NEW ISSUE **RATINGS: (See "RATINGS" herein)**
Book Entry Only

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law, (i) interest on the 2020 Bonds is not excluded from gross income for federal tax purposes, and (ii) interest on, and any profit made on the sale, exchange or other disposition of, the 2020 Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. For a more complete discussion of the tax aspects, see "TAX MATTERS" herein.

$81,465,000
STATE OF OHIO
TURNPIKE REVENUE REFUNDING BONDS,
2020 SERIES A (FEDERALLY TAXABLE)

and

$376,850,000
STATE OF OHIO
TURNPIKE JUNIOR LIEN REVENUE REFUNDING BONDS,
2020 SERIES A (FEDERALLY TAXABLE)
(INFRASTRUCTURE PROJECTS)

ISSUED BY THE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

Dated: Date of Delivery **Due: February 15 in the years shown herein**

The State of Ohio Turnpike Revenue Refunding Bonds, 2020 Series A (Federally Taxable) (the "2020 Senior Lien Bonds") are being issued by the Ohio Turnpike and Infrastructure Commission, a body both corporate and politic of the State of Ohio (the "Commission"), under the Amended and Restated Master Trust Agreement (Eighteenth Supplemental Trust Agreement) dated as of April 8, 2013, as amended and supplemented by various supplemental trust agreements, including the Twenty-Third Supplemental Trust Agreement dated as of February 1, 2020 (collectively, the "Senior Lien Trust Agreement"), each between the Commission and The Huntington National Bank, Columbus, Ohio, as trustee (the "Senior Lien Trustee"). The 2020 Senior Lien Bonds are being issued for the purpose of providing funds to advance refund all of the outstanding State of Ohio Turnpike Revenue Bonds, 2013 Series A, and to pay costs of issuance of the 2020 Senior Lien Bonds.

The State of Ohio Turnpike Junior Lien Revenue Refunding Bonds, 2020 Series A (Federally Taxable) (Infrastructure Projects) (the "2020 Junior Lien Bonds") (the 2020 Senior Lien Bonds and the 2020 Junior Lien Bonds are referred to collectively herein as the "2020 Bonds") are being issued by the Commission under a Junior Lien Master Trust Agreement, dated as of August 1, 2013, as supplemented by the First Supplemental Junior Lien Trust Agreement dated as of August 1, 2013, the Second Supplemental Junior Lien Trust Agreement dated as of February 15, 2018 and the Third Supplemental Junior Lien Trust Agreement dated as of February 1, 2020 (collectively, the "Junior Lien Trust Agreement"), each between the Commission and The Huntington National Bank, Columbus, Ohio, as trustee (the "Junior Lien Trustee"). The 2020 Junior Lien Bonds are being issued for the purpose of providing funds to advance refund a portion of the outstanding State of Ohio Turnpike Junior Lien Revenue Bonds, 2013 Series A (Infrastructure Projects), and to pay costs of issuance of the 2020 Junior Lien Bonds.

The 2020 Bonds will be dated the date of initial issuance and delivery thereof and will bear interest from their delivery date at the rates shown on the inside front cover, calculated on the basis of a year of 360 days consisting of twelve 30 day months. The 2020 Bonds shall be issued in the denominations of $5,000 and integral multiples thereof. The inside cover page of this Official Statement contains information concerning the maturity schedules, principal amounts, interest rates, prices and yields of the 2020 Bonds.

The 2020 Bonds are subject to redemption prior to maturity as described herein. See "DESCRIPTION OF THE 2020 BONDS - Redemption of 2020 Bonds" herein.

THE 2020 BONDS AND THE INTEREST THEREON WILL BE SPECIAL OBLIGATIONS OF THE STATE OF OHIO ISSUED BY THE COMMISSION AND WILL BE PAYABLE SOLELY FROM THE SYSTEM PLEDGED REVENUES. NOTHING IN THE 2020 BONDS, THE SENIOR LIEN TRUST AGREEMENT, THE JUNIOR LIEN TRUST AGREEMENT OR ANY OTHER DOCUMENT WILL REPRESENT OR CONSTITUTE GENERAL OBLIGATIONS, DEBT OR BONDED INDEBTEDNESS OF THE COMMISSION, THE STATE OF OHIO OR ANY POLITICAL SUBDIVISION OR AGENCY THEREOF, AND THE HOLDERS OR OWNERS OF THE 2020 BONDS WILL NOT BE GIVEN THE RIGHT, AND HAVE NO RIGHT, TO HAVE EXCISE TAXES, AD VALOREM TAXES OR OTHER TAXES LEVIED BY THE STATE OF OHIO OR THE TAXING AUTHORITY OF ANY OTHER POLITICAL SUBDIVISION FOR THE PAYMENT OF THE PRINCIPAL OF OR INTEREST OR REDEMPTION PREMIUM, IF ANY, ON THE 2020 BONDS. NEITHER THE GENERAL CREDIT, FAITH NOR RESOURCES OF THE COMMISSION OR THE STATE OF OHIO, OR ANY POLITICAL SUBDIVISION OR AGENCY THEREOF, ARE PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST OR REDEMPTION PREMIUM, IF ANY, ON THE 2020 BONDS.

The 2020 Senior Lien Bonds will be payable from and secured by a pledge of and a senior lien on System Pledged Revenues, as defined in the Senior Lien Trust Agreement, on parity with other outstanding and any additional Senior Lien Bonds (as herein defined) that may be issued under the Senior Lien Trust Agreement, and the 2020 Junior Lien Bonds will be payable from and secured by a junior pledge of and a junior lien on the System Pledged Revenues and a first pledge and lien on the Junior Lien Special Funds, as defined in the Junior Lien Trust Agreement, on a parity with any additional Junior Lien Bonds (as herein defined) that may be issued under the Junior Lien Trust Agreement. Principal and interest payments on the 2020 Junior Lien Bonds are paid from System Pledged Revenues after the payment of principal and interest on all outstanding Senior Lien Bonds (and any applicable payment to the Debt Service Reserve Account of the Senior Lien Debt Service Fund), and thus the 2020 Junior Lien Bonds are subordinate to the 2020 Senior Lien Bonds and all other Senior Lien Bonds issued or to be issued under the Senior Lien Trust Agreement. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS" herein.

The 2020 Bonds are offered when, as and if issued and received by the Underwriters, subject to prior sale and to withdrawal or modification of the offer without notice. Certain legal matters relating to the issuance of the 2020 Bonds are subject to the approving opinions of Squire Patton Boggs (US) LLP, Bond Counsel (see "LEGAL MATTERS" and "TAX MATTERS" herein). Certain legal matters will be passed upon for the Commission by its General Counsel, Jennifer L. Stueber, Esq. Certain legal matters will be passed upon for the Underwriters by Tucker Ellis LLP. The 2020 Bonds are expected to be available for delivery through The Depository Trust Company on or about February 13, 2020.

Citigroup **BofA Securities**

Fifth Third Securities, Inc. **KeyBanc Capital Markets Inc.** **Loop Capital Markets**

Date: January 29, 2020

$81,465,000
STATE OF OHIO
TURNPIKE REVENUE REFUNDING BONDS,
2020 SERIES A (FEDERALLY TAXABLE)

Maturity Date (February 15)	Principal Amount	Interest Rate	Price	CUSIP*
2032	$2,255,000	2.501%	100.000	67760HNC1
2033	2,315,000	2.601%	100.000	67760HND9
2034	2,375,000	2.651%	100.000	67760HNE7
2035	2,435,000	2.731%	100.000	67760HNF4
2036	2,500,000	2.801%	100.000	67760HNG2

$69,585,000 3.196% Term Bond Maturing February 15, 2048, Price 100.000, Yield 3.196% CUSIP 67760HNH0*

$376,850,000
STATE OF OHIO
TURNPIKE JUNIOR LIEN REVENUE REFUNDING BONDS, 2020 SERIES A (FEDERALLY TAXABLE)
(INFRASTRUCTURE PROJECTS)

Maturity Date (February 15)	Principal Amount	Interest Rate	Price	CUSIP*
2021	$1,990,000	1.667%	100.000	67760HMP3
2022	2,105,000	1.717%	100.000	67760HMQ1
2023	2,140,000	1.746%	100.000	67760HMR9
2024	2,175,000	1.817%	100.000	67760HMS7
2025	2,215,000	1.947%	100.000	67760HMT5
2026	2,260,000	2.043%	100.000	67760HMU2
2027	2,305,000	2.143%	100.000	67760HMV0
2028	2,355,000	2.251%	100.000	67760HMW8
2029	2,410,000	2.351%	100.000	67760HMX6
2030	2,465,000	2.401%	100.000	67760HMY4
2031	2,525,000	2.451%	100.000	67760HMZ1

$12,155,000 3.096% Term Bond Maturing February 15, 2040, Price 100.000, Yield 3.096% CUSIP 67760HNA5*

$339,750,000 3.216% Term Bond Maturing February 15, 2048, Price 100.000, Yield 3.216% CUSIP 67760HNB3*

* CUSIP (Committee on Uniform Securities Identification Procedures) numbers have been assigned by an organization not affiliated with the Commission or the Underwriters, and such parties are not responsible for the selection or use of the CUSIP numbers. The CUSIP numbers are included solely for the convenience of bondholders and no representation is made as to the correctness of such CUSIP numbers. CUSIP numbers assigned to securities may be changed during the term of such securities based on a number of factors including, but not limited to, the refunding or defeasance of such issue or the use of secondary market financial products. None of the Commission or the Underwriters has agreed to, and there is no duty or obligation to, update this Official Statement to reflect any change or correction in the CUSIP numbers set forth above

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

MEMBERS

Name	Title	Membership Term Expires
Jerry N. Hruby	Chairman*	6/30/21
Timothy J. Paradiso	Vice-Chairman*	6/30/23
Michael A. Peterson	Secretary-Treasurer*	6/30/20
Sandra K. Barber	Member	6/30/24
Guy C. Coviello	Member	6/30/23
Vickie Eaton Johnson	Member	6/30/22
Jack Marchbanks, Ph.D.	Ex-Officio Member	(a)
Kimberly Murnieks	Ex-Officio Non-Voting Member	(b)
Sen. Rob McColley	Non-Voting Member	(c)
Rep. Dave Greenspan	Non-Voting Member	(d)

* Officers are elected for four-year terms; the current terms expire on June 30, 2023.
(a) While Director of Ohio Department of Transportation
(b) While Director of Office of Budget and Management
(c) Appointed by President of Ohio Senate
(d) Appointed by Speaker of Ohio House of Representatives

EXECUTIVE STAFF

FERZAN M. AHMED, P.E., Executive Director
TODD AUDET, Chief of Staff
JENNIFER L. STUEBER, General Counsel
MARTIN S. SEEKELY, Deputy Executive Director, Chief Financial Officer/Comptroller
MATTHEW COLE, Director of Administration
ANTHONY YACOBUCCI, Chief Engineer
DAVID J. MILLER, Director of Audit and Internal Control
SHARON D. ISAAC, Director of Toll Operations‡
ADAM L. GREENSLADE, Director of Governmental Affairs, Marketing and Communications
BRIAN KELLEY, Chief Technology Officer
ANDREW HERBERGER, Director of Service Plaza Operations

BOND COUNSEL

SQUIRE PATTON BOGGS (US) LLP
Cleveland, Ohio

MUNICIPAL ADVISOR

PFM FINANCIAL ADVISORS LLC
Cleveland, Ohio

TRUSTEE

THE HUNTINGTON NATIONAL BANK
Columbus, Ohio

INDEPENDENT AUDITORS

PLANTE & MORAN, PLLC
Columbus, Ohio

CONSULTING ENGINEERS

AECOM TECHNICAL SERVICES, INC.
Akron, Ohio

TRAFFIC CONSULTANT

JACOBS ENGINEERING GROUP INC.
Cincinnati, Ohio

‡ Sharon Isaac has announced her resignation effective as of January 31, 2020. Laurie Davis will be promoted to Director of Toll Operations on February 1, 2020.

This Official Statement does not constitute an offering of any security other than the original offering of bonds (the "2020 Bonds") of the State of Ohio (the "State") by the Ohio Turnpike and Infrastructure Commission (the "Commission") identified on the cover hereof. No person has been authorized by the State or the Commission to give any information or to make any representation, other than that contained in this Official Statement, and if given or made, such other information or representation not so authorized must not be relied upon as having been given or authorized by the Commission or the State. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, and there shall not be any sale of the 2020 Bonds by any person in any jurisdiction in which it is unlawful to make such offer, solicitation or sale.

The information and expressions of opinions 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 financial position or other aspects of the Commission since the date hereof.

