God, war, or terrorist action; (ii) failure or shut-down of the Electronic Municipal Market Access system maintained by the MSRB; or (iii) to the extent beyond the Disclosure Dissemination Agent's reasonable control, interruptions in telecommunications or utilities services, failure, malfunction or error of any telecommunications, computer or other electrical, mechanical or technological application, service or system, computer virus, interruptions in Internet service or telephone service (including due to a virus, electrical delivery problem or similar occurrence) that affect Internet users generally, or in the local area in which the Disclosure Dissemination Agent or the MSRB is located, or acts of any government, regulatory or any other competent authority the effect of which is to prohibit the Disclosure Dissemination Agent from performance of its obligations under this Disclosure Agreement.

"Holder" means any person (a) having the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries) or (b) treated as the owner of any Bonds for federal income tax purposes.

"Information" means, collectively, the Annual Reports, the Audited Financial Statements, the Notice Event notices, the Failure to File Event notices, the Voluntary Event Disclosures and the Voluntary Financial Disclosures.

"MSRB" means the Municipal Securities Rulemaking Board, or any successor thereto, established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934.

"Notice Event" means any of the events enumerated in paragraph (b)(5)(i)(C) of the Rule and listed in Section 4(a) of this Disclosure Agreement.

"Obligated Person" means any person, including the Issuer, who is either generally or through an enterprise, fund, or account of such person committed by contract or other arrangement to support payment of all, or part of the obligations on the Bonds (other than providers of municipal bond insurance, letters of credit, or other liquidity facilities), as shown on Exhibit A.

"Official Statement" means that Official Statement prepared by the Issuer in connection with the Bonds, as listed in Exhibit A.

"Trustee" means the institution, if any, identified as such in the document under which the Bonds were issued.

"Voluntary Event Disclosure" means information of the category specified in any of subsections (e)(vi)(1) through (e)(vi)(10) of Section 2 of this Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(a) of this Disclosure Agreement.

"Voluntary Financial Disclosure" means information of the category specified in any of subsections (e)(vii)(1) through (e)(vii)(9) of Section 2 of this Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(b) of this Disclosure Agreement.

SECTION 2. Provision of Annual Reports.

(a) The Issuer shall provide, annually, an electronic copy of the Annual Report and Certification to the Disclosure Dissemination Agent, together with a copy for the Trustee, not later than the Annual Filing Date. Promptly upon receipt of an electronic copy of the Annual Report and the Certification, the Disclosure Dissemination Agent shall provide an Annual Report to the MSRB not later than December 31 of the calendar year following the end of each fiscal year of the Issuer, commencing with the fiscal year ending June 30, 2021 (which is due December 31, 2021). Such date and each anniversary thereof is the Annual Filing Date. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 3 of this Disclosure Agreement.

(b) If on the fifteenth (15th) day prior to the Annual Filing Date, the Disclosure Dissemination Agent has not received a copy of the Annual Report and Certification, the Disclosure Dissemination Agent shall contact the Disclosure Representative by telephone and in writing (which may be by e-mail) to remind the Issuer of its undertaking to provide the Annual Report pursuant to Section 2(a). Upon such reminder, the Disclosure Representative shall either (i) provide the Disclosure Dissemination Agent with an electronic copy of the Annual Report and the Certification no later than two (2) business days prior to the Annual Filing Date, or (ii) instruct the Disclosure Dissemination Agent in writing that the Issuer will not be able to file the Annual Report within the time required under this Disclosure Agreement, state the date by which the Annual Report for such year will be provided and instruct the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form attached as Exhibit B, which may be accompanied by a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.

(c) If the Disclosure Dissemination Agent has not received an Annual Report and Certification by 10:00 a.m. Eastern time on Annual Filing Date (or, if such Annual Filing Date falls on a Saturday, Sunday or holiday, then the first business day thereafter) for the Annual Report, a Failure to File Event shall have occurred and the Issuer irrevocably directs the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form attached as Exhibit B without reference to the anticipated filing date for the Annual Report, which may be accompanied by a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.

(d) If Audited Financial Statements of the Issuer are prepared but not available prior to the Annual Filing Date, the Issuer shall, when the Audited Financial Statements are available, provide at such time an electronic copy to the Disclosure Dissemination Agent, accompanied by a Certification, together with a copy for the Trustee, if any, for filing with the MSRB.

(e) The Disclosure Dissemination Agent shall:

(i) verify the filing specifications of the MSRB each year prior to the Annual Filing Date;

(ii) upon receipt, promptly file each Annual Report received under Sections 2(a) and 2(b) hereof with the MSRB;

(iii) upon receipt, promptly file each Audited Financial Statement received under Section 2(d) hereof with the MSRB;

(iv) upon receipt, promptly file the text of each Notice Event received under Sections 4(a) and 4(b)(ii) hereof with the MSRB, identifying the Notice Event as instructed by the Issuer pursuant to Section 4(a) or 4(b)(ii) hereof (being any of the categories set forth below) when filing pursuant to Section 4(c) of this Disclosure Agreement:

1. "Principal and interest payment delinquencies;"

2. "Non-Payment related defaults, if material;"

3. "Unscheduled draws on debt service reserves reflecting financial difficulties;"

4. “Unscheduled draws on credit enhancements reflecting financial difficulties;”

5. “Substitution of credit or liquidity providers, or their failure to perform;”

6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the security, or other material events affecting the tax status of the security;

7. “Modifications to rights of securities holders, if material;”

8. Bond calls, if material, and tender offers;

9. “Defeasances;”

10. “Release, substitution, or sale of property securing repayment of the securities, if material;”

11. “Rating changes;”

12. “Bankruptcy, insolvency, receivership or similar event of the obligated person;”

13. The consummation of a merger, consolidation, or acquisition involving an Obligated Person or the sale of all or substantially all of the assets of an Obligated Person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

14. “Appointment of a successor or additional trustee, or the change of name of a trustee, if material;”

15. “Incurrence of a financial obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the obligated person, any of which affect security holders, if material;” and

16. “Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflect financial difficulties.”

(v) upon receipt (or irrevocable direction pursuant to Section 2(c) of this Disclosure Agreement, as applicable), promptly file a completed copy of Exhibit B to this Disclosure Agreement with the MSRB, identifying the filing as "Failure to Provide Annual Report As Required" when filing pursuant to Section 2(b)(ii) or Section 2(c) of this Disclosure Agreement;

(vi) upon receipt, promptly file the text of each Voluntary Event Disclosure received under Section 7(a) hereof with the MSRB, identifying the Voluntary Event Disclosure as instructed by the Issuer pursuant to Section 7(a) (being any of the categories set forth below) when filing pursuant to Section 7(a) of this Disclosure Agreement:

1. "amendment to continuing disclosure undertaking;"

2. "change in obligated person;"

3. "notice to investors pursuant to bond documents;"

4. "certain communications from the Internal Revenue Service;" other than those communications included in the Rule;

5. "secondary market purchases;"

6. "bid for auction rate or other securities;"

7. "capital or other financing plan;"

8. "litigation/enforcement action;"

9. "change of tender agent, remarketing agent, or other on-going party;" and

10. "other event-based disclosures."