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, INCLUDING THE EXHIBITS, CONTAINS FORECASTS, PROJECTIONS AND ESTIMATES THAT ARE BASED ON CURRENT EXPECTATIONS OR ASSUMPTIONS. IF AND WHEN INCLUDED IN THIS OFFICIAL STATEMENT, THE WORDS "EXPECTS," "FORECASTS," "PROJECTS," "INTENDS," "ANTICIPATES," "ESTIMATES," "ASSUMES" AND ANALOGOUS EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. ANY SUCH STATEMENTS INHERENTLY ARE SUBJECT TO A VARIETY OF RISKS AND UNCERTAINTIES THAT COULD CAUSE ACTUAL RESULTS TO DIFFER MATERIALLY FROM THOSE THAT HAVE BEEN PROJECTED. SUCH RISKS AND UNCERTAINTIES INCLUDE, AMONG OTHERS, GENERAL ECONOMIC AND BUSINESS CONDITIONS, CHANGES IN POLITICAL, SOCIAL AND ECONOMIC CONDITIONS, REGULATORY INITIATIVES AND COMPLIANCE WITH GOVERNMENTAL REGULATIONS, LITIGATION AND VARIOUS OTHER EVENTS, CONDITIONS AND CIRCUMSTANCES, MANY OF WHICH ARE BEYOND THE CONTROL OF THE COMMISSION. THESE FORWARD-LOOKING STATEMENTS SPEAK ONLY AS OF THE DATE OF THIS OFFICIAL STATEMENT. THE COMMISSION DOES NOT PLAN TO ISSUE ANY UPDATE OR REVISION TO ANY FORWARD-LOOKING STATEMENT CONTAINED HEREIN TO REFLECT ANY CHANGE IN THE COMMISSION'S EXPECTATIONS WITH REGARD THERETO OR ANY CHANGE IN EVENTS, CONDITIONS OR CIRCUMSTANCES ON WHICH ANY SUCH STATEMENT IS BASED, SUBJECT TO ITS CONTRACTUAL OBLIGATIONS OF CONTINUING DISCLOSURE HEREIN.

THE 2020 BONDS HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICES OF THE 2020 BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

The 2020 Bonds, like all obligations of state and local governments or their agencies and authorities, are subject to changes in value due to changes in the condition of the market for government obligations or changes in the financial position of the Commission due to the economy or otherwise. It is possible under certain market or economic conditions, or if the financial condition of the Commission should change, that the market price of the 2020 Bonds could be adversely affected. With regard to the risk involved in a loss of the exemption of the 2020 Bonds, and the income thereon, from Ohio taxation, see "INVESTMENT CONSIDERATIONS – Changes in Ohio Tax Law" herein.

With regard to the risk involved in a downward revision or withdrawal of the ratings for the 2020 Bonds, see "RATINGS" herein.

INFORMATION CONCERNING OFFERING RESTRICTIONS IN CERTAIN JURISDICTIONS OUTSIDE THE UNITED STATES

THE COMMISSION MAKES NO REPRESENTATION AS TO THE ACCURACY, COMPLETENESS OR ADEQUACY OF THE INFORMATION UNDER THIS CAPTION. THE COMMISSION SHALL NOT HAVE ANY RESPONSIBILITY FOR COMPLIANCE WITH ANY RULES OR RESTRICTIONS OF ANY JURISDICTION RELATING TO THE OFFERING, SOLICITATION, AND/OR SALE OF THE BONDS.

IN CONNECTION WITH THE OFFERINGS AND SALES OF THE BONDS, NO ACTION HAS BEEN TAKEN BY THE COMMISSION THAT WOULD PERMIT THE PUBLIC OFFERING OF THE BONDS, OR POSSESSION OR DISTRIBUTION OF ANY INFORMATION RELATING TO THE PRICING OF THE BONDS, THIS OFFICIAL STATEMENT OR ANY OTHER OFFERING OR PUBLICITY MATERIAL RELATING TO THE BONDS, IN ANY NON-U.S. JURISDICTION WHERE ACTION FOR THAT PURPOSE IS REQUIRED.

NOTICE TO INVESTORS IN THE EUROPEAN ECONOMIC AREA ("EEA")

THIS OFFICIAL STATEMENT IS NOT A PROSPECTUS FOR THE PURPOSES OF EUROPEAN COMMISSION REGULATION 809/2004 OR EUROPEAN COMMISSION DIRECTIVE 2003/71/EC (AS AMENDED, INCLUDING BY EUROPEAN COMMISSION DIRECTIVE 2010/73/EU, AS APPLICABLE) (THE "PROSPECTUS DIRECTIVE"). IT HAS BEEN PREPARED ON THE BASIS THAT ALL OFFERS OF THE BONDS WILL BE MADE PURSUANT TO AN EXEMPTION UNDER ARTICLE 3 OF THE PROSPECTUS DIRECTIVE, AS IMPLEMENTED IN MEMBER STATES OF THE EEA, FROM THE REQUIREMENT TO PRODUCE A PROSPECTUS FOR SUCH OFFERS. THIS OFFICIAL STATEMENT IS ONLY ADDRESSED TO AND DIRECTED AT PERSONS IN MEMBER STATES OF THE EEA WHO ARE "QUALIFIED INVESTORS" WITHIN THE MEANING OF ARTICLE 2(1)(E) OF THE PROSPECTUS DIRECTIVE AND ANY RELEVANT IMPLEMENTING MEASURE IN EACH MEMBER STATE OF THE EEA ("QUALIFIED INVESTORS"). THIS OFFICIAL STATEMENT MUST NOT BE ACTED ON OR RELIED ON IN ANY SUCH MEMBER STATE OF THE EEA BY PERSONS WHO ARE NOT QUALIFIED INVESTORS. ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS OFFICIAL STATEMENT RELATES IS AVAILABLE ONLY TO QUALIFIED INVESTORS IN ANY MEMBER STATE OF THE EEA AND WILL NOT BE ENGAGED IN WITH ANY OTHER PERSONS.

NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

THIS OFFICIAL STATEMENT HAS NOT BEEN APPROVED FOR THE PURPOSES OF SECTION 21 OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 ("FSMA") AND DOES NOT CONSTITUTE AN OFFER TO THE PUBLIC IN ACCORDANCE WITH THE PROVISIONS OF SECTION 85 OF THE FSMA. THIS OFFICIAL STATEMENT IS FOR DISTRIBUTION ONLY TO, AND IS DIRECTED SOLELY AT, PERSONS IN THE UNITED KINGDOM THAT ARE QUALIFIED INVESTORS WITHIN THE MEANING OF ARTICLE 2(1)(E) OF THE PROSPECTUS DIRECTIVE WHO ARE ALSO (I) INVESTMENT PROFESSIONALS, AS SUCH TERM IS DEFINED IN ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005, AS AMENDED (THE "FINANCIAL PROMOTION ORDER") OR (I) HIGH NET WORTH ENTITIES, AND OTHER PERSONS TO WHOM IT MAY LAWFULLY BE COMMUNICATED, FALLING WITHIN ARTICLE 49(2)(A) TO (D) OF THE FINANCIAL PROMOTION ORDER (ALL SUCH PERSONS TOGETHER BEING REFERRED TO AS "RELEVANT PERSONS"). THIS OFFICIAL STATEMENT IS DIRECTED ONLY AT RELEVANT PERSONS AND

MUST NOT BE ACTED ON OR RELIED ON BY PERSONS WHO ARE NOT RELEVANT PERSONS, INCLUDING IN CIRCUMSTANCES IN WHICH SECTION 21(1) OF THE FSMA APPLIES TO THE ISSUER. THIS OFFICIAL STATEMENT AND ITS CONTENTS ARE CONFIDENTIAL AND SHOULD NOT BE DISTRIBUTED, PUBLISHED OR REPRODUCED (IN WHOLE OR IN PART) OR DISCLOSED BY RECIPIENTS TO ANY OTHER PERSONS IN THE UNITED KINGDOM. IN THE UNITED KINGDOM, ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS OFFICIAL STATEMENT RELATES IS AVAILABLE ONLY TO RELEVANT PERSONS AND WILL BE ENGAGED IN ONLY WITH RELEVANT PERSONS. ANY PERSON WHO IS NOT A RELEVANT PERSON SHOULD NOT ACT OR RELY ON THIS OFFICIAL STATEMENT OR ANY OF ITS CONTENTS.

NOTICE TO PROSPECTIVE INVESTORS IN HONG KONG

THE BONDS (EXCEPT FOR BONDS WHICH ARE A “STRUCTURED PRODUCT” AS DEFINED IN THE SECURITIES AND FUTURES ORDINANCE (CAP. 571 OF THE LAWS OF HONG KONG) (“SECURITIES AND FUTURES ORDINANCE”)) MAY NOT BE OFFERED OR SOLD IN HONG KONG BY MEANS OF ANY DOCUMENT OTHER THAN (I) IN CIRCUMSTANCES WHICH DO NOT CONSTITUTE AN OFFER TO THE PUBLIC WITHIN THE MEANING OF THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE (CAP. 32 OF THE LAWS OF HONG KONG) (“COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE”) OR (II) TO “PROFESSIONAL INVESTORS” AS DEFINED IN THE SECURITIES AND FUTURES ORDINANCE AND ANY RULES MADE THEREUNDER, OR (III) IN OTHER CIRCUMSTANCES WHICH DO NOT RESULT IN THE DOCUMENT BEING A “PROSPECTUS” AS DEFINED IN THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE, AND NO ADVERTISEMENT, INVITATION OR DOCUMENT RELATING TO THE BONDS MAY BE ISSUED OR MAY BE IN THE POSSESSION OF ANY PERSON FOR THE PURPOSE OF ISSUE (IN EACH CASE WHETHER IN HONG KONG OR ELSEWHERE), WHICH IS DIRECTED AT, OR THE CONTENTS OF WHICH ARE LIKELY TO BE ACCESSED OR READ BY, THE PUBLIC OF HONG KONG (EXCEPT IF PERMITTED TO DO SO UNDER THE SECURITIES LAWS OF HONG KONG) OTHER THAN WITH RESPECT TO BONDS WHICH ARE OR ARE INTENDED TO BE DISPOSED OF ONLY TO PERSONS OUTSIDE HONG KONG OR ONLY TO “PROFESSIONAL INVESTORS” AS DEFINED IN THE SECURITIES AND FUTURES ORDINANCE AND ANY RULES MADE THEREUNDER.

NOTICE TO INVESTORS IN SWITZERLAND

THE BONDS MAY NOT BE PUBLICLY OFFERED IN SWITZERLAND AND WILL NOT BE LISTED ON THE SIX SWISS EXCHANGE (“SIX”) OR ON ANY OTHER STOCK EXCHANGE OR REGULATED TRADING FACILITY IN SWITZERLAND. THIS OFFICIAL STATEMENT HAS BEEN PREPARED WITHOUT REGARD TO THE DISCLOSURE STANDARDS FOR ISSUANCE PROSPECTUSES UNDER ART. 652A OR ART. 1156 OF THE SWISS CODE OF OBLIGATIONS OR THE DISCLOSURE STANDARDS FOR LISTING PROSPECTUSES UNDER ART. 27 FF. OF THE SIX LISTING RULES OR THE LISTING RULES OF ANY OTHER STOCK EXCHANGE OR REGULATED TRADING FACILITY IN SWITZERLAND. NEITHER THIS OFFICIAL STATEMENT NOR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE BONDS OR THE OFFERING MAY BE PUBLICLY DISTRIBUTED OR OTHERWISE MADE PUBLICLY AVAILABLE IN SWITZERLAND.

NONE OF THIS OFFICIAL STATEMENT OR ANY OTHER OFFERING OR MARKETING MATERIAL RELATING TO THE OFFERING, THE ISSUER OR THE BONDS HAVE BEEN OR WILL BE FILED WITH OR APPROVED BY ANY SWISS REGULATORY AUTHORITY. IN PARTICULAR,

THIS OFFICIAL STATEMENT WILL NOT BE FILED WITH, AND THE OFFER OF THE BONDS WILL NOT BE SUPERVISED BY, THE SWISS FINANCIAL MARKET SUPERVISORY AUTHORITY ("FINMA"), AND THE OFFER OF BONDS HAS NOT BEEN AND WILL NOT BE AUTHORIZED UNDER THE SWISS FEDERAL ACT ON COLLECTIVE INVESTMENT SCHEMES ("CISA"). ACCORDINGLY, INVESTORS DO NOT HAVE THE BENEFIT OF THE SPECIFIC INVESTOR PROTECTION PROVIDED UNDER THE CISA.

NOTICE TO INVESTORS IN SINGAPORE

THIS OFFICIAL STATEMENT HAS NOT BEEN AND WILL NOT BE REGISTERED AS A PROSPECTUS WITH THE MONETARY AUTHORITY OF SINGAPORE. ACCORDINGLY, THIS OFFICIAL STATEMENT AND ANY OTHER DOCUMENT OR MATERIAL USED IN CONNECTION WITH THE OFFER OR SALE, OR INVITATION FOR SUBSCRIPTION OR PURCHASE, OF THE BONDS MAY NOT BE CIRCULATED OR DISTRIBUTED, NOR MAY THE BONDS BE OFFERED OR SOLD, OR BE MADE THE SUBJECT OF AN INVITATION FOR SUBSCRIPTION OR PURCHASE, WHETHER DIRECTLY OR INDIRECTLY, TO PERSONS IN SINGAPORE OTHER THAN (I) TO AN INSTITUTIONAL INVESTOR AS DEFINED IN SECTION 4A OF THE SECURITIES AND FUTURES ACT (CHAPTER 289) OF SINGAPORE, AS MODIFIED OR AMENDED FROM TIME TO TIME (THE "SFA") PURSUANT TO SECTION 274 OF THE SFA, (II) TO A RELEVANT PERSON PURSUANT (AS DEFINED IN SECTION 275(2) OF THE SFA) TO SECTION 275(1), OR ANY PERSON PURSUANT TO SECTION 275(1A), AND IN ACCORDANCE WITH THE CONDITIONS SPECIFIED IN SECTION 275, OF THE SFA; OR (III) OTHERWISE PURSUANT TO, AND IN ACCORDANCE WITH THE CONDITIONS OF, ANY OTHER APPLICABLE PROVISION OF THE SFA. WHERE THE BONDS ARE SUBSCRIBED OR PURCHASED UNDER SECTION 275 OF THE SFA BY A RELEVANT PERSON THAT IS: (A) A CORPORATION (WHICH IS NOT AN ACCREDITED INVESTOR (AS DEFINED IN SECTION 4A OF THE SFA)) THE SOLE BUSINESS OF WHICH IS TO HOLD INVESTMENTS AND THE ENTIRE SHARE CAPITAL OF WHICH IS OWNED BY ONE OR MORE INDIVIDUALS, EACH OF WHOM IS AN ACCREDITED INVESTOR; OR (B) A TRUST (WHERE THE TRUSTEE IS NOT AN ACCREDITED INVESTOR) WHOSE SOLE PURPOSE IS TO HOLD INVESTMENTS AND EACH BENEFICIARY OF THE TRUST IS AN INDIVIDUAL WHO IS AN ACCREDITED INVESTOR, SECURITIES OR SECURITIES-BASED DERIVATIVES CONTRACTS (EACH AS DEFINED IN SECTION 2(1) OF THE SFA) OF THAT CORPORATION OR THE BENEFICIARIES' RIGHTS AND INTEREST (HOWSOEVER DESCRIBED) IN THAT TRUST SHALL NOT BE TRANSFERRED WITHIN 6 MONTHS AFTER THAT CORPORATION OR THAT TRUST HAS ACQUIRED THE BONDS PURSUANT TO AN OFFER MADE UNDER SECTION 275 OF THE SFA EXCEPT: (I) TO AN INSTITUTIONAL INVESTOR OR TO A RELEVANT PERSON, OR TO ANY PERSON ARISING FROM AN OFFER REFERRED TO IN SECTION 275(1A) OR SECTION 276(4)(I)(B) OF THE SFA; (II) WHERE NO CONSIDERATION IS OR WILL BE GIVEN FOR THE TRANSFER; (III) WHERE THE TRANSFER IS BY OPERATION OF LAW; (IV) AS SPECIFIED IN SECTION 276(7) OF THE SFA; OR (V) AS SPECIFIED IN REGULATION 37A OF THE SECURITIES AND FUTURES (OFFERS OF INVESTMENTS) (SECURITIES AND SECURITIES-BASED DERIVATIVE CONTRACTS) REGULATIONS 2018 OF SINGAPORE.

Notification under Section 309B(1)(C) of the SFA

IN CONNECTION WITH SECTION 309B OF THE SFA AND THE SECURITIES AND FUTURES (CAPITAL MARKETS PRODUCTS) REGULATIONS 2018 OF SINGAPORE (THE "CMP REGULATIONS 2018"), THE ISSUER HAS DETERMINED, AND HEREBY NOTIFIES ALL RELEVANT PERSONS (AS DEFINED IN SECTION 309A(1) OF THE SFA), THAT THE BONDS ARE

‘PRESCRIBED CAPITAL MARKETS PRODUCTS’(AS DEFINED IN THE CMP REGULATIONS 2018) AND ARE EXCLUDED INVESTMENT PRODUCTS (AS DEFINED IN MAS NOTICE SFA 04-N12: NOTICE ON THE SALE OF INVESTMENT PRODUCTS AND MAS NOTICE FAA-N16: NOTICE ON RECOMMENDATIONS ON INVESTMENT PRODUCTS).

NOTICE TO PROSPECTIVE INVESTORS IN TAIWAN

THE OFFER OF THE BONDS HAS NOT BEEN AND WILL NOT BE REGISTERED OR FILED WITH, OR APPROVED BY, THE FINANCIAL SUPERVISORY COMMISSION OF TAIWAN AND/OR OTHER REGULATORY AUTHORITY OF TAIWAN PURSUANT TO RELEVANT SECURITIES LAWS AND REGULATIONS, AND THE BONDS MAY NOT BE OFFERED, ISSUED OR SOLD IN TAIWAN THROUGH A PUBLIC OFFERING OR IN CIRCUMSTANCES WHICH CONSTITUTE AN OFFER WITHIN THE MEANING OF THE SECURITIES AND EXCHANGE ACT OF TAIWAN THAT REQUIRES THE REGISTRATION OR FILING WITH OR APPROVAL OF THE FINANCIAL SUPERVISORY COMMISSION OF TAIWAN. THE BONDS MAY BE MADE AVAILABLE OUTSIDE TAIWAN FOR PURCHASE BY INVESTORS RESIDING IN TAIWAN (EITHER DIRECTLY OR THROUGH PROPERLY LICENSED TAIWAN INTERMEDIARIES), BUT MAY NOT BE OFFERED OR SOLD IN TAIWAN EXCEPT TO QUALIFIED INVESTORS VIA A TAIWAN LICENSED INTERMEDIARY. ANY SUBSCRIPTIONS OF BONDS SHALL ONLY BECOME EFFECTIVE UPON ACCEPTANCE BY THE ISSUER OR THE RELEVANT DEALER OUTSIDE TAIWAN AND SHALL BE DEEMED A CONTRACT ENTERED INTO IN THE JURISDICTION OF INCORPORATION OF THE ISSUER OR RELEVANT DEALER, AS THE CASE MAY BE, UNLESS OTHERWISE SPECIFIED IN THE SUBSCRIPTION DOCUMENTS RELATING TO THE BONDS SIGNED BY THE INVESTORS.

NOTICE TO INVESTORS IN JAPAN

THE BONDS HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE FINANCIAL INSTRUMENTS AND EXCHANGE ACT OF JAPAN (NO. 25 OF 1948, AS AMENDED, THE “FIEA”). NEITHER THE BONDS NOR ANY INTEREST THEREIN MAY BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, IN JAPAN OR TO, OR FOR THE BENEFIT OF, ANY “RESIDENT” OF JAPAN (AS DEFINED UNDER ITEM 5, PARAGRAPH 1, ARTICLE G OF THE FOREIGN EXCHANGE AND FOREIGN TRADE ACT (ACT NO. 228 OF 1949, AS AMENDED)), OR TO OTHERS FOR RE-OFFERING OR RESALE, DIRECTLY OR INDIRECTLY, IN JAPAN OR TO, OR FOR THE BENEFIT OF, ANY RESIDENT OF JAPAN, EXCEPT PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF, AND OTHERWISE IN COMPLIANCE WITH, THE FIEA AND ANY OTHER APPLICABLE LAWS, REGULATIONS AND MINISTERIAL GUIDELINES OF JAPAN.

THE PRIMARY OFFERING OF THE BONDS AND THE SOLICITATION OF AN OFFER FOR ACQUISITION THEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER PARAGRAPH 1, ARTICLE 4 OF THE FIEA. AS IT IS A PRIMARY OFFERING, IN JAPAN, THE BONDS MAY ONLY BE OFFERED, SOLD, RESOLD OR OTHERWISE TRANSFERRED, DIRECTLY OR INDIRECTLY TO, OR FOR THE BENEFIT OF CERTAIN QUALIFIED INSTITUTIONAL INVESTORS AS DEFINED IN THE FIEA (“QIIS”). A QII WHO PURCHASED OR OTHERWISE OBTAINED THE BONDS CANNOT RESELL OR OTHERWISE TRANSFER THE BONDS IN JAPAN TO ANY PERSON EXCEPT ANOTHER QII.

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OFFICIAL STATEMENT

$81,465,000
STATE OF OHIO
TURNPIKE REVENUE REFUNDING BONDS,
2020 SERIES A (FEDERALLY TAXABLE)

and

$376,850,000
STATE OF OHIO
TURNPIKE JUNIOR LIEN REVENUE REFUNDING BONDS, 2020 SERIES A
(FEDERALLY TAXABLE) (INFRASTRUCTURE PROJECTS)

ISSUED BY THE
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

INTRODUCTION

This Official Statement has been prepared by the Ohio Turnpike and Infrastructure Commission (the "Commission") in connection with the original issuance and sale by the Commission of the $81,465,000 State of Ohio Turnpike Revenue Refunding Bonds, 2020 Series A (Federally Taxable) identified on the cover page hereof (the "2020 Senior Lien Bonds") and the $376,850,000 State of Ohio Turnpike Junior Lien Revenue Refunding Bonds, 2020 Series A (Federally Taxable) (Infrastructure Projects) identified on the cover page hereof (the "2020 Junior Lien Bonds").

All financial and other information presented herein has been provided by the Commission from its records, except for information expressly attributed to other sources (e.g. information relating to the Ohio Department of Transportation). The presentation of information, including tables of receipts from tolls and other sources, is intended to show recent historic information, and is not intended to indicate future or continuing trends in the financial position or other aspects of the Commission. No representation is made that past experience, as might be shown by such financial and other information, will necessarily continue or be repeated in the future.

This Official Statement should be considered in its entirety and no subject discussed should be considered less important than any other subject by reason of its location in the text.

Terms used in this Official Statement and not otherwise defined shall have the meanings set forth for such terms in the GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT attached to this Official Statement as Exhibit A-1 and in the GLOSSARY OF TERMS AND SUMMARY OF JUNIOR LIEN TRUST AGREEMENT attached to this Official Statement as Exhibit A-2.

Ohio Turnpike and Infrastructure Commission

The Commission (formerly the Ohio Turnpike Commission) is a body both corporate and politic of the State of Ohio (the "State") created by the Ohio Turnpike Act (the "Act") with the power to construct, operate and maintain the Ohio Turnpike System (as described below) and to finance Infrastructure Projects (as hereinafter defined) authorized by Amended Substitute House Bill 51 ("H.B. 51") as described below. See "THE COMMISSION – The Commission's Role in the Ohio Jobs and Transportation Plan" herein. The Commission's composition, powers, duties, functions, duration and all other attributes are derived from the Act, as amended and supplemented from time to time. See "THE COMMISSION" herein.

Purpose of the Senior Lien Bonds

The proceeds of the 2020 Senior Lien Bonds will be used (i) to advance refund all of the outstanding State of Ohio Turnpike Revenue Bonds, 2013 Series A (the "2013 Senior Lien Bonds") (originally issued to provide funds required to pay and reimburse costs of making certain capital improvements to the Turnpike System (as hereinafter defined), to fund a debt service reserve fund and to pay costs of issuance of the 2013 Senior Lien Bonds) and (ii) to pay costs of issuance of the 2020 Senior Lien Bonds. See "PLAN OF FINANCE" and "SOURCES AND USES OF PROCEEDS" herein.

Purpose of the Junior Lien Bonds

The proceeds of the 2020 Junior Lien Bonds will be used (i) to advance refund a portion of the outstanding State of Ohio Turnpike Junior Lien Revenue Bonds, 2013 Series A (Infrastructure Projects) (the "2013 Junior Lien Bonds") (originally issued to pay costs of Infrastructure Projects in accordance with H.B. 51, to fund a debt service reserve fund and to pay costs of issuance of the 2013 Junior Lien Bonds) and (ii) to pay costs of issuance of the 2020 Junior Lien Bonds. See "PLAN OF FINANCE" and "SOURCES AND USES OF PROCEEDS" herein.

Senior Lien Trust Agreement and Junior Lien Trust Agreement

The 2020 Senior Lien Bonds are being issued pursuant to that certain Amended and Restated Master Trust Agreement (Eighteenth Supplemental Trust Agreement) dated as of April 8, 2013 (the "Master Senior Lien Trust Agreement"), between the Commission and The Huntington National Bank, as Trustee (the "Senior Lien Trustee"), as amended and supplemented by various supplemental trust agreements, including the Twenty-Third Supplemental Trust Agreement dated as of February 1, 2020 (collectively, the "Senior Lien Trust Agreement") and a resolution adopted by the Commission on December 16, 2019. The 2020 Junior Lien Bonds are being issued pursuant to that certain Junior Lien Master Trust Agreement dated as of August 1, 2013 (the "Junior Lien Master Trust Agreement") between the Commission and The Huntington National Bank, as Trustee (the "Junior Lien Trustee"), as supplemented and amended by various supplemental trust agreements including the Third Supplemental Junior Lien Trust Agreement dated as of February 1, 2020 (the "Third Supplement" and, together with the Junior Lien Master Trust Agreement, the "Junior Lien Trust Agreement") and a resolution adopted by the Commission on December 16, 2019.

Interest on 2020 Bonds

Interest on the 2020 Senior Lien Bonds and the 2020 Junior Lien Bonds is payable on each February 15 and August 15, commencing on August 15, 2020 (each an "Interest Payment Date" with respect to the 2020 Senior Lien Bonds and the 2020 Junior Lien Bonds, respectively).

Redemption

The 2020 Bonds are subject to optional redemption and mandatory sinking fund redemption prior to maturity under certain circumstances as more fully set forth herein. See "DESCRIPTION OF THE 2020 BONDS - Redemption of 2020 Bonds."

Limitation

THE 2020 BONDS AND THE INTEREST THEREON WILL BE SPECIAL OBLIGATIONS OF THE STATE OF OHIO ISSUED BY THE COMMISSION AND WILL BE PAYABLE SOLELY FROM THE SYSTEM PLEDGED REVENUES. NOTHING IN THE 2020 BONDS, THE SENIOR LIEN TRUST

AGREEMENT, THE JUNIOR LIEN TRUST AGREEMENT OR ANY OTHER DOCUMENT WILL REPRESENT OR CONSTITUTE GENERAL OBLIGATIONS, DEBT OR BONDED INDEBTEDNESS OF THE COMMISSION, THE STATE OF OHIO OR ANY POLITICAL SUBDIVISION OR AGENCY THEREOF, AND THE HOLDERS OR OWNERS OF THE 2020 BONDS WILL NOT BE GIVEN THE RIGHT, AND HAVE NO RIGHT, TO HAVE EXCISE TAXES, AD VALOREM TAXES OR OTHER TAXES LEVIED BY THE STATE OF OHIO OR THE TAXING AUTHORITY OF ANY OTHER POLITICAL SUBDIVISION FOR THE PAYMENT OF THE PRINCIPAL OF OR INTEREST OR REDEMPTION PREMIUM, IF ANY, ON THE 2020 BONDS. NEITHER THE GENERAL CREDIT, FAITH NOR RESOURCES OF THE COMMISSION OR THE STATE OF OHIO, OR ANY POLITICAL SUBDIVISION OR AGENCY THEREOF, ARE PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST OR REDEMPTION PREMIUM, IF ANY, ON THE 2020 BONDS.