(vii) upon receipt, promptly file the text of each Voluntary Financial Disclosure received under Section 7(b) hereof with the MSRB, identifying the Voluntary Financial Disclosure as instructed by the Issuer pursuant to Section 7(b) (being any of the categories set forth below) when filing pursuant to Section 7(b) of this Disclosure Agreement:

1. "quarterly/monthly financial information;"

2. "Timing of annual disclosure (120 days);

3. change in fiscal year/timing of annual disclosure;"

4. "change in accounting standard;"

5. "interim/additional financial information/operating data;"

6. “budget;”

7. “investment/debt/financial policy;”

8. “information provided to rating agency, credit/liquidity provider or other third party;”

9. “consultant reports;” and

10. “other financial/operating data.”

(viii) provide the Issuer evidence of the filings of each of the above when made, which shall be by means of the DAC system, for so long as DAC is the Disclosure Dissemination Agent under this Disclosure Agreement.

(f) The Issuer may adjust the Annual Filing Date upon change of its fiscal year by providing written notice of such change and the new Annual Filing Date to the Disclosure Dissemination Agent, the Trustee (if any) and the MSRB, provided that the period between the existing Annual Filing Date and new Annual Filing Date shall not exceed one year.

(g) Anything in this Disclosure Agreement to the contrary notwithstanding, any Information received by the Disclosure Dissemination Agent before 10:00 a.m. Eastern time on any business day that it is required to file with the MSRB pursuant to the terms of this Disclosure Agreement and that is accompanied by a Certification and all other information required by the terms of this Disclosure Agreement will be filed by the Disclosure Dissemination Agent with the MSRB no later than 11:59 p.m. Eastern time on the same business day; provided, however, the Disclosure Dissemination Agent shall have no liability for any delay in filing with the MSRB if such delay is caused by a Force Majeure Event provided that the Disclosure Dissemination Agent uses reasonable efforts to make any such filing as soon as possible.

SECTION 3. Content of Annual Reports.

(a) Each Annual Report shall contain operating data of the Authority for the preceding fiscal year, prepared from the records of the Authority, specifically and in the form attached as Exhibit D hereto, consisting of updates to certain tables set forth in the section of the Official Statement captioned “SUMMARY OF HISTORICAL OPERATIONS” and titled as follows: (1) Transactions; (2) Toll Revenues; and (3) Historical Revenue, Expenditures and Debt Service Coverage.

(b) Audited Financial Statements as described in the Official Statement will be included in the Annual Report. If audited financial statements are not available, then unaudited financial statements, prepared in accordance with generally acceptable accounting principles as described in the Official Statement will be included in the Annual Report. In such event, Audited Financial Statements (if any) will be provided pursuant to Section 2(d).

Any or all of the items listed above may be included by specific reference from other documents, including official statements of debt issues with respect to which the State is an "obligated person" (as defined by the Rule), which have been previously filed with the Securities and Exchange Commission or available on the MSRB Internet Website. If the document incorporated by reference is a final official statement, it must be available from the MSRB. The Issuer will clearly identify each such document so incorporated by reference.

If the Annual Financial Information contains modified operating data or financial information different from the Annual Financial Information agreed to in the continuing disclosure undertaking related to the Bonds, the Issuer is required to explain, in narrative form, the reasons for the modification and the impact of the change in the type of operating data or financial information being provided.

SECTION 4. Reporting of Notice Events.

(a) The occurrence of any of the following events with respect to the Bonds constitutes a Notice Event:

1. Principal and interest payment delinquencies;

2. Non-payment related defaults, if material;

3. Unscheduled draws on debt service reserves reflecting financial difficulties;

4. Unscheduled draws on credit enhancements reflecting financial difficulties;

5. Substitution of credit or liquidity providers, or their failure to perform;

6. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;

7. Modifications to rights of Bond holders, if material;

8. Bond calls, if material, and tender offers;

9. Defeasances;

10. Release, substitution, or sale of property securing repayment of the Bonds, if material;

11. Rating changes;

12. Bankruptcy, insolvency, receivership or similar event of the Obligated Person;

Note to subsection (a)(12) of this Section 4: For the purposes of the event described in subsection (a)(12) of this Section 4, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an Obligated Person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Obligated Person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Obligated Person.

13. The consummation of a merger, consolidation, or acquisition involving an Obligated Person or the sale of all or substantially all of the assets of the Obligated Person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

14. Appointment of a successor or additional trustee or the change of name of a trustee, if material;

15. Incurrence of a financial obligation of an Obligated Person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of an Obligated Person, any of which affect security holders, if material; and

16. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of an Obligated Person, any of which reflect financial difficulties.

The Issuer shall, in a timely manner not later than nine (9) business days after its occurrence, notify the Disclosure Dissemination Agent in writing of the occurrence of a Notice Event. Such notice shall instruct the Disclosure Dissemination Agent to report the occurrence pursuant to subsection (c) and shall be accompanied by a Certification. Such notice or Certification shall identify the Notice Event that has occurred (which shall be any of the categories set forth in Section 2(e)(iv) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth (10^{th}) business day after the occurrence of the Notice Event).

(b) The Disclosure Dissemination Agent is under no obligation to notify the Issuer or the Disclosure Representative of an event that may constitute a Notice Event. In the event the

Disclosure Dissemination Agent so notifies the Disclosure Representative, the Disclosure Representative will within two (2) business days of receipt of such notice (but in any event not later than the tenth (10^{th}) business day after the occurrence of the Notice Event, if the Issuer determines that a Notice Event has occurred), instruct the Disclosure Dissemination Agent that either (i) a Notice Event has not occurred and no filing is to be made or (ii) a Notice Event has occurred and the Disclosure Dissemination Agent is to report the occurrence pursuant to subsection (c) of this Section 4, together with a Certification. Such Certification shall identify the Notice Event that has occurred (which shall be any of the categories set forth in Section 2(e)(iv) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth (10^{th}) business day after the occurrence of the Notice Event).

(c) If the Disclosure Dissemination Agent has been instructed by the Issuer as prescribed in subsection (a) or (b)(ii) of this Section 4 to report the occurrence of a Notice Event, the Disclosure Dissemination Agent shall promptly file a notice of such occurrence with MSRB in accordance with Section 2(e)(iv) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.

SECTION 5. CUSIP Numbers. The Issuer will provide the Dissemination Agent with the CUSIP numbers for (i) new bonds at such time as they are issued or become subject to the Rule and (ii) any Bonds to which new CUSIP numbers are assigned in substitution for the CUSIP numbers previously assigned to such Bonds.

SECTION 6. Additional Disclosure Obligations. The Issuer acknowledges and understands that other state and federal laws, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the Issuer, and that the duties and responsibilities of the Disclosure Dissemination Agent under this Disclosure Agreement do not extend to providing legal advice regarding such laws. The Issuer acknowledges and understands that the duties of the Disclosure Dissemination Agent relate exclusively to execution of the mechanical tasks of disseminating information as described in this Disclosure Agreement.

SECTION 7. Voluntary Filing.

(a) The Issuer may instruct the Disclosure Dissemination Agent to file a Voluntary Event Disclosure with the MSRB from time to time pursuant to a Certification of the Disclosure Representative. Such Certification shall identify the Voluntary Event Disclosure (which shall be any of the categories set forth in Section 2(e)(vi) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information. If the Disclosure Dissemination Agent has been instructed by the Issuer as prescribed in this Section 7(a) to file a Voluntary Event Disclosure, the Disclosure Dissemination Agent shall promptly file such Voluntary Event Disclosure with the MSRB in accordance with Section 2(e)(vi) hereof This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-2

(b) The Issuer may instruct the Disclosure Dissemination Agent to file a Voluntary Financial Disclosure with the MSRB from time to time pursuant to a Certification of the Disclosure Representative. Such Certification shall identify the Voluntary Financial Disclosure (which shall be any of the categories set forth in Section 2(e)(vii) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information. If the Disclosure Dissemination Agent has been instructed by the Issuer as prescribed in this Section 7(b) hereof to file a Voluntary Financial Disclosure, the Disclosure Dissemination Agent shall promptly file such Voluntary Financial Disclosure with the MSRB in accordance with Section 2(e)(vii) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-3.

(c) The parties hereto acknowledge that the Issuer is not obligated pursuant to the terms of this Disclosure Agreement to file any Voluntary Event Disclosure pursuant to Section 7(a) hereof or any Voluntary Financial Disclosure pursuant to Section 7(b) hereof

(d) Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information through the Disclosure Dissemination Agent using the means of dissemination set forth in this Disclosure Agreement or including any other information in any Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure, in addition to that required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure.

SECTION 8. Termination of Reporting Obligation. The obligations of the Issuer and the Disclosure Dissemination Agent under this Disclosure Agreement shall terminate with respect to the Bonds upon the legal defeasance, prior redemption or payment in full of all of the Bonds, when the Issuer is no longer an obligated person with respect to the Bonds, or upon delivery by the Disclosure Representative to the Disclosure Dissemination Agent of an opinion of counsel expert in federal securities laws to the effect that continuing disclosure is no longer required.

SECTION 9. Disclosure Dissemination Agent. The Issuer has appointed Digital Assurance Certification, L.L.C. as exclusive Disclosure Dissemination Agent under this Disclosure Agreement. The Issuer may, upon thirty (30) days written notice to the Disclosure Dissemination Agent and the Trustee, replace or appoint a successor Disclosure Dissemination Agent. Upon termination of DAC’s services as Disclosure Dissemination Agent, whether by notice of the Issuer or DAC, the Issuer agrees to appoint a successor Disclosure Dissemination

Agent or, alternately, agrees to assume all responsibilities of Disclosure Dissemination Agent under this Disclosure Agreement for the benefit of the Holders of the Bonds. Notwithstanding any replacement or appointment of a successor, the Issuer shall remain liable to the Disclosure Dissemination Agent until payment in full for any and all sums owed and payable to the Disclosure Dissemination Agent. The Disclosure Dissemination Agent may resign at any time by providing thirty (30) days' prior written notice to the Issuer.

SECTION 10. Remedies in Event of Default. In the event of a failure of the Issuer or the Disclosure Dissemination Agent to comply with any provision of this Disclosure Agreement, the Holders' rights to enforce the provisions of this Agreement shall be limited solely to a right, by action in mandamus or for specific performance, to compel performance of the parties' obligations under this Disclosure Agreement. Any failure by a party to perform in accordance with this Disclosure Agreement shall not constitute a default on the Bonds, an event of default under the Indenture or under any other document relating to the Bonds, and all rights and remedies shall be limited to those expressly stated herein.

SECTION 11. Duties, Immunities and Liabilities of Disclosure Dissemination Agent.

(a) The Disclosure Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement. The Disclosure Dissemination Agent's obligation to deliver the information at the times and with the contents described herein shall be limited to the extent the Issuer has provided such information to the Disclosure Dissemination Agent as required by this Disclosure Agreement. The Disclosure Dissemination Agent shall have no duty with respect to the content of any disclosures or notice made pursuant to the terms hereof. The Disclosure Dissemination Agent shall have no duty or obligation to review or verify any Information or any other information, disclosures or notices provided to it by the Issuer and shall not be deemed to be acting in any fiduciary capacity for the Issuer, the Holders of the Bonds or any other party. The Disclosure Dissemination Agent shall have no responsibility for the Issuer's failure to report to the Disclosure Dissemination Agent a Notice Event or a duty to determine the materiality thereof. The Disclosure Dissemination Agent shall have no duty to determine, or liability for failing to determine, whether the Issuer has complied with this Disclosure Agreement. The Disclosure Dissemination Agent may conclusively rely upon Certifications of the Issuer at all times.

The obligations of the Issuer under this Section shall survive resignation or removal of the Disclosure Dissemination Agent and defeasance, redemption or payment of the Bonds.

(b) The Disclosure Dissemination Agent may, from time to time, consult with legal counsel (either in-house or external) of its own choosing in the event of any disagreement or controversy, or question or doubt as to the construction of any of the provisions hereof or its respective duties hereunder, and shall not incur any liability and shall be fully protected in acting in good faith upon the advice of such legal counsel. The reasonable fees and expenses of such counsel shall be payable by the Issuer.

(c) All documents, reports, notices, statements, information and other materials provided to the MSRB under this Agreement shall be provided in an electronic format and accompanied by identifying information as prescribed by the MSRB.

SECTION 12. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer and the Disclosure Dissemination Agent may amend this Disclosure Agreement and any provision of this Disclosure Agreement may be waived, if such amendment or waiver is supported by an opinion of counsel expert in federal securities laws acceptable to both the Issuer and the Disclosure Dissemination Agent to the effect that such amendment or waiver does not materially impair the interests of Holders of the Bonds and would not, in and of itself, cause the undertakings herein to violate the Rule if such amendment or waiver had been effective on the date hereof but taking into account any subsequent change in or official interpretation of the Rule; provided neither the Issuer or the Disclosure Dissemination Agent shall be obligated to agree to any amendment modifying their respective duties or obligations without their consent thereto.

Notwithstanding the preceding paragraph, the Disclosure Dissemination Agent shall have the right to adopt amendments to this Disclosure Agreement necessary to comply with modifications to and interpretations of the provisions of the Rule as announced by the Securities and Exchange Commission from time to time by giving not less than twenty (20) days written notice of the intent to do so together with a copy of the proposed amendment to the Issuer. No such amendment shall become effective if the Issuer shall, within ten (10) days following the giving of such notice, send a notice to the Disclosure Dissemination Agent in writing that it objects to such amendment.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Trustee, if any, for the Bonds, the Disclosure Dissemination Agent, the underwriter, and the Holders from time to time of the Bonds, and shall create no rights in any other person or entity.

SECTION 14. Governing Law. This Disclosure Agreement shall be governed by the laws of the State of West Virginia (other than with respect to conflicts of laws).