Security for the 2020 Senior Lien Bonds

The 2020 Senior Lien Bonds will be equally and ratably secured on parity with other outstanding and any additional Senior Lien Bonds, which are secured equally and ratably by a lien on and pledge of the System Pledged Revenues.

The 2020 Senior Lien Bonds are further secured by a first pledge and lien on moneys on deposit in the Senior Lien Debt Service Fund, including the Senior Lien Debt Service Reserve Account therein, as more fully described in "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS."

The following table presents a current summary of the Senior Lien Bonds outstanding prior to the issuance of the 2020 Senior Lien Bonds (collectively, the "Outstanding Senior Lien Bonds"), including the series designation, dated date, original principal amount and outstanding (as of December 31, 2019) principal amount:

Series	Dated Date	Original Principal Amount	Outstanding Principal Amount†
1998 Series A	September 1, 1998	$298,575,000	$179,420,000
2010 Series A	November 18, 2010	131,290,000	21,650,000
2013 Series A	August 15, 2013	73,495,000	73,495,000*
2017 Series A	September 28, 2017	114,670,000	113,265,000
2018 Series A	February 15, 2018	73,880,000	73,880,000
Total:		$691,910,000	$461,710,000

*All of the 2013 Senior Lien Bonds will be advance refunded with the proceeds of the 2020 Bonds.
†Does not include the principal amount of the series that have been defeased.

The Outstanding Senior Lien Bonds are more fully described in "CERTAIN FINANCIAL INFORMATION – Debt Administration: Outstanding Bonds" herein.

Security for the 2020 Junior Lien Bonds

The 2020 Junior Lien Bonds will be equally and ratably secured and on parity with other outstanding and any additional Junior Lien Bonds, which are secured equally and ratably by a lien on and pledge of the System Pledged Revenues, which lien and pledge are junior and subordinate to the lien and pledge of the System Pledged Revenues created by the Senior Lien Trust Agreement. Junior Lien Bonds are subordinate to Senior Lien Bonds issued under the Senior Lien Trust Agreement. THE PAYMENT OF THE 2020 JUNIOR LIEN BONDS, THE OUTSTANDING JUNIOR LIEN BONDS AND ANY AND ALL

ADDITIONAL JUNIOR LIEN BONDS THAT MAY BE ISSUED IS SUBJECT TO THE PRIOR RIGHT OF PAYMENT FROM SYSTEM PLEDGED REVENUES TO THE PAYMENT OF ALL SENIOR LIEN BONDS ISSUED UNDER THE SENIOR LIEN TRUST AGREEMENT. UPON AN EVENT OF DEFAULT UNDER THE JUNIOR LIEN TRUST AGREEMENT, THE JUNIOR LIEN TRUSTEE MAY NOT DECLARE THE PRINCIPAL AND INTEREST OF ALL OUTSTANDING JUNIOR LIEN BONDS TO BE IMMEDIATELY DUE AND PAYABLE UNLESS THE SENIOR LIEN TRUSTEE HAS DECLARED ACCELERATION OF MATURITY OF THE OUTSTANDING SENIOR LIEN BONDS AS A RESULT OF A DEFAULT UNDER THE SENIOR LIEN TRUST AGREEMENT.

The 2020 Junior Lien Bonds are further secured by a first pledge and lien on moneys on deposit in the Junior Lien Debt Service Fund and the Junior Lien Debt Service Reserve Fund as more fully described in "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS" herein.

The following table presents a current summary of the Junior Lien Bonds outstanding prior to the issuance of the 2020 Junior Lien Bonds (the "Outstanding Junior Lien Bonds"), including the series designation, dated date, original principal amount and outstanding (as of December 31, 2019) principal amount:

Series	**Dated Date**	**Original Principal Amount**	**Outstanding Principal Amount**
2013 Series A	August 15, 2013	$994,812,816	$1,116,656,485‡*
2018 Series A	February 15, 2018	425,965,000	425,965,000
Total:		$1,420,777,816	$1,542,621,485

* A portion of the 2013 Junior Lien Bonds in the principal amount of $340,000,000 will be advance refunded with the proceeds of the 2020 Bonds.

‡Amount includes "accreted" principal of capital appreciation bonds and convertible capital appreciation bonds as of December 31, 2019.

Toll Increases

In conjunction with the Commission's issuance of Senior Lien Bonds and Junior Lien Bonds in 2013, the Commission implemented a series of forward-looking toll increases over a 10-year period starting January 1, 2014 and ending December 31, 2023. Specifically, the Commission, at its July 15, 2013 meeting, implemented a toll increase plan that increases rates by an average of 2.7% each year (the historical rate of inflation) for those 10 years. In addition to the forward-looking toll increase plan implemented beginning in 2014, the Commission has authority to increase tolls further, including if such increase is required by the toll covenants in the Senior Lien Trust Agreement or the Junior Lien Trust Agreement. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS – Toll Rate Covenants." In addition, the Commission expects to make further modifications to its toll system that may impact how tolls are calculated and collected for certain trips. See "TOLLS AND TOLL COLLECTION - Planned Toll Collection System Modernization" herein.

As described above, the Commission implemented a forward-looking toll increase plan starting in 2014. One exception to that 10-year plan for toll increases related to passenger vehicles using *E-ZPass*® and making local trips of less than 30 miles, for which tolls were not increased. After 2023, the Commission's projections currently assume that the toll rate for these particular local trips will experience a one-time increase to equal the same per mile rate as charged for all *E-ZPass*® trips. The Commission recently completed a strategic plan for modernizing the toll collection system, and if all or parts of that plan are implemented, further revisions to the toll collection system may impact this exception. See "TOLLS AND TOLL COLLECTION – Planned Toll Collection System Modernization" herein.

The Commission's projections also currently assume that after 2023 tolls will increase for all vehicles, regardless of class or payment method, by 2.7 percent each year for 5 years beginning on January 1, 2024 and then, beginning on January 1, 2029, 2.0 percent annually thereafter. See "EXHIBIT D – TRAFFIC AND REVENUE STUDY."

The toll increases have been determined by the Commission taking into account the amount necessary to meet existing and projected debt service and operational and maintenance obligations of the Commission. For a complete description of toll increases adopted by the Commission, see "EXHIBIT D - TRAFFIC AND REVENUE STUDY" and "TOLLS AND TOLL COLLECTION" herein.

Traffic and Revenue Study and Projected Results

Attached hereto as Exhibit D is the Ohio Turnpike Traffic and Revenue Study dated January 17, 2020 (the "Traffic and Revenue Study") prepared by Jacobs Engineering Group Inc. (the "Traffic Consultant"). The Traffic and Revenue Study contains forecasts and projections of Turnpike transactions and gross toll revenues along with key assumptions in arriving at those forecasts and projections. Those forecasts assume escalation of toll rates previously approved by the Commission, as described above. Those forecasts also assume that the changes to the toll collection system described herein are timely implemented by the Commission. See "TOLLS AND TOLL COLLECTION – Planned Toll Collection System Modernization" herein. The traffic and gross toll forecasts are subject to future economic and social conditions, demographic developments and regional transportation construction activities that cannot be predicted with certainty. 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 the assumptions and methodologies used to develop such forecasts and the related limitations. See "INVESTMENT CONSIDERATIONS," "TOLLS AND TOLL COLLECTION - New Toll Collection Systems" and "EXHIBIT D - TRAFFIC AND REVENUE STUDY" herein.

The Commission retained the Traffic Consultant to prepare the Traffic and Revenue Study and to project the financial results of the Commission's operations for the years 2020-2059. The projections summarized under the heading "PROJECTED OPERATING RESULTS AND DEBT SERVICE COVERAGE" herein are based upon revenue estimates (taking into account implementation of toll adjustments adopted or to be adopted by the Commission) and operating expense projections and the implementation of the Commission's 2020-2030 capital program (described below). The results of this analysis are included in the Traffic and Revenue Study included as Exhibit D, which should be read in its entirety.

THE COMMISSION

Since 1955, the Commission has operated the Ohio Turnpike System (the "Turnpike System"), a modern, limited access highway which travels 241 miles across the State of Ohio from its border with Pennsylvania to its border with Indiana. Various sections of the Turnpike System are designated as Interstate Routes 76, 80 and 90. See "THE TURNPIKE SYSTEM - General" herein.

The Commission determines toll rates, collects revenues, controls disbursements and has title to all assets, except for title to real estate, which the Commission purchases in the name of the State of Ohio with the beneficial use being held by the Commission.

Governance and Oversight

The Commission consists of ten members, including seven voting members. Six of the voting members are appointed by the Governor with the advice and consent of the Ohio Senate, no more than three of whom may be members of the same political party. The seventh voting member is the Director of ODOT, who is a voting member ex-officio. The three remaining members, the Director of the Office of Budget and Management (OBM), a state senator and a state representative, have non-voting status. The state senator and the state representative are named, respectively, by the President of the Ohio Senate and the Speaker of the Ohio House of Representatives. Members appointed prior to July 1, 2013 are serving eight-year terms staggered such that one term starts or expires every two years. Members appointed on and after July 1, 2013 are serving five-year terms.

Legislation was enacted in 1996 to create the Turnpike Oversight Committee, which was subsequently renamed the Turnpike Legislative Review Committee. The Committee consists of six members of the Ohio General Assembly (three each from the Ohio Senate and the Ohio House of Representatives). The Commission reports quarterly to the Committee on certain Commission matters, including financial and budgetary matters and on-going and proposed projects of the Commission. The Turnpike Legislative Review Committee is also authorized to review the location of new Turnpike System projects the Commission plans to undertake.

Legislation was enacted in 2007 to require the Commission to (i) notify the Governor and legislative leaders prior to any toll change, (ii) allow certain committee chairs of the legislature responsible for transportation budget matters to request the Commission to provide past budgets and present proposed budgets, (iii) submit its annual budget to the Governor, OBM, the leadership of the Ohio General Assembly and the Ohio Legislative Service Commission for their review, (iv) seek approval of OBM prior to any debt issuance and, in connection therewith, any trust agreements or supplements thereto, and to (v) add the Director of Development (now called the Director of the Development Services Agency) and the Director of OBM as additional ex-officio non-voting members of the Commission.

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Ohio Turnpike and Infrastructure Commission Members

Name	Title	Membership Term Expires
Jerry N. Hruby	Chairman*	6/30/21
Timothy J. Paradiso	Vice-Chairman*	6/30/23
Michael A. Peterson	Secretary-Treasurer*	6/30/20
Sandra K. Barber	Member	6/30/24
Guy C. Coviello	Member	6/30/23
Vickie Eaton Johnson	Member	6/30/22
Jack Marchbanks, Ph.D.	Ex-Officio Member	(a)
Kimberly Murnieks	Ex-Officio Non-Voting Member	(b)
Sen. Rob McColley	Non-Voting Member	(c)
Rep. Dave Greenspan	Non-Voting Member	(d)

* Officers are elected for four-year terms; the current terms expire on June 30, 2023.
(a) While Director of Ohio Department of Transportation
(b) While Director of Office of Budget and Management
(c) Appointed by President of Ohio Senate
(d) Appointed by Speaker of Ohio House of Representatives

Executive Staff

Executive Director. Ferzan M. Ahmed, P.E. was appointed by the Ohio Turnpike and Infrastructure Commission as Executive Director on February 25, 2019. Ferzan is a native of Pakistan who came to America in 1985 to pursue higher education. Ferzan began his career in transportation as an Engineer in Training at the Ohio Department of Transportation ("ODOT") in District 6 where he managed multiple construction projects for 15 years. He then moved to engineering design to become the project manager on the I-70/I-71 reconstruction program, which was ODOT's largest construction project at the time. In 2011, he was appointed as the Deputy Director of ODOT District 6, where he oversaw all ODOT activities in eight counties in Central Ohio including Franklin County. During his tenure, ODOT completed some of Ohio's largest construction projects. In 2016, the Delaware County Commissioners appointed him as the Administrator of Delaware County, Ohio's fastest-growing county. There, he led the effort to create a formal budget process and county-performance metrics. Most recently, Ferzan served as a Vice President and leader of AECOM Technical Services, Inc.'s Ohio Transportation practice. In that role, he worked with ODOT as AECOM Technical Services, Inc.'s Project Principal for DriveOhio autonomous and connected vehicle deployment projects and the Mid-Ohio Regional Planning Commission ("MORPC") Hyperloop Feasibility Study. Ferzan is a registered Professional Engineer in Civil Engineering and formerly served as the Chair of the Ohio Board of Registration for Engineers and Surveyors. He was recently elected to the Board of Directors of the International Bridge, Tunnel and Turnpike Association. Ferzan graduated with a Bachelor of Science degree in Electrical and Computer Engineering from Kansas State University.