SECTION 15. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

[Remainder of page intentionally left blank.]

The Disclosure Dissemination Agent and the Issuer have caused this Disclosure Agreement to be executed, on the date first written above, by their respective officers duly authorized.

DIGITAL ASSURANCE CERTIFICATION,
L.L.C., as Disclosure Dissemination Agent

By: ________________________________
Name: ______________________________
Its: ________________________________

WEST VIRGINIA PARKWAYS
AUTHORITY

By: ________________________________
Name: Jeffrey A. Miller
Its: Executive Director

EXHIBIT A

NAME AND CUSIP NUMBERS OF BONDS

Name of Issuer	**West Virginia Parkways Authority**
Obligated Person(s)	**West Virginia Parkways Authority**
Name of Bond Issue:	**Senior Lien Turnpike Toll Revenue Bonds, Series 2021**
Date of Issuance:	**June 23, 2021**
Date of Official Statement	**June 9, 2021**

Maturity (June 1)	CUSIP**
2022	956510BA8
2023	956510BB6
2024	956510BC4
2025	956510BD2
2026	956510BE0
2027	956510BF7
2028	956510BG5
2029	956510BH3
2030	956510BJ9
2031	956510BK6
2032	956510BL4
2033	956510BM2
2034	956510BN0
2035	956510BP5
2036	956510BQ3
2037	956510BR1
2038	956510BS9
2039	956510BT7
2040	956510BU4
2041	956510BV2
2042	956510BW0
2043	956510BX8
2047	956510BY6
2051	956510BZ3

EXHIBIT B

NOTICE TO MSRB OF FAILURE TO FILE ANNUAL REPORT

Issuer:	West Virginia Parkways Authority
Obligated Person:	West Virginia Parkways Authority
Name(s) of Bond Issue(s):	Senior Lien Turnpike Toll Revenue Bonds, Series 2021
Date(s) of Issuance:	June 23, 2021
Date(s) of Disclosure Agreement:	June 23, 2021
CUSIP Numbers:	956510____________

NOTICE IS HEREBY GIVEN that the Issuer has not provided an Annual Report with respect to the above-named Bonds as required by the Disclosure Agreement between the Issuer and Digital Assurance Certification, L.L.C., as Disclosure Dissemination Agent. [The Issuer has notified the Disclosure Dissemination Agent that it anticipates that the Annual Report will be filed by ___________].

Dated: __________

Digital Assurance Certification, L.L.C., as
Disclosure Dissemination Agent, on behalf of the
Issuer

____

cc:

EXHIBIT C-1
EVENT NOTICE COVER SHEET

This cover sheet and accompanying "event notice" may be sent to the MSRB, pursuant to Securities and Exchange Commission Rule 15c2-12(b)(5)(i)(C) and (D).

Issuer's and/or Other Obligated Person's Name:

West Virginia Parkways Authority

Issuer's Six-Digit CUSIP Number:

956510

or Nine-Digit CUSIP Number(s) of the bonds to which this event notice relates: __________

Number of pages attached:

Description of Notice Events (Check One):

1. _____ "Principal and interest payment delinquencies;"
2. _____ "Non-Payment related defaults, if material;"
3. _____ "Unscheduled draws on debt service reserves reflecting financial difficulties;"
4. _____ "Unscheduled draws on credit enhancements reflecting financial difficulties;"
5. _____ "Substitution of credit or liquidity providers, or their failure to perform;"
6. _____ "Adverse tax opinions, IRS notices or events affecting the tax status of the security;"
7. _____ "Modifications to rights of securities holders, if material;"
8. _____ "Bond calls, if material;" Tender offers;
9. _____ "Defeasances;"
10. ____ "Release, substitution, or sale of property securing repayment of the securities, if material;"
11. ____ "Rating changes;"
12. ____ "Bankruptcy, insolvency, receivership or similar event of the obligated person;"
13. ____ "Merger, consolidation, or acquisition of the obligated person, if material;"
14. ____ "Appointment of a successor or additional trustee, or the change of name of a trustee, if material;"
15. "Incurrence of a financial obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the obligated person, any of which affect security holders, if material;" and
16. ____ "Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the obligated person, any of which reflect financial difficulties."

____________ Failure to provide annual financial information as required.

I hereby represent that I am authorized by the issuer or its agent to distribute this information publicly:

Signature: ____

Name: ________________________ Title: ________________________

Digital Assurance Certification, L.L.C.
315 E. Robinson Street, Suite 300
Orlando, FL 32801
407-515-1100

Date:

EXHIBIT C-2
VOLUNTARY EVENT DISCLOSURE COVER SHEET

This cover sheet and accompanying "voluntary event disclosure" may be sent to the MSRB, pursuant to the Disclosure Dissemination Agent Agreement dated as of June 23, 2021 between the Issuer and DAC.

Issuer's and/or Other Obligated Person's Name:

West Virginia Parkways Authority

Issuer's Six-Digit CUSIP Number: 956510

____

or Nine-Digit CUSIP Number(s) of the bonds to which this notice relates:

____

Number of pages attached:

Description of Voluntary Event Disclosure (Check One):

1. ____ "amendment to continuing disclosure undertaking;"
2. ____ "change in obligated person;"
3. ____ "notice to investors pursuant to bond documents;"
4. ____ "certain communications from the Internal Revenue Service;"
5. ____ "secondary market purchases;"
6. ____ "bid for auction rate or other securities;"
7. ____ "capital or other financing plan;"
8. ____ "litigation/enforcement action;"
9. ____ "change of tender agent, remarketing agent, or other on-going party; and"
10. ____ "other event-based disclosures."

I hereby represent that I am authorized by the issuer or its agent to distribute this information publicly:

Signature: ____

Name: ______________________________ Title: ______________________________

Digital Assurance Certification, L.L.C.
315 E. Robinson Street
Suite 300
Orlando, FL 32801
407-515-1100

Date:

EXHIBIT C-3
VOLUNTARY FINANCIAL DISCLOSURE COVER SHEET

This cover sheet and accompanying "voluntary financial disclosure" may be sent to the MSRB, pursuant to the Disclosure Dissemination Agent Agreement dated as of June 23, 2021 between the West Virginia Parkways Authority and DAC.

Issuer's and/or Other Obligated Person's Name:

Issuer's Six-Digit CUSIP Number: 956510

____

____

or Nine-Digit CUSIP Number(s) of the bonds to which this notice relates:

____

Number of pages attached: ___

____ Description of Voluntary Financial Disclosure (Check One):

1. ___ "quarterly/monthly financial information;"
2. ___ "change in fiscal year/timing of annual disclosure;"
3. ___ "change in accounting standard;"
4. ___ "interim/additional financial information/operating data;"
5. ____ "budget;"
6. ___ "investment/debt/financial policy;"
7. ___ "information provided to rating agency, credit/liquidity provider or other third party;"
8. ___ "consultant reports;" and
9. ___ "other financial/operating data."

I hereby represent that I am authorized by the issuer or its agent to distribute this information publicly:

Signature: ____

Name: ______________________________ Title: __________________________

Digital Assurance Certification, L.L.C.
315 E. Robinson Street
Suite 300
Orlando, FL 32801
407-515-1100

Date:

EXHIBIT D
FORM OF ANNUAL OPERATING DATA

$333,630,000
West Virginia Parkways Authority
Senior Lien Turnpike Toll Revenue Bonds, Series 2021

Report for the Period Ending: June 30, 2021

(This form is provided for example purposes. The Authority shall provide information related to fiscal year ending June 30, 2021 to complete this form in compliance with the provisions of the Disclosure Dissemination Agent Agreement. For each year thereafter, the Authority shall update this form with applicable historical information).

The information contained herein by the West Virginia Parkways Authority (the "Authority") is being provided in compliance with the Authority's contractual undertaking to provide annual financial information and operating data, as required by Rule 15c2-12 of the Securities and Exchange Commission, regarding the above-referenced bonds.

The following table summarizes the Authority's transactions for fiscal years 2000 through 2020.

Transactions (000's)

Fiscal Year	Passenger Vehicles	Commercial Vehicles	Total
2000	25,883	7,697	33,580
2001	25,182	7,767	32,949
2002	26,864	7,625	34,489
2003	26,809	7,607	34,416
2004	27,544	7,866	35,410
2005	27,078	8,308	35,386
2006	26,745	8,437	35,182
2007	26,960	8,265	35,225
2008	26,413	8,018	34,431
2009	26,511	7,098	33,609
2010	27,043	7,329	34,372
2011	27,140	7,328	34,468
2012	27,549	7,515	35,064
2013	26,934	7,462	34,396
2014	27,154	7,621	34,775
2015	28,006	7,890	35,896
2016	28,924	8,057	36,981
2017	29,146	8,250	37,396
2018	28,966	8,484	37,450
2019	28,526	8,709	37,235
2020	24,487	8,342	32,829

The following table summarizes the Authority's toll revenues for fiscal years 2000 through 2020.

Toll Revenues ($ 000's)

Fiscal Year	Passenger Vehicles	Commercial Vehicles	Total
2000	$26,473	$28,683	$55,156
2001	24,984	28,647	53,631
2002	26,670	28,269	54,939
2003	26,616	28,141	54,757
2004	27,388	29,466	56,854
2005	27,165	30,834	57,999
2006	27,856	34,002	61,858
2007	26,908	31,257	58,165
2008	26,831	30,182	57,013
2009	26,584	26,757	53,341
2010	40,685	39,186	79,871
2011	42,066	39,894	81,960
2012	43,280	40,627	83,907
2013	43,429	40,090	83,519
2014	44,032	40,875	84,907
2015	46,309	42,388	88,697
2016	50,333	43,246	93,579
2017	48,847	43,892	92,739
2018	49,766	45,522	95,288
2019	64,925	65,985	130,910
2020	68,727	85,741	154,468

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The following table sets forth the Authority's historical revenues, expenses and debt service coverage for fiscal years 2016 to 2020.

West Virginia Parkways Authority

Historical Revenue, Expenditure and Debt Service Coverage
Dollars in Thousands

	2016	2017	2018	2019	2020
Pledged Revenues					
Toll Revenue	$93,223	$92,436	$95,215	$130,910	$154,468
				1,905	2,187
Total Pledged Revenues	**93,223**	**92,436**	**95,215**	**132,815**	**156,655**
Expenses Paid from Pledged Revenues					
Maintenance	22,090	22,515	19,726	22,418	24,113
Toll	9,566	9,857	9,369	14,143	13,875
Traffic Control (State Police)	3,172	3,231	2,888	3,967	4,074
Administration	4,295	6,018	5,466	3,421	1,966
Total Expenses Paid from Pledged Revenues	**39,123**	**41,621**	**37,449**	**43,949**	**44,028**
Net Revenues Available for Debt Service	**54,100**	**50,815**	**57,766**	**88,866**	**112,627**
Senior Lien Debt Service Requirements					
Senior Lien Debt Service	10,755	10,760	10,140	9,025	10,280
Total Senior Lien Debt Service Requirements	**10,755**	**10,760**	**10,140**	**9,025**	**10,280**
Net Revenues Available after Debt Service	**43,345**	**40,055**	**47,626**	**79,841**	**102,347**
Renewal and Replacement Fund					
Projected Annual Budget Amounts	13,952	12,553	13,184	16,988	18,800
Remaining Cash Flow After Debt Service and R&R	**$29,393**	**$27,502**	**$34,442**	**$62,853**	**$83,547**
Debt Service Coverage Ratio					
Senior Lien Debt Service Coverage	**5.03**	**4.72**	**5.70**	**9.85**	**10.96**
Senior Lien Debt Service and R&R Coverage Ratio	**2.19**	**2.18**	**2.48**	**3.42**	**3.87**

APPENDIX G

BOOK-ENTRY ONLY SYSTEM

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Series 2021 Bonds. The Series 2021 Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Series 2021 Bond certificate will be issued for each maturity of the Series 2021 Bonds and in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC is a limited purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of bond certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation, and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC System is also available to others such as both U.S. and non-U.S. securities, brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a AA+ rating from S&P. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Series 2021 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2021 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2021 Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2021 Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Series 2021 Bonds, except in the event that use of the book-entry system for the Series 2021 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2021 Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2021 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2021 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2021 Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Redemption and other notices shall be sent to DTC. If less than all Series 2021 Bonds of a maturity and series are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such Series 2021 Bonds to be redeemed.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 2021 Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 2021 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal of and interest on the Series 2021 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest on the Series 2021 Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

THE AUTHORITY AND THE TRUSTEE WILL HAVE NO RESPONSIBILITY OR OBLIGATION TO THE DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE PAYMENTS TO OR THE PROVIDING OF NOTICE FOR SUCH DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS, OR BENEFICIAL OWNERS. PAYMENTS MADE TO DTC OR ITS NOMINEE SHALL SATISFY THE AUTHORITY'S OBLIGATION UNDER THE INDENTURE TO THE EXTENT OF SUCH PAYMENTS.

SO LONG AS CEDE & CO., AS NOMINEE OF DTC, IS THE REGISTERED OWNER OF THE SERIES 2021 BONDS, REFERENCES TO THE HOLDERS OF THE SERIES 2021 BONDS OR OWNERS OF THE SERIES 2021 BONDS, SHALL MEAN CEDE & CO., AND SHALL NOT MEAN THE BENEFICIAL OWNERS.

In the event that either (a) the Authority receives notice from DTC to the effect that DTC is unable or unwilling to discharge its responsibilities as a clearing agency for the Series 2021 Bonds or (b) the Authority elects to discontinue its use of DTC as a clearing agency for the Series 2021 Bonds, then the Authority will do or perform or cause to be done or performed all acts or things, not adverse to the rights of the holders of the Series 2021 Bonds, as are necessary or appropriate to discontinue use of DTC as a clearing agency for the Series 2021 Bonds and to transfer the ownership of each of the Series 2021 Bonds to such person or persons, including any clearing agency, as provided in the Indenture. Any expenses of such a discontinuation and transfer, including any expenses of printing new certificates to evidence the Series 2021 Bonds, will be paid by the Authority.