Chief of Staff. Todd Audet is a Civil Engineer with nearly 30 years of experience in engineering and leadership. He began with the Ohio Turnpike and Infrastructure Commission as Chief of Staff on December 2, 2019. A Brigadier General in the Ohio Air National Guard, he has worked in leadership roles in both civilian and military environments. He most recently served as the Vice President of Planning, Engineering and Operations at the Toledo-Lucas County Port Authority (2017-2019). Todd also served as Deputy Director for the ODOT District 2 based in Bowling Green for two stints (2003-2007 and 2010-2017). He led the operations of the district's eight counties including Highway Management, Planning and Engineering, Construction, and Business and Human Resources. On the military side, Audet has served in numerous high-level roles including most recently as Chief of Staff for the Ohio Air National Guard and as Assistant Adjutant General for Air, Ohio National Guard. Todd has participated in numerous stateside and overseas deployments to include Operation Enduring Freedom, Operation Iraqi Freedom and Ohio's State Partnership Program with Serbia and Hungary. His awards and decorations include the Legion of Merit and the Global War on Terrorism Expeditionary Medal. Audet earned a bachelor's degree in Civil Engineering at the University of Toledo in 1990. He also holds two master's degrees from the USAF War and Staff Colleges.

General Counsel. Jennifer L. Stueber, Esq., was appointed as the Commission's General Counsel in 2015 bringing with her 20 years of experience representing clients in both the public and private sectors. The General Counsel oversees all legal affairs of the Commission relating to contracts; litigation; personal injury and property damages claims; all dispute resolutions; employment and workers' compensation matters; insurance matters; finance; and real property matters including acquisitions, dispositions and appropriations. The General Counsel also serves as the Commission's Chief Ethics Officer, Public Records Officer and Data Privacy Officer. Jennifer was at a major Cleveland law firm before joining the Commission in 2015 where she advised clients in matters of real estate development, private finance and public finance, including serving as bond counsel for various state and local governments, as well as underwriter's counsel, issuer's counsel, and disclosure counsel. Jennifer is a graduate of Cleveland Marshall College of Law and earned her B.A. degree from The Ohio State University.

Deputy Executive Director, Chief Financial Officer and Comptroller. Martin S. Seekely oversees all financial operations of the Commission, including budgeting, accounts receivable, accounts payable, payroll, *E-ZPass*® Customer accounts, investments, and debt service management. Marty joined the Commission in May 2010 with 31 years of financial experience. During the 16 years that he was employed at Phar-Mor, Inc., he held various positions including Vice President, Chief Financial Officer, and Controller. His financial experience also includes serving as Controller for Boston Distributors, Inc.; Controller for Riser Foods, Inc.; and Assistant Controller at Fisher Foods, Inc. Marty received a B.S.B.A. from John Carroll University and became a Certified Public Accountant in 1985.

Director of Administration. Matthew J. Cole is responsible for the day-to-day operations of the Commission's Human Resources, Safety Services and Office Services Departments. Prior to coming to the Commission in May 2003, Matt worked as a Human Resources Manager for Cuyahoga County, Ohio. His experience includes 20+ years in the public sector and an additional 3 years in the private sector. Prior to working for Cuyahoga County and the Commission, Matt worked for the Bellefaire Jewish Community Board as a Counselor for emotionally and behaviorally troubled youth. Matt holds both a B.A. in Social Work and Criminal Justice and a M.A. in Labor Relations and Human Resources from Cleveland State University. He is certified as a Professional in Human Resources (PHR).

Director of Audit and Internal Control. David J. Miller oversees the entire audit function of the Commission. He has also served as the project manager for the procurement and implementation of the present toll collection system inclusive of electronic tolling via *E-ZPass*®. Previously, Dave held the positions of EDP Auditor and Chief Accountant for the Commission before being placed in charge of the Internal Audit and Toll Audit Departments in 1996. Prior to joining the Commission in 1993, Dave worked in public accounting with the Cleveland Office of Arthur Andersen & Company. While there, he performed financial auditing and tax preparation services for non-SEC clients and specialized in the audit and control of information systems. Dave holds a Bachelor of Arts Degree in Accounting from Grove City College, Pennsylvania. He is a Certified Public Accountant and a Certified Information Systems Auditor.

Director of Toll Operations (through January 31, 2020). Sharon D. Isaac* oversees the Commission's Toll Operations Department, which is responsible for managing all 31 interchanges and all toll collector activities through which the Commission's main revenue source is generated. Sharon's tenure with the Commission began in 1991 in the Legal Department as Staff Counsel. Sharon was promoted to the position of Assistant General Counsel in 1995 and to the position of Director of Toll Operations in 1996. Prior to her employment with the Commission, Sharon practiced law with a defense-oriented firm specializing in workers' compensation and employment law. She also served in the public sector as a Judicial Law Clerk for the Cuyahoga County Court of Common Pleas, and as a Contract Administrator for New Jersey Transit Bus Operations, Inc. Sharon holds a B.A. in Political Science from Barnard College of Columbia University, and a J.D. from The George Washington University National Law Center.

Director of Toll Operations (as of February 1, 2020). Laurie Davis has worked for the Commission since June 1985 and is currently the Superintendent of Toll Operations. She will be promoted to Director of Toll Operations on February 1, 2020.

Director of Governmental Affairs. Adam L. Greenslade serves as the Commission's liaison with the State legislature as well as the many communities, including cities, townships and 13 counties through which the Turnpike traverses. Adam brings with him 15 years' experience in government relations and public affairs. Prior to joining the Commission, Adam served as Director of Clydescope Economic Development Corporation in Clyde, Ohio, and was the owner of North Coast Strategy Group, a full-service government relations, public affairs and grant writing firm. He has previous experience working in both chambers of the State legislature and was a registered lobbyist on the state and federal level. Adam is a graduate of The Ohio State University with a degree in Geography - Urban and Regional Systems.

Chief Engineer. Anthony D. Yacobucci, P.E., has earned both a Bachelor's and Master's degree in Civil Engineering from Cleveland State University. He is a registered Professional Engineer with more than 30 years of experience. Tony has worked at the Commission for the last ten years in progressive roles, including the last five years as Chief Engineer. In this role, Tony is responsible for the administration and supervision of the operational functions of the Commission, including the planning, design, construction and maintenance of the Commission's infrastructure. Prior to joining the Commission in February 2010, Tony worked in the engineering consulting industry where he served in progressive roles, including: Office Leader, Director of Operations and Vice President, with some of the nation's premier consulting engineering firms. During this timeframe, Tony was responsible for the management, operation and strategic vision of four multi−disciplined offices located in Cleveland, Columbus, Cincinnati and Toledo. He also served as the Commission's Consulting Engineer, in compliance with the Master Trust Agreement, from 2000 through 2008. He also played a significant role in the design and construction of the Ohio Turnpike bridges over the Cuyahoga River Valley.

Chief Technology Officer. Brian Kelley is responsible for the Commission's overall technical vision and technology operations. Brian brings with him over 27 years of public sector experience in information technology. Prior to starting with the Commission in September 2017, Brian served as Chief Information Officer for Portage County, Ohio. Under his leadership, Portage County received international, national, state, and regional recognition for highly successful enterprise-wide IT projects. Brian has also previously served on technology related work groups with the Ohio Supreme Court, the State of Ohio Department of Administrative Services Office of Information Technology, and the County Risk Sharing Authority of Ohio. Brian holds a Bachelor of Arts in Criminal Justice and Sociology and a Master's Degree in Public

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* Sharon Isaac has announced her resignation effective as of January 31, 2020.

Administration from Kent State University. He is a graduate of the Certified Government Chief Information Officer Program at the University of North Carolina at Chapel Hill.

Director of Service Plaza Operations. Andrew Herberger serves as the Commission's Director of Service Plaza Operations overseeing the Ohio Turnpike's 14 service plaza properties. Andrew has been employed at the Ohio Turnpike and Infrastructure Commission since June of 2004, administering both self-operated and contracted services and managing the system of plazas that serve Ohio's travelers. Prior to working for the Ohio Turnpike, Andrew has been employed in Campus Operations, managing campus Auxiliary Services at several Colleges and Universities including the University of Buffalo, Lakeland College and Case Western Reserve University. Andrew is a graduate of SUNY Erie Community College with a degree in Food Service Administration and State University of New York at Buffalo certified in Business Administration.

The Commission's Role in the Ohio Jobs and Transportation Plan

In January 2012, ODOT announced a significant budget shortfall that would require postponement of some of the State's largest, most complex transportation construction projects by up to a decade or more. In an effort to address this funding deficit, the Ohio Jobs and Transportation Plan (the "Plan"), gave the Commission the ability to raise funds for Infrastructure Projects through the issuance of Turnpike revenue bonds without making disruptive changes to the current Commission structure or the operation and maintenance of the Turnpike System. The Plan called for Turnpike revenue bond proceeds to be used to fund Infrastructure Projects to alleviate the impact of the ODOT budget shortfall on significant transportation construction projects which have a transportation-related "nexus" to the Turnpike System.

As part of the implementation of the Plan, the Ohio General Assembly adopted a number of significant changes to the Act, which became effective July 1, 2013. The changes to the Act included, among other things, the renaming of the Commission as the Ohio Turnpike and Infrastructure Commission and expansion of its purpose to allow the Commission to sell Turnpike revenue bonds to finance Infrastructure Projects.

Junior Lien Bonds - the Commission's Partnership with ODOT

As part of the Plan, the Commission has issued two series of bonds to pay costs of certain transportation infrastructure projects ("Infrastructure Projects") as defined under Chapter 5537 of the Ohio Revised Code that have a transportation related "nexus" to the Turnpike System, its (i) \$994,812,816 Turnpike Junior Lien Revenue Bonds, 2013 Series A (Infrastructure Projects) and (ii) its \$425,965,000 Turnpike Junior Lien Revenue Bonds, 2018 Series A (Infrastructure Projects). See "THE COMMISSION – The Commission's Role in the Ohio Jobs and Transportation Plan" herein.

The Junior Lien Bonds issued under the Junior Lien Trust Agreement as "Junior Lien Bonds" are subordinate to Senior Lien Bonds issued under the Senior Lien Trust Agreement. The payment of the principal of, premium, if any, and interest on all Junior Lien Bonds issued under the Junior Lien Trust Agreement, are secured equally and ratably by a lien on and pledge of the System Pledged Revenues, which lien and pledge are junior and subordinate to the lien and pledge of the System Pledged Revenues created by the Senior Lien Trust Agreement. THE PAYMENT OF THE OUTSTANDING JUNIOR LIEN BONDS AND ALL ADDITIONAL JUNIOR LIEN BONDS IS SUBJECT TO THE PRIOR RIGHT OF PAYMENT FROM SYSTEM PLEDGED REVENUES TO THE PAYMENT OF ALL SENIOR LIEN BONDS ISSUED UNDER THE SENIOR LIEN TRUST AGREEMENT. UPON AN EVENT OF DEFAULT UNDER THE JUNIOR LIEN TRUST AGREEMENT, THE JUNIOR LIEN TRUSTEE MAY NOT DECLARE THE PRINCIPAL AND INTEREST OF ALL OUTSTANDING JUNIOR LIEN BONDS TO BE IMMEDIATELY DUE AND PAYABLE UNLESS THE SENIOR LIEN TRUSTEE HAS DECLARED ACCELERATION OF

MATURITY OF THE OUTSTANDING SENIOR LIEN BONDS AS A RESULT OF A DEFAULT UNDER THE SENIOR LIEN TRUST AGREEMENT.

In August 2013, the Director of ODOT submitted funding requests for Infrastructure Projects to the Commission for consideration and, on September 16, 2013, the Commission's Board approved the funding of specific Infrastructure Projects totaling $930 million. Through September 30, 2019, ODOT has expended $922,104,000 on Infrastructure Projects and the Commission has reimbursed ODOT $922,104,000 for ODOT's expenditures on these Infrastructure Projects. The status of the funding (in thousands) of each infrastructure project as of September 30, 2019 is as follows:

Project	County	Approved Amount*	Amount Expended by ODOT*	Infrastructure Funds Paid to ODOT*
I-90 Innerbelt Bridge	Cuyahoga	$275,020	$273,959	$273,959
Opportunity Corridor	Cuyahoga	14,000	13,608	13,608
US 250 Widening	Erie	14,000	14,000	14,000
1-75 Widening	Hancock/Wood	283,280	280,105	280,105
SR57	Lorain	16,500	16,500	16,500
I-75/ I-475 Interchange	Lucas	122,200	122,200	122,200
I-475 and Rt 20 Interchange	Lucas	27,500	25,478	25,478
1-75 Widening	Lucas	63,000	63,000	63,000
I-80 Widening	Mahoning/Trumbull	65,500	65,500	65,500
I-271 Widening	Summit	49,000	47,754	47,754
		$930,000	$922,104	$922,104

*In Thousands

On January 22, 2018 the Commission's Board approved the funding of three additional Infrastructure Projects totaling $450 million. Through September 30, 2019, ODOT has expended $84,435,000 on these Infrastructure Projects and the Commission has reimbursed ODOT $84,435,000 for ODOT's expenditures on these Infrastructure Projects. The entire $450 million in 2018 Junior Lien Bond Proceeds is expected to be paid to ODOT by the end of 2023. The status of the funding (in thousands) of each infrastructure project as of September 30, 2019 is as follows:

Project	County	Project ID #'s	Approved Amount*	Amount Expended by ODOT*	Infrastructure Funds Paid to ODOT*
I-75 Reconstruction	Wood/Lucas	93592	$90,000	$10,061	$10,061
I-75 Reconstruction	Lucas	93594	160,000	45,519	45,519
Opportunity Corridor	Cuyahoga	96833	200,000	28,855	28,855
			$450,000	$84,435	$84,435

*In Thousands

The Commission is required by the Act to make an annual report to the Governor and the General Assembly on the funding of Turnpike System Projects and Infrastructure Projects. The Act further requires the Commission to submit an annual report to the Turnpike Legislative Review Committee on Infrastructure Projects approved and funded by the Commission.