According to DTC, the foregoing information with respect to DTC has been provided to the industry for informational purposes only and is not intended to serve as a representation, warranty or contract modification of any kind.

The information in this section concerning DTC and DTC's book-entry only system has been obtained from DTC. The Authority, the State and the Underwriter take no responsibility for the accuracy thereof.

APPENDIX H

FORM OF MEMORANDUM OF UNDERSTANDING

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MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (this "MOU") effective as of June 1, 2021, is made by and among the STATE OF WEST VIRGINIA, DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, acting by and through its Secretary of Transportation (the "Division"), the WEST VIRGINIA STATE TREASURER (the "Treasurer"), the WEST VIRGINIA PARKWAYS AUTHORITY (the "Parkways Authority"), and UNITED BANK, a Virginia banking corporation, as Trustee (the "Trustee") under that certain Master Trust Indenture dated as of August 1, 2018 (the "Master Trust Indenture"), by and between the Parkways Authority and the Trustee, that certain First Supplemental Trust Indenture dated as of August 1, 2018, by and between the Parkways Authority and Trustee (the "First Supplemental Indenture") and that certain Second Supplemental Trust Indenture dated as of June 1, 2021, by and between the Parkways Authority and Trustee (the "Second Supplemental Indenture", and together with the First Supplemental Indenture, the Master Trust Indenture, the "Indenture").

WITNESSETH THAT:

WHEREAS, Article 16A, Chapter 17 of the Code of West Virginia, 1931, as amended (the "Act"), empowers the Parkways Authority to construct, reconstruct, improve, maintain, repair, and operate parkway projects within the State and empowers the Parkways Authority to issue bonds to provide for the costs of paying all or any part of any one or more such projects;

WHEREAS, under Section 5 of the Act, "parkway projects" include (a) projects to be constructed, reconstructed, improved, maintained, repaired, and operated by the Parkways Authority on the West Virginia Turnpike ("On-Turnpike Authority Projects"), as well as (b) certain projects to be constructed, reconstructed, improved, maintained, repaired, and operated by the Division that are located off the West Virginia Turnpike (the "Turnpike") in ten specific counties identified in the Act, namely, Raleigh County, Fayette County, Wyoming County, Mercer County, Kanawha County, Greenbrier County, Monroe County, Summers County, McDowell County, and Nicholas County (collectively, the "Project Counties"), to the extent allowed under the Act and applicable federal laws (collectively, "Off-Turnpike WVDOH Projects", and together with On-Turnpike Authority Projects, "Parkway Projects");

WHEREAS, the Division, the Treasurer, the Parkways Authority and the Trustee entered into that certain Memorandum of Understanding effective as of August 1, 2018 (the "2018 MOU"), in connection with the Parkways Authority's Senior Lien Turnpike Toll Revenue Bonds, Series 2018 (the "Series 2018 Bonds");

WHEREAS, on May 20, 2021, the Parkways Authority, pursuant to the Act, adopted a Bond Authorizing Resolution (the "Resolution") that, among other things, authorized the issuance of its Senior Lien Turnpike Toll Revenue Bonds, Series 2021, in an amount not to exceed $333,630,000 (the "Series 2021 Bonds");

WHEREAS, as authorized by the Act and the Resolution, a portion of the proceeds of such Series 2021 Bonds will be deposited in the State Treasury within the State Road Fund, as hereinafter further provided, to pay all or a portion of the costs of certain Off-Turnpike WVDOH

Projects which, pursuant to the Act, were projects that were referenced in the Division of Highways' Statewide Transportation Improvement Plan as it existed on June 1, 2017, or in the West Virginia Division of Highways SOS Transportation Investment Program Candidate Project List dated May 3, 2017 (collectively, the "Potential Off-Turnpike WVDOH Projects"), and located within the Project Counties;

WHEREAS, Section 11 of the Act requires a special account to be established for such proceeds, within the State Road Fund, which special account is to be designated as the "State Road Construction Account" (the "State Road Construction Account") and held in the State Treasury, to be expended by the Division on Off-Turnpike WVDOH Projects;

WHEREAS, the State Road Construction Account is to include all amounts allocated and disbursed to the Division by, or at the direction of, the Parkways Authority for Off-Turnpike WVDOH Projects, including a portion of the proceeds of Series 2021 Bonds issued as provided in the Act;

WHEREAS, Section 103 and Sections 141 to 150 of the Internal Revenue Code of 1986, as amended (the "Federal Tax Requirements"), impose certain requirements on the expenditure and investment of proceeds of tax-exempt municipal securities and require compliance with those requirements in order for interest on an issue of tax-exempt securities to continue to remain so excludable, and such requirements relate to the character of the facilities to be financed with the proceeds of such issue, the expenditure of funds with respect to the projects to be financed with such proceeds, and the rebate to the Federal Government of certain investment earnings with respect to such proceeds;

WHEREAS, the Parkways Authority, as successor to the West Virginia Turnpike Commission, the Division and Federal Highway Administration of the United States Division of Transportation ("FHWA") are parties to that certain Memorandum of Supplemental Agreement, dated December 13, 1988 (the "1988 Tri-Partite Agreement"), as amended and restated by that certain Amended and Restated Agreement dated as of June 1, 2018 (the "2018 Tri-Partite Agreement", and together with the 1988 Tri-Partite Agreement, the "Tri-Partite Agreement"), that allows for such use of Turnpike toll revenues;

WHEREAS, the Resolution ratified and confirmed the execution of the Master Trust Indenture and authorized and approved the Second Supplemental Indenture and other documents relating to the Series 2021 Bonds, including this MOU;

WHEREAS, the parties hereto wish to enter into this MOU for the purposes, and upon the terms and conditions, set forth herein.

NOW THEREFORE, in consideration of the foregoing and other mutual benefits among them, the parties hereto do hereby covenant and agree as follows:

1. The Division shall create or cause to be created in the State Road Fund (a) the State Road Construction Account as contemplated by the Act and (b) a sub-account within such State Road Construction Account for certain proceeds of the Series 2021 Bonds, which sub-account shall be designated as the "Series 2021 Sub-Account" as contemplated by the Indenture. The Parkways Authority and the Treasurer shall assist, and cooperate with, the

Division in the creation and establishment of the State Road Construction Account and the Series 2021 Sub-Account, respectively. The Division and Treasurer may use a different name in establishing such sub-account in the OASIS system of the State (including, for example only, "WVPA Turnpike Bonds 2021 WVSTO" or a similar name), and the parties hereby confirm and acknowledge that (i) such sub-Account as named within OASIS is and shall be such "Series 2021 Sub-Account" as used in this MOU, and (ii) the Division in its reports, books and records will refer to such sub-account in a way that makes this clear.

2. Upon receipt of the proceeds of the Series 2021 Bonds that have been designated by the Parkways Authority to finance the Off-Turnpike WVDOH Projects identified in Exhibit A hereto (together with substituted and additional projects as permitted by the provisions of Section 3 of this MOU, below, the "Series 2021 Off-Turnpike WVDOH Projects"), which proceeds are estimated to be in the amount of $423,633,133.10 and shall initially be deposited along with the Parkways Authority's equity contribution and other net proceeds of the Series 2021 Bonds with the Trustee, as provided in the Second Supplemental Indenture, and the Trustee, in accordance with the terms of the Indenture, shall immediately transfer $422,881,498.60 of such proceeds to the State Treasurer for deposit into said State Road Construction Account in the Series 2021 Sub-Account.

3. The Division agrees to undertake the Series 2021 Off-Turnpike WVDOH Projects and to pay the costs thereof from the amounts available therefor in the Series 2021 Sub-Account (including investment earnings, if any) within the State Road Construction Account; provided, however, that if such amounts are not sufficient to complete such projects, then the Division agrees to provide such additional funding as shall be necessary to complete such projects and further agrees and acknowledges that the Parkways Authority shall have no liability or responsibility for providing any additional funding for such projects beyond the initial deposit into the Series 2021 Sub-Account required under Section 2 of this MOU; provided, further, that, if necessary to spend the amounts available to fund the Series 2021 Off-Turnpike WVDOH Projects (for example, without limitation, in the event that, after such projects are bid out, the actual cost thereof turns out to be lower than the Division's original engineer's estimates), or for other documented good cause, the Division shall substitute and/or identify and designate additional Off-Turnpike WVDOH Projects from Potential Off-Turnpike WVDOH Projects approved in the Resolution if such substitute and/or additional projects are first approved by Bond Counsel rendering approving opinions with respect to the Series 2021 Bonds as Off-Turnpike WVDOH Projects eligible to be financed in accordance with the Act, the Tri-Partite Agreement and the Federal Tax Requirements; and provided, further, that the Division shall not use any amounts in the Series 2021 Sub-Account (including without limitation the initial deposit of proceeds of the Series 2021 Bond and any investment earnings) for any other purpose or any other projects. For the avoidance of doubt, the Division is responsible to provide any additional funding necessary to complete the Series 2021 Off-Turnpike WVDOH Projects over and above the certain proceeds of the Series 2021 Bonds, described in Section 2 above, designated to be immediately transferred by the Trustee to the State Treasurer for deposit into the State Road Construction Account, and, for the avoidance of doubt, the Parkways Authority shall not be responsible to find or provide such additional funds to the Division as may be necessary to complete the Series 2021 Off-Turnpike WVDOH Projects.

4. The Division expects to enter into, within one year of the date hereof, binding commitments for each of the Parkways Projects which will be financed with amounts of Bond proceeds in the Series 2021 Sub-Account within the State Road Construction Account, and the Division further expects that work on the projects will commence and proceed with due diligence to completion. It is reasonably expected by the Division that at least 85% of the proceeds in the Series 2021 Sub-Account within the State Road Construction Account will be disbursed by the Division within five years of the date hereof to pay the costs of governmentally owned projects that are not to be used in private trades or businesses and that do not represent loans to nongovernmental persons. The Division shall deliver to the Parkways Authority an executed engineering certificate, in form and substance satisfactory to Bond Counsel (as defined in the Indenture), certifying that that at least five years is necessary to complete construction of the applicable Series 2021 Off-Road WVDOH Projects, in connection with the issuance and sale of the Series 2021 Bonds and, if so requested by Bond Counsel, in connection with any substitution or addition of Series 2021 Off-Turnpike WVDOH Projects.

5. Pending disbursement for the purposes of Paragraphs 3 and 4 above, proceeds of the Series 2021 Bonds shall be invested in such manner as shall not result in a violation of the Federal Tax Requirements and will only be invested in Permitted Investments, as defined by the Master Trust Indenture. The Division will cause the State Treasurer to segregate such investments (and any other or substitute investments as herein permitted) from all other investments of the Division and the State and will preserve and protect such investments (or other or substitute investments) from any and all claims. Such investments will not be sold, assigned or otherwise disposed of except as herein provided.

6. The Division and/or Treasurer will keep, or cause to be kept, detailed records documenting (a) all Receipts into the Series 2021 Sub-Account, (b) all investments of funds in said Sub-Account and any investment earnings, (c) all disbursements and uses of such Receipts and earnings from investments, and (d) that all proceeds deposited into said State Road Construction Account in the Series 2021 Sub-Account were dispersed only for permissible and eligible costs and expenses related to Series 2021 Off-Turnpike WVDOH Projects; and the Division and/or Treasurer shall provide or make available the same such upon request to the Parkways Authority and Bond Counsel (and to the Parkways Authority's auditors and its arbitrage rebate consultant) to allow compliance by the Parkways Authority (and the Division, as applicable) with the Federal Tax Requirements, the Act, or the terms and conditions of the Indenture and this MOU.

7. The Parkways Authority will prepare and file with the Internal Revenue Service such reports as are necessary to comply with the Federal Tax Requirements and shall make Rebate Payments as required by Section 148 of the Federal Tax Requirements from amounts available therefor and permitted pursuant to the Tri-Partite Agreement. In the event such amounts are not available for such purpose, the Division, to the extent that amounts derived from the proceeds of the Series 2021 Bonds continue to be held in the Series 2021 Sub-Account of the State Road Construction Account, will direct the application of such amounts, and investment earnings, if any, and shall make available other amounts, to advance funds to the Parkways Authority in order to allow the Parkways Authority to make such Rebate Payments on a timely basis, and the Treasurer shall make such transfers to the Parkways Authority for such purpose.

8. The Division shall take all necessary steps to avoid delay in the expenditure of the proceeds of the Series 2021 Bonds deposited in the State Road Construction Account as provided in Section 2 hereof. Subject to the foregoing, the Division agrees to liquidate investments in the State Road Construction Account to the extent necessary in order to permit the Parkways Authority to comply with the Federal Tax Requirements.

9. The parties hereto acknowledge that this MOU is entered into in part to induce the purchase of the Series 2021 Bonds by investors and agree to the enforcement of the provisions hereof by or on behalf of the owners of the Series 2021 Bonds.

10. This MOU may be amended, modified, restated or supplemented by the parties from time to time, including for the purpose of complying with Section 11 of the Act as to proceeds of any Additional Bonds under the Indenture that may be issued to fund, in whole or in part, future Off-Turnpike WVDOH Projects; provided, however, that this MOU may be amended, modified or supplemented only by an agreement in writing signed by each party hereto.

[*Signature page follows this page.*]

IN WITNESS WHEREOF, the parties hereto have caused this Memorandum of Understanding to be executed by their duly authorized officers as of the date above first written.