OHIO DEPARTMENT OF TRANSPORTATION*

ODOT was established on September 29, 1972, by the Ohio General Assembly through the expansion of the responsibilities of the former Ohio Department of Highways to include all modes of transportation. ODOT is responsible for planning, designing, constructing, maintaining and rehabilitating the State's highway system, and administering both federal and State funds which provide grants for aviation, bridges and public transportation facilities and programs throughout the State.

ODOT is one of the largest agencies of State government, with approximately 4,900 permanent employees. ODOT consists of a central headquarters office, located in Columbus, Ohio and 12 District Offices located throughout the State. The Director is appointed by the Governor.

ODOT is a decentralized organization, with most highway-related functions performed in 12 geographic districts. Approximately 85 percent of ODOT's employees are located in the 12 district, 90 full service highway service facilities and 130 outpost facilities throughout the State. The districts perform planning, design, construction, engineering, material testing, and maintenance functions for ODOT. The 12 districts are each headed by a District Deputy Director, who reports to the Director of ODOT.

ODOT's Central Office contains the offices and divisions which provide technical and administrative support to the districts for both highway and modal programs. The organization of the Central Office consists of the Transportation Policy and Chief Engineer Divisions, the Business and Human Resources Divisions, Field Operations Divisions and the Director's administrative support staff. These divisions and their respective offices develop policies and procedures, provide technical support and monitor the Districts for compliance with established procedures. All construction contracts are advertised and awarded by the Central Office.

The State has the seventh largest highway network in the country, with approximately 121,000 miles of roadway, of which approximately 16,000 miles are under ODOT's jurisdiction. ODOT is responsible for and/or is involved in a wide variety of programs and projects relating to aviation, bicycling, highways and public transportation. ODOT's annual budget is approximately $3.3 billion. Major funding sources for ODOT's highway program include state motor fuel taxes and fees and Title 23 Moneys received from the United States Department of Transportation.

PLAN OF FINANCE

The 2020 Bonds are being issued to provide funds to (i) advance refund all of the Commission's State of Ohio Turnpike Revenue Bonds, 2013 Series A and a portion of the State of Ohio Turnpike Junior Lien Revenue Bonds, 2013 Series A (Infrastructure Projects) (the refunded portion of each such series referred to collectively herein as the "Refunded Bonds") and (ii) pay the costs of issuance of the 2020 Bonds. See Exhibit H for detailed information regarding the Refunded Bonds.

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* All information about the Ohio Department of Transportation has been provided by ODOT.

SOURCES AND USES OF PROCEEDS

The proceeds received from the sale of the 2020 Bonds, and the expected application of these funds is as follows:

	2020 Series A Senior Lien Bonds	2020 Series A Junior Lien Bonds	Total
Sources:			
Par Amount	$81,465,000.00	$376,850,000.00	$458,315,000.00
TOTAL SOURCES	$81,465,000.00	$376,850,000.00	$458,315,000.00
Uses:			
Deposit to Senior Lien Escrow Fund	$81,105,489.68		$81,105,489.68
Deposit to Junior Lien Escrow Fund		$375,207,327.29	$375,207,327.29
Costs of Issuance[1]	$359,510.32	$1,642,672.71	$2,002,183.03
TOTAL USES	$81,465,000.00	$376,850,000.00	$458,315,000.00

[1]Includes underwriters' discount, additional proceeds, fees and expenses of counsel and counsel to the underwriters, rating agency fees, printing expenses, fees and expenses of the Municipal Advisor, trustee fees, verification agent fees, other miscellaneous costs and expenses, and rounding.

DEBT SERVICE

Set forth in the table below is the total debt service for the Outstanding Senior Lien Bonds and Junior Lien Bonds secured by the System Pledged Revenues.

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ANNUAL SENIOR LIEN BONDS AND JUNIOR LIEN BONDS DEBT SERVICE

		2020 Series A Senior Lien Bonds					2020 Series A Junior Lien Bonds				
Fiscal Year	Outstanding Senior Lien Annual Debt Service	Principal	Interest	Total	Total Senior Lien Annual Debt Service	Outstanding Junior Lien Annual Debt Service	Principal	Interest	Total	Total Junior Lien Annual Debt Service	Total Annual Debt Service
2020	$43,916,350	$-	$1,284,128	$1,284,128	$45,200,478	$43,590,338	$-	$5,974,815	$5,974,815	$49,565,153	$97,014,731
2021	54,203,588	-	2,540,033	2,540,033	56,743,621	38,465,338	1,990,000	11,801,729	13,791,729	52,257,067	106,659,787
2022	57,150,213	-	2,540,033	2,540,033	59,690,246	38,465,338	2,105,000	11,767,071	13,872,071	52,337,408	112,027,654
2023	57,109,625	-	2,540,033	2,540,033	59,649,658	49,520,233	2,140,000	11,730,317	13,870,317	63,390,550	123,040,208
2024	48,900,588	-	2,540,033	2,540,033	51,440,621	68,222,128	2,175,000	11,691,875	13,866,875	82,089,003	133,529,624
2025	40,919,288	-	2,540,033	2,540,033	43,459,321	71,277,128	2,215,000	11,650,552	13,865,552	85,142,680	128,602,001
2026	49,677,713	-	2,540,033	2,540,033	52,217,746	63,297,003	2,260,000	11,605,903	13,865,903	77,162,906	129,380,652
2027	25,235,869	-	2,540,033	2,540,033	27,775,902	81,390,253	2,305,000	11,558,119	13,863,119	95,253,372	123,029,274
2028	25,223,800	-	2,540,033	2,540,033	27,763,833	87,305,128	2,355,000	11,506,916	13,861,916	101,167,043	128,930,877
2029	9,619,800	-	2,540,033	2,540,033	12,159,833	107,455,878	2,410,000	11,452,081	13,862,081	121,317,958	133,477,792
2030	9,608,175	-	2,540,033	2,540,033	12,148,208	112,341,728	2,465,000	11,394,159	13,859,159	126,200,886	138,349,095
2031	9,402,925	-	2,540,033	2,540,033	11,942,958	117,364,578	2,525,000	11,333,623	13,858,623	131,223,200	143,166,159
2032	3,514,300	2,255,000	2,511,835	4,766,835	8,281,135	128,079,878	-	11,302,679	11,302,679	139,382,556	147,663,691
2033	3,514,300	2,315,000	2,453,529	4,768,529	8,282,829	127,873,828	-	11,302,679	11,302,679	139,176,506	147,459,336
2034	3,514,300	2,375,000	2,391,942	4,766,942	8,281,242	128,712,530	-	11,302,679	11,302,679	140,015,209	148,296,451
2035	3,514,300	2,435,000	2,327,212	4,762,212	8,276,512	128,336,620	-	11,302,679	11,302,679	139,639,299	147,915,810
2036	3,514,300	2,500,000	2,258,949	4,758,949	8,273,249	129,749,423	-	11,302,679	11,302,679	141,052,101	149,325,350
2037	8,874,900	-	2,223,937	2,223,937	11,098,837	125,701,063	2,900,000	11,257,787	14,157,787	139,858,849	150,957,686
2038	15,545,500	-	2,223,937	2,223,937	17,769,437	118,895,175	2,990,000	11,166,610	14,156,610	133,051,785	150,821,221
2039	13,520,500	-	2,223,937	2,223,937	15,744,437	117,677,706	3,085,000	11,072,569	14,157,569	131,835,275	147,579,711
2040	13,945,500	-	2,223,937	2,223,937	16,169,437	120,217,375	3,180,000	10,975,586	14,155,586	134,372,961	150,542,398
2041	14,369,250	-	2,223,937	2,223,937	16,593,187	120,280,125	3,280,000	10,873,618	14,153,618	134,433,743	151,026,929
2042	14,360,250	-	2,223,937	2,223,937	16,584,187	120,259,750	3,385,000	10,766,444	14,151,444	134,411,194	150,995,381
2043	6,303,750	-	2,223,937	2,223,937	8,527,687	120,255,500	3,495,000	10,655,814	14,150,814	134,406,314	142,934,001
2044	-	6,085,000	2,126,698	8,211,698	8,211,698	23,729,875	66,195,000	9,535,199	75,730,199	99,460,074	107,671,772
2045	-	6,280,000	1,929,106	8,209,106	8,209,106	20,254,375	77,365,000	7,226,754	84,591,754	104,846,129	113,055,235
2046	-	6,480,000	1,725,201	8,205,201	8,205,201	20,409,625	78,075,000	4,727,279	82,802,279	103,211,904	111,417,105
2047	-	22,740,000	1,258,265	23,998,265	23,998,265	-	64,905,000	2,428,160	67,333,160	67,333,160	91,331,426
2048	-	28,000,000	447,440	28,447,440	28,447,440	-	43,050,000	692,244	43,742,244	43,742,244	72,189,684
Total	**$535,459,081**	**$81,465,000**	**$64,222,228**	**$145,687,228**	**$681,146,309**	**$2,429,127,911**	**$376,850,000**	**$291,358,618**	**$668,208,618**	**$3,097,336,530**	**$3,778,391,039**

Totals may not add due to rounding

Source: Ohio Turnpike and Infrastructure Commission

DESCRIPTION OF THE 2020 BONDS

General

The 2020 Bonds are being issued by the Commission pursuant to the Act, the Senior Lien Trust Agreement and the Junior Lien Trust Agreement and will be dated the date of their issuance and delivery. The 2020 Bonds will be issued in the principal amounts, bearing interest at the rates, paying interest on the dates, and maturing (subject to the rights of prior redemption described below) on the dates, all as shown on the inside cover page of this Official Statement.

Interest on the 2020 Bonds will accrue from their date of delivery and will be payable semi-annually to maturity (or earlier redemption) on February 15 and August 15, commencing on August 15, 2020 (each an "Interest Payment Date").

Redemption of 2020 Bonds

The 2020 Bonds are subject to optional redemption and mandatory redemption as set forth below.

Optional Redemption

Optional Redemption of 2020 Senior Lien Bonds. The 2020 Senior Lien Bonds are subject to redemption prior to maturity at the option of the Commission in whole or in part on any date on or after February 15, 2030, in such order as the Commission shall determine, at a redemption price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date.

Optional Redemption of 2020 Junior Lien Bonds. The 2020 Junior Lien Bonds are subject to redemption prior to maturity at the option of the Commission, in whole or in part on any date on or after February 15, 2030, in such order as the Commission shall determine, at a redemption price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date.

Mandatory Redemption

Mandatory Sinking Fund Redemption of 2020 Senior Lien Bonds. The 2020 Senior Lien Bonds maturing on February 15, 2048 shall be subject to mandatory sinking fund redemption by the Commission prior to maturity at a redemption price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date, on the dates and in the principal amounts set forth below:

Redemption Dates (2/15)	Principal Amounts
2044	$6,085,000
2045	6,280,000
2046	6,480,000
2047	22,740,000
2048	28,000,000 *

*Stated Maturity

Mandatory Sinking Fund Redemption of 2020 Junior Lien Bonds. The 2020 Junior Lien Bonds maturing on February 15, 2040 shall be subject to mandatory sinking fund redemption by the Commission prior to maturity at a redemption price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date, on the dates and in the principal amounts set forth below:

Redemption Dates (2/15)	Principal Amounts
2037	$2,900,000
2038	2,990,000
2039	3,085,000
2040	3,180,000 *

* Stated Maturity

The 2020 Junior Lien Bonds maturing on February 15, 2048 shall be subject to mandatory sinking fund redemption by the Commission prior to maturity at a redemption price equal to 100% of the principal amount thereof, plus accrued interest to the redemption date, on the dates and in the principal amounts set forth below:

Redemption Dates (2/15)	Principal Amounts
2041	$3,280,000
2042	3,385,000
2043	3,495,000
2044	66,195,000
2045	77,365,000
2046	78,075,000
2047	64,905,000
2048	43,050,000 *

* Stated Maturity

Selection of 2020 Bonds to be Redeemed

While the 2020 Bonds are held in DTC book-entry only form, if less than all of the 2020 Bonds are to be redeemed, the particular 2020 Bonds or portions thereof to be redeemed are to be selected on a "Pro Rata Pass-Through Distribution of Principal" basis in accordance with DTC operational procedures then in effect. Such procedures currently provide for adjustment of the principal by a factor provided pursuant to DTC operational arrangements. If the Trustee does not provide the necessary information or does not identify the redemption as on a "Pro Rata Pass-Through Distribution of Principal" basis, the 2020 Bonds will be selected for redemption in accordance with DTC procedures by lot. The Commission intends that redemption allocations to be made by DTC, the DTC Participants or such other intermediaries that may exist between the Commission and the owners of the 2020 Bonds be made on a "Pro Rata Pass-Through Distribution of Principal" basis as described above. However, the Commission cannot provide any assurance that DTC, the DTC Participants or any other intermediaries will allocate redemptions among the owners on such basis. If operational procedures of DTC (or of any successor depository) do not allow for the redemption of the 2020 Bonds on a "Pro Rata Pass-Through Distribution of Principal" basis, the 2020 Bonds will be selected for redemption by lot.

If the 2020 Bonds are not registered in book-entry form, in the event of partial redemption of 2020 Bonds of like series, maturity and interest rate, the Trustee will assign to each 2020 Bond of such series, maturity and interest rate then outstanding a distinctive number for each $5,000 of principal amount thereof, and will select by lot, using such method of selection as it deems proper in its discretion, from the numbers so assigned to such 2020 Bonds, as many numbers as, at $5,000 for each number, equals the principal amount of such 2020 Bonds to be redeemed. The 2020 Bonds to be redeemed will be only so much of the principal amount of each such 2020 Bond of a denomination of more than $5,000 principal amount as equals $5,000 for each number assigned to it and so selected.

Notice of Redemption

The notice of the call for redemption shall (i) identify the 2020 Bonds or portions thereof to be redeemed (specifying the CUSIP numbers of the 2020 Bonds to be redeemed and stating that no representation is made as to the accuracy or correctness of the CUSIP numbers printed therein or on the 2020 Bonds), (ii) specify the redemption price to be paid, (iii) specify the date fixed for redemption, (iv) specify the place or places where the amounts due upon redemption are payable, (v) set forth the name, address, and telephone number of the person from whom information pertaining to the redemption may be obtained, and (vi) except in the case of a conditional notice of optional redemption, state that on the redemption date there shall become due and payable upon each 2020 Bond to be redeemed the redemption price thereof, or the redemption price of the specified portion of the principal amount in the case of a 2020 Bond to be redeemed in part only, with interest accrued to such date, and that from and after such date, interest thereon shall cease to accrue and be payable. If at the time of giving of notice of an optional redemption of 2020 Bonds there has not been deposited with the Trustee moneys or Defeasance Obligations sufficient to redeem all 2020 Bonds called for such redemption, then such notice shall state that the redemption is conditional upon the deposit of moneys or such Defeasance Obligations sufficient for the redemption with the Trustee not later than the opening of business on the redemption date, and such notice will be of no effect and such 2020 Bonds shall not be redeemed unless such moneys or such Defeasance Obligations are so deposited. Such notice will be sent by first class mail not less than thirty (30) days nor more than sixty (60) days prior to the redemption date to Holders whose 2020 Bonds or portion thereof have been called for redemption at the addresses shown in the Bond Register on the Record Date. Failure to mail any such notice or any defect therein will not affect the validity of the proceedings for the redemption of any other 2020 Bonds.

Book Entry Only System

The 2020 Bonds will be issued under a book-entry only system, registered in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC"), New York, New York, as registered owner, in the form of a single, fully registered 2020 Bond representing each maturity of each Series, or interest rate within a maturity of such Series, as the case may be. The beneficial owners of 2020 Bonds in book entry form have no right to receive 2020 Bonds in the form of physical securities or certificates; ownership of beneficial interests in book entry form will be shown by book entry on the system maintained and operated by DTC and its Participants, and transfers of the ownership of beneficial interests will be made only by book entry by DTC and its Participants, and the 2020 Bonds as such shall not be transferable or exchangeable, except for transfer to another Depository or to another nominee of the Depository, without further action by the Commission. See "EXHIBIT E - Book Entry Only System" attached hereto.

Global Clearance Procedures

Beneficial interests in the 2020 Bonds may be held through DTC, Clearstream Banking, S.A. ("Clearstream") or Euroclear Bank SA/NV ("Euroclear") as operator of the Euroclear System, directly as a participant or indirectly through organizations that are participants in such system. See "EXHIBIT E - Book Entry Only System" attached hereto.

Disclaimer by Commission, Trustee, Municipal Advisor and Underwriters

Neither the Commission nor the Trustee has any responsibility or liability for any aspect of the records relating to, or payments made on account of, book-entry interest ownership, or for maintaining, supervising or reviewing any records relating to that ownership.

The Commission, the Trustee, the Commission's Municipal Advisor, and the Underwriters cannot and do not give any assurances that DTC, the Direct and Indirect Participants or others will distribute to the Beneficial Owners (i) payments of principal or interest on the 2020 Bonds paid, or (ii) notices sent to DTC as the Holder or that they will do so on a timely basis, or that DTC or the Direct and Indirect Participants will serve and act in the manner described in this Official Statement. The Commission has been advised by DTC that the current "Rules" applicable to DTC and the Direct and Indirect Participants are on file with the Securities and Exchange Commission and that the current "Procedures" of DTC to be followed in dealing with the Direct and Indirect Participants are on file with DTC.

SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS

Security for 2020 Senior Lien Bonds - General

The 2020 Senior Lien Bonds will be payable solely from and secured by a pledge of and senior lien on System Pledged Revenues. Pursuant to the terms of the Senior Lien Trust Agreement, the Commission has pledged and granted a lien to the Senior Lien Trustee on the System Pledged Revenues to provide for the payment of principal of and interest and premium, if any, on bonds issued under the Senior Lien Trust Agreement ("Senior Lien Bonds") which include the Commission's Outstanding Senior Lien Bonds, any additional Senior Lien Bonds issued under the Senior Lien Trust Agreement in the future, including the 2020 Senior Lien Bonds. The pledge of and lien on System Pledged Revenues for the 2020 Senior Lien Bonds is on a parity with that same pledge and lien for all Senior Lien Bonds Outstanding under the Senior Lien Trust Agreement. The principal of, premium, if any, and interest on all Senior Lien Bonds will be paid from System Pledged Revenues prior to the payment of any Junior Lien Bonds, including the 2020 Junior Lien Bonds.

System Pledged Revenues consist of Net Revenues and Additional System Payments. The Commission is not presently a party to any agreement or arrangement producing Additional System Payments. Net Revenues consist of Gross Revenues less required deposits to the Expense Fund. Gross Revenues consist of Tolls and certain investment income and insurance proceeds. Gross Revenues have in the past also included moneys received from the Ohio Department of Transportation and designated as System Pledged Revenues by the Commission, but there are currently no such proceeds. Gross Revenues, since January 1, 2004, also include concession revenues derived from the operation of the service plazas (other than funds contractually committed to the Service Plaza Capital Improvements Reserve and other than any allocation of the State fuel tax revenues) and all revenues derived from leases, licenses, royalties, advertising and miscellaneous sales, fees and charges together with all investment earnings thereon. See "EXHIBIT A-1 - GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT - Application of Monies in Gross Revenue Account" herein.

Security for 2020 Junior Lien Bonds - General

The 2020 Junior Lien Bonds will be payable solely from and secured by a junior pledge of and junior lien on System Pledged Revenues and a first pledge and lien on the Junior Lien Special Funds (which consist of the Junior Lien Debt Service Fund and, as to Junior Lien Debt Service Reserve Fund Bonds (including the 2020 Junior Lien Bonds), the Junior Lien Debt Service Reserve Fund). Pursuant to the terms of the Junior Lien Trust Agreement, bonds issued under the Junior Lien Trust Agreement (the "Junior Lien Bonds"), which include the Commission's Outstanding Junior Lien Bonds and any additional Junior Lien Bonds that may be issued and outstanding under the Junior Lien Trust Agreement in the future, including the 2020 Junior Lien Bonds, are junior and subordinate in right of payment to the Senior Lien Bonds, including the 2020 Senior Lien Bonds and all other bonds issued or to be issued under the Senior Lien Trust Agreement in that System Pledged Revenues must be applied to payment obligations relating to the Senior Lien Bonds before being used to pay any obligations relating to the Outstanding Junior Lien Bonds or any other bonds issued under the Junior Lien Trust Agreement.

The 2020 Junior Lien Bonds are the third series of "Junior Lien Bonds" to be issued under the Junior Lien Trust Agreement. Upon fulfillment of conditions set forth in the Junior Lien Trust Agreement, the Commission may issue additional Junior Lien Bonds under the terms of the Junior Lien Trust Agreement, which would be on a parity with the Outstanding Junior Lien Bonds and the 2020 Junior Lien Bonds. However, all such additional Junior Lien Bonds issued under the terms of the Junior Lien Trust Agreement shall be subordinate to the payment of all Senior Lien Bonds issued under the Senior Lien Trust Agreement. For a more detailed description of the Junior Lien Trust Agreement see "EXHIBIT A-2 - GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT" herein.

The Commission does not charge or collect tolls for the use by the traveling public of Non-System Projects or Infrastructure Projects. Payment of debt service on any Senior Lien Bonds that may be issued for Non-System Projects and any Junior Lien Bonds (including the 2020 Junior Lien Bonds) issued to finance or refinance Infrastructure Projects is not dependent on, subject to, or related in any manner to progress on or the completion or operation of any funded Non-System Project or Infrastructure Project.

Limitation

THE 2020 BONDS WILL NOT CONSTITUTE GENERAL OBLIGATIONS, DEBT OR BONDED INDEBTEDNESS OF THE COMMISSION OR THE STATE OR ANY POLITICAL SUBDIVISION THEREOF, AND THE HOLDERS THEREOF WILL NOT BE GIVEN THE RIGHT, AND HAVE NO RIGHT, TO HAVE ANY EXCISES OR TAXES LEVIED BY THE COMMISSION OR THE STATE OR ANY POLITICAL SUBDIVISION THEREOF OR APPLIED FOR THE PAYMENT OF THE PRINCIPAL OF OR INTEREST OR REDEMPTION PREMIUM, IF ANY, ON THE 2020 BONDS.

Flow of Funds

Senior Lien Trust Agreement

The Senior Lien Trust Agreement establishes the following funds and accounts: the Revenue Fund (and the Gross Revenue Account and the Additional System Payments Account therein), the Expense Fund (and the Operation, Maintenance and Administrative Expenses Account and the Expense Reserve Account therein), the Senior Lien Debt Service Fund (and the Senior Lien Interest Account, the Senior Lien Principal Account, the Senior Lien Bond Redemption Account and the Senior Lien Debt Service Reserve Account therein), the Series Payments Fund (and, to the extent necessary to segregate and separately account for Series Payments, one or more separate accounts therein), the Renewal and Replacement Fund, the System Projects Fund (and, to the extent necessary, one or more separate Construction Accounts therein), the General Reserve Fund, the Supplemental Payments Fund (and, to the extent necessary to segregate and separately account for Supplemental Payments, one or more separate accounts therein), and the Rebate Fund (and a separate Rebate Account therein for each Series of Senior Lien Bonds, to the extent required by applicable law).

The funds and accounts created by the Senior Lien Trust Agreement constitute trust funds for the purposes provided in the Senior Lien Trust Agreement and are for purposes of accounting, kept separate and distinct from all other funds of the Commission and are to be used only for the purposes and in the manner provided in the Senior Lien Trust Agreement.

The Senior Lien Debt Service Fund and the accounts therein are held by the Senior Lien Trustee. The Revenue Fund, the Series Payments Fund, the Expense Fund, the Renewal and Replacement Fund, the System Projects Fund, the General Reserve Fund and the Rebate Fund have been established and are maintained by the Commission in a bank or trust company which is eligible under the laws of the State to receive deposits of public funds. The Supplemental Payments Fund and the accounts therein have been established and are held in compliance with the document or agreement providing for such Supplemental Payments. For a description of the provisions of the Senior Lien Trust Agreement regarding the deposits and disbursements that are required or permitted to be made to or from the funds and accounts established under the Senior Lien Trust Agreement, see "EXHIBIT A-1 – GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT – Funds and Accounts" herein.

Junior Lien Trust Agreement

The Senior Lien Trust Agreement was originally structured to allow for the issuance of junior lien obligations, and the flow of funds provided in the Junior Lien Trust Agreement has been structured to fit within the framework of the Senior Lien Trust Agreement. The provisions of the Senior Lien Trust Agreement creating and establishing the funds and accounts held under the Senior Lien Trust Agreement were incorporated by reference into the Junior Lien Trust Agreement. In addition to the funds and accounts created and established under the Senior Lien Trust Agreement, the Junior Lien Trust Agreement established the following funds and accounts: the Junior Lien Debt Service Fund (and the Junior Lien Interest Account, the Junior Lien Principal Account and the Junior Lien Redemption Account therein), the Junior Lien Debt Service Reserve Fund (and, at the request of the Commission, a separate Junior Lien Debt Service Reserve Account therein for any particular Series of Junior Lien Debt Service Reserve Fund Bonds), the Junior Lien Series Payments Fund (and, to the extent necessary to segregate and separately account for Junior Lien Series Payments, one or more separate accounts therein), the Junior Lien Supplemental Payments Fund (and, to the extent necessary to segregate and separately account for Junior Lien Supplemental Payments, one or more separate accounts therein), the Infrastructure Projects Fund (and to the extent necessary, one or more separate accounts therein), and the Junior Lien Rebate Fund (and a separate Junior Lien Rebate Account therein for each Series of Junior Lien Bonds, to the extent required by applicable law).

The funds and accounts created by the Junior Lien Trust Agreement constitute trust funds for the purposes provided in the Junior Lien Trust Agreement and will, for purposes of accounting, be kept separate and distinct from all other funds of the Commission and will be used only for the purposes and in the manner provided in the Junior Lien Trust Agreement.

The Junior Lien Debt Service Fund and the accounts therein and the Junior Lien Debt Service Reserve Fund are held by the Junior Lien Trustee. The Infrastructure Projects Fund and the Junior Lien Rebate Fund are required to be established and maintained by the Commission in a bank or trust company which is eligible under the laws of the State to receive deposits of public funds. The Junior Lien Supplemental Payments Fund and the Junior Lien Series Payments Fund and the accounts therein are required to be established and held in compliance with the document or agreement providing for such Junior Lien Supplemental Payments or Junior Lien Series Payments, as the case may be. For a description of the provisions of the Junior Lien Trust Agreement regarding the deposits and disbursements that are required or permitted to be made to or from the funds and accounts established therein, see "EXHIBIT A-2 – GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT – Funds and Accounts" herein.