STATE OF WEST VIRGINIA, DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, acting by and through its Secretary of Transportation

By: ______________________________
Name: Byrd E. White, III
Title: Secretary of Transportation

WEST VIRGINIA STATE TREASURER

By: ______________________________
Name: Riley Moore
Title: State Treasurer

WEST VIRGINIA PARKWAYS AUTHORITY

By: ______________________________
Name: Jeffrey A. Miller
Title: Executive Director

UNITED BANK

By: ______________________________
Name: Thomas J. Provenzano
Title: Vice President

Exhibit A

Eligible Parkways Projects

APPENDIX I

AMENDED AND RESTATED TRIPARTITE AGREEMENT

AMENDED AND RESTATED AGREEMENT

BETWEEN

THE WEST VIRGINIA DIVISION OF HIGHWAYS,

THE WEST VIRGINIA PARKWAYS AUTHORITY

AND

THE FEDERAL HIGHWAY ADMINISTRATION,

DEPARTMENT OF TRANSPORTATION

THIS AGREEMENT, entered into this 1st day of ~~May~~ June, 2018, by and between the West Virginia Division of Highways, a Corporation, and successor to the West Virginia Department of Highways, under the jurisdiction of the West Virginia Department of Transportation, hereinafter referred to as the "DEPARTMENT," the West Virginia Parkways Authority (successor in interest by statute to the West Virginia Turnpike Commission and the West Virginia Parkways Economic Development and Tourism Authority), hereinafter referred to as the "PARKWAYS AUTHORITY," and the Federal Highway Administration, hereinafter referred to as "FHWA."

WHEREAS, a portion of Interstate 77 extending from its interchange with U.S. 460 at Princeton to Charleston in the State of West Virginia (the "West Virginia Turnpike") was a two-lane toll road as of June 30, 1968; and

WHEREAS, financing of said toll road and facilities was accomplished through issuance of revenue bonds; and

WHEREAS, the FHWA had determined that it was in the public interest and in furtherance of the national transportation goals and objectives to bring the PARKWAYS AUTHORITY'S two-lane toll road up to the geometric and construction standards for the National System of Interstate and Defense Highways in order to provide for the safe use of such highway as part of the Interstate System; and

WHEREAS, the DEPARTMENT has requested participation in the reconstruction and improvement of said toll road pursuant to Title 23, United States Code, Subsection 129(e), as enacted in Section 133 of the Federal-Aid Highway Act of 1970, 84 Stat. 1732-33; and

WHEREAS, Public Law 100-17, Section 120(c) authorized the Secretary of Transportation upon the request of the appropriate state highway department of the West Virginia Turnpike to void preexisting Section 129(e) agreements; and

WHEREAS, Section 129 of Division L, Title I of Public Law 115-141, the Consolidated Appropriations Act, 2018, amended Section 1012(e) of Public Law 102-240 by adding subsection (2); and

WHEREAS, Section 1012(e)(2), as amended, authorizes the Secretary of Transportation and, via delegation under 49 CFR1.85(c)(19) and 1.85(c)(22), the Administrator of FHWA to modify the Original Agreement (as defined below) entered into under Section 120(c) of Public Law 100-17 upon the request of the DEPARTMENT; and

WHEREAS, the DEPARTMENT has requested, pursuant to Section 1012(e)(2) of Public Law 102-240, that the Section 129(e) agreement between the DEPARTMENT, PARKWAYS AUTHORITY, and FHWA dated December 13, 1988 (the "Original Agreement"), be modified by the Secretary or her duly authorized representative.

NOW THEREFORE, the parties hereto agree as follows:

1. As requested by the DEPARTMENT, pursuant to Section 1012(e)(2) of Public Law 102-240, the Original Agreement is modified and restated, and upon the execution of this agreement by all three parties hereto, this agreement shall be the document under which the parties' rights, duties, and responsibilities will be governed after its execution.
2. The said toll road on Interstate 77, extending from Princeton to Charleston in the State of West Virginia, (again, the "West Virginia Turnpike") was reconstructed and improved on the same basis and in the same manner as in the construction and maintenance of free Interstate System highways under Chapter I of Title 23 of the United States Code.
3. The DEPARTMENT and PARKWAYS AUTHORITY entered into an agreement for the construction and improvement of said toll road in 1971 in order to enable the DEPARTMENT and PARKWAYS AUTHORITY to comply with the

requirements of this agreement and in accordance with Chapter 17, Article 16A, Section 5, Subsections (12) and (13), of the Official Code of West Virginia, 1931, as it then existed in 1971, to provide for the safe use of the toll road as part of the Interstate System.

4. The PARKWAYS AUTHORITY and the DEPARTMENT agree that the toll revenues from the operation of the West Virginia Turnpike will be used on the West Virginia Turnpike for amounts necessary for operation and maintenance; debt service; reasonable return on investment of any private person or entity that may be authorized by the State to operate and maintain the facility; and any cost necessary for improvement, including reconstruction, resurfacing, restoration, and rehabilitation.

5. The parties agree that the use of excess toll revenues (i.e., the toll revenues in excess of the herein stated costs in item number 4, above) are authorized to be used for any other purpose for which Federal funds may be obligated under Title 23 of the United States Code, provided that the PARKWAYS AUTHORITY and the DEPARTMENT certify annually that the West Virginia Turnpike is being adequately maintained and is in compliance with the audit requirements in section 129(a)(3)(B) of Title 23 of the United States Code.

6. The PARKWAYS AUTHORITY and the DEPARTMENT agree to comply with the annual audit requirements in section 129(a)(3)(B) of Title 23 of the United States Code, which require the PARKWAYS AUTHORITY to conduct or have an independent auditor conduct an annual audit of the West Virginia Turnpike records to verify adequate maintenance and compliance with section 129 (a)(1)(3)(A) of Title 23 of the United States Code. Additionally, the PARKWAYS AUTHORITY and the DEPARTMENT agree, upon reasonable notice, to make all records pertaining to the West Virginia Turnpike available for audit by the Secretary of Transportation or an authorized representative of the FHWA.

7. The PARKWAYS AUTHORITY agrees that any bonds issued or any cost incurred under this agreement will not cause tolls to be increased to an unreasonable amount.

IN WITNESS WHEREOF, the West Virginia Division of Highways has caused its corporate name to be signed hereto by Thomas J. Smith, P.E., Secretary of the West Virginia Department of Transportation and West Virginia Commissioner of Highways, and the West Virginia Parkways Authority has caused this agreement to be signed by The Honorable James C. Justice II, Governor of the State of West Virginia and Chairman of the West Virginia Parkways Authority, and its official seal affixed hereto by its Secretary, both thereunto duly authorized; and Federal Highway Administration, U.S. Department of Transportation, has caused this agreement to be executed by Brandye L. Hendrickson, its Acting Administrator as of the day and year first written above.

ATTEST:

Carla P. Rotsch
Title – Business Manager

WEST VIRGINIA DIVISION OF
HIGHWAYS, A CORPORATION

Thomas J. Smith
Thomas J. Smith, P.E.
Commissioner of Highways

ATTEST:

Title – Secretary

WEST VIRGINIA PARKWAYS AUTHORITY

Jim Justice
James C. Justice II
Chairman

FEDERAL HIGHWAY ADMINISTRATION

Brandye L. Hendrickson
Brandye L. Hendrickson
Acting Administrator

WEST VIRGINIA PARKWAYS AUTHORITY • SENIOR LIEN TURNPIKE TOLL REVENUE BONDS, SERIES 2021

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