Amounts on deposit in the Gross Revenue Account of the Revenue Fund will be transferred and deposited in the various funds and accounts in the order of priority shown below, subject to the restrictions set forth in the Senior Lien Trust Agreement and the Junior Lien Trust Agreement. Similarly, amounts, if any, on deposit in the Series Payment Fund and Supplemental Payments Fund will be transferred and deposited as shown below. There are currently no deposits to the Series Payments Fund or the Supplemental Payments Fund.

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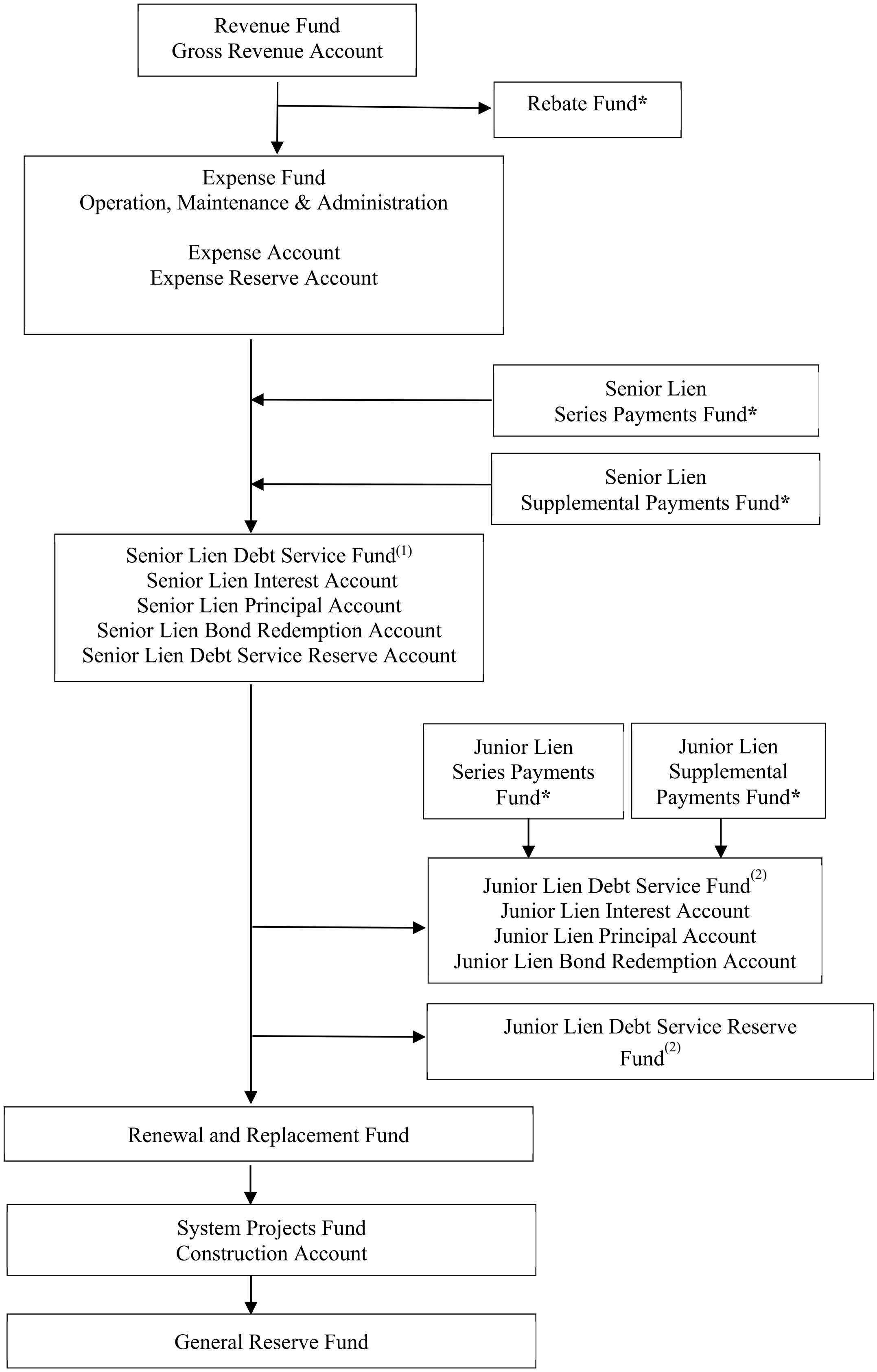


** Currently there are no deposits to these funds.*
(1) Held by Senior Lien Trustee
(2) Held by Junior Lien Trustee

Debt Service Reserve Requirements

Senior Lien Debt Service Reserve Account

The Senior Lien Trust Agreement requires that a balance be maintained in the Debt Service Reserve Account in the Senior Lien Debt Service Fund equal in amount to the Senior Lien Debt Service Reserve Requirement, that being the lower of (1) the Maximum Senior Lien Annual Debt Service Requirement, without credit for Series Payments otherwise permitted to be included by the definition of Senior Lien Annual Debt Service Requirement, or (2) the maximum amount permitted by the Code to be funded from Bond proceeds without requiring yield restriction. In lieu of the amounts required to be on deposit in the Senior Lien Debt Service Reserve Account, the Commission may at any time cause to be deposited into such Debt Service Reserve Account a Reserve Account Credit Facility for the benefit of the Holders. At the time of that deposit, the provider of the Reserve Account Credit Facility, or the Senior Lien Bonds that are secured by the Reserve Account Credit Facility, must be assigned one of the two highest ratings by each Rating Agency that has a rating outstanding on the Bonds. The Reserve Account Credit Facility must be in an amount which, together with other amounts on deposit therein, equals the Senior Lien Debt Service Reserve Requirement or, if the Commission has exercised its option to fund the Senior Lien Debt Service Reserve Account in installments, the amount then required to be on deposit in such Debt Service Reserve Account in accordance with such election. The Reserve Account Credit Facility shall be payable or available to be drawn upon in accordance with the Senior Lien Trust Agreement. Draws on the Reserve Account Credit Facility, if necessary, will be made on a pro-rata basis. Prior to the issuance of the 2020 Senior Lien Bonds, the Senior Lien Debt Service Reserve Requirement is $61,917,429.

In the event that, subsequent to being deposited in the Debt Service Reserve Account, a Reserve Account Credit Facility fails to satisfy the Reserve Account Credit Facility Rating Requirement (as defined below), the Commission is required to deposit funds into the Senior Lien Debt Service Reserve Account in an amount that, together with any other amounts on deposit as well as any Reserve Account Credit Facilities that do meet the Reserve Account Credit Facility Rating Requirement, equals the Senior Lien Debt Service Reserve Requirement. Alternatively, the Commission may deposit another Reserve Account Credit Facility that meets the Reserve Account Credit Facility Rating Requirement to insure over the Reserve Account Credit Facility that does not meet the Reserve Account Credit Facility Rating Requirement. The Commission is also authorized to withdraw the cash or additional Reserve Account Credit Facility that has been so deposited if the initial Reserve Account Credit Facility subsequently meets the Reserve Account Credit Facility Rating Requirement. For purposes of the provisions of the Senior Lien Trust Agreement summarized in this paragraph, "Reserve Account Credit Facility Rating Requirement" means that the provider of a Reserve Account Credit Facility must be rated in one of the two highest rating categories (without giving effect to modifiers or qualifiers) by at least two Rating Agencies. For a further description of the requirements of the Senior Lien Trust Agreement for the funding and application of the Senior Lien Debt Service Reserve Account, see "EXHIBIT A-1 - GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT - Funds and Accounts - Debt Service Reserve Account" herein.

Senior Lien Debt Service Reserve Account Credit Facility

The Commission maintains on deposit a Debt Service Reserve Account Credit Facility in the Senior Lien Debt Service Reserve Account in the principal amount of $49,283,000, which was issued by Assured Guaranty. While the Debt Service Reserve Account Credit Facility is in the Senior Lien Debt Service Account and is available to be drawn upon, such Debt Service Reserve Account Credit Facility is not currently being relied upon by the Commission toward satisfaction of the Senior Lien Debt Service Reserve Requirement.

Junior Lien Debt Service Reserve Fund

The Junior Lien Trust Agreement requires that a balance be maintained in the Junior Lien Debt Service Reserve Fund equal in amount to the Junior Lien Debt Service Reserve Requirement, that being 100% of the average Junior Lien Annual Debt Service on all Outstanding Junior Lien Debt Service Reserve Fund Bonds, without credit for Junior Lien Series Payments otherwise permitted to be included by the definition of Junior Lien Annual Debt Service Requirement, calculated as of the date of original issue of each Series of Junior Lien Debt Service Reserve Fund Bonds and set forth in the Junior Lien Supplemental Trust Agreement authorizing each Series of Junior Lien Debt Service Reserve Fund Bonds, provided that the amount of the Junior Lien Debt Service Reserve Requirement shall not exceed the maximum amount permitted by the Code to be held without yield restrictions in a reasonably required debt service reserve fund for the Junior Lien Bonds. "Junior Lien Debt Service Reserve Fund Bonds" means any Junior Lien Bonds designated in any Supplemental Junior Lien Trust Agreement as being secured by the Junior Lien Debt Service Reserve Fund. The 2020 Junior Lien Bonds will be designated in the Third Supplement as Junior Lien Debt Service Reserve Fund Bonds secured by the Junior Lien Debt Service Reserve Fund. Prior to the issuance of the 2020 Junior Lien Bonds, the Junior Lien Debt Service Reserve Requirement is $110,475,026.

In lieu of the amounts required to be on deposit in the Junior Lien Debt Service Reserve Fund, the Commission may at any time cause to be deposited into such Junior Lien Debt Service Reserve Fund a Junior Lien Credit Facility for the benefit of the Holders of the Junior Lien Debt Service Reserve Fund Bonds in an amount, which together with other amounts on deposit therein, equals the Junior Lien Debt Service Reserve Requirements or, if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in such Junior Lien Debt Service Reserve Fund in accordance with such election, which Junior Lien Credit Facility shall be payable or available to be drawn upon in accordance with the Junior Lien Trust Agreement.

For a further description of the requirements of the Junior Lien Trust Agreement for the funding and application of the Junior Lien Debt Service Reserve Fund, see "EXHIBIT A-2 GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT - Funds and Accounts – Junior Lien Debt Service Reserve Fund" herein.

Toll Rate Covenants

Senior Lien Toll Covenant

The Commission covenants in the Senior Lien Trust Agreement that it will at all times charge and collect or cause to be charged and collected Tolls for the use of the Turnpike System at rates not less than those set forth in the schedule of such Tolls then in effect and as shall be required in order that: (a) Gross Revenues in each Fiscal Year shall equal at least one hundred percent (100%) of the aggregate of: (i) the Cost of Operation, Maintenance and Administration for such Fiscal Year as provided in the Annual Budget; and (ii) any amounts required to be deposited into the Expense Reserve Account in such Fiscal Year; and (b) System Pledged Revenues in each Fiscal Year shall equal at least one hundred percent (100%) of the aggregate in such Fiscal Year of (i) the Annual Debt Service Requirement, (ii) required deposits to the Debt Service Reserve Fund, (iii) deposits and payments required pursuant to the Junior Lien Master Trust Agreement, (iv) deposits and payments required pursuant to any resolution, indenture or other authorizing instrument under which any obligations of the Commission secured by a pledge of the System Pledged Revenues junior and subordinate to the Junior Lien Bonds are issued, and (v) the Renewal and Replacement Requirement; and (c) System Pledged Revenues (plus Supplemental Payments, if any, in an amount not to exceed the aggregate Annual Debt Service Requirement for such Fiscal Year for all Series of Senior Lien Bonds to which such Supplemental Payments are pledged in each Fiscal Year) shall equal at least one hundred twenty percent (120%) of the Annual Debt Service Requirement in such Fiscal Year. For a further description of the Toll rate covenant in the Senior Lien Trust Agreement, see "EXHIBIT A-1 GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT - Tolls" herein.

Junior Lien Toll Covenant

The Commission covenants in the Junior Lien Trust Agreement that it will at all times charge and collect or cause to be charged and collected Tolls for the use of the Turnpike System at rates not less than those set forth in the schedule of such Tolls then in effect and as shall be required in order that (a) Gross Revenues in each Fiscal Year equal at least one hundred percent (100%) of the aggregate of (i) the Cost of Operation, Maintenance and Administration for such Fiscal Year as provided in the Annual Budget, and (ii) any amounts required to be deposited into the Expense Reserve Account in such Fiscal Year; (b) System Pledged Revenues in each Fiscal Year equal at least one hundred percent (100%) of the aggregate in such Fiscal Year of (i) the Composite Annual Debt Service Requirement, (ii) required deposits to the Junior Lien Debt Service Reserve Fund, (iii) deposits and payments required pursuant to the Senior Lien Trust Agreement, (iv) deposits and payments required pursuant to any resolution, indenture or other authorizing instrument under which any obligations of the Commission secured by a pledge of the System Pledged Revenues junior and subordinate to the Junior Lien Bonds are issued, and (v) the Renewal and Replacement Requirement; and (c) System Pledged Revenues (plus Supplemental Payments, if any, in an amount not to exceed the aggregate Composite Annual Debt Service Requirement for such Fiscal Year for all Series of Senior Lien Bonds and Junior Lien Bonds to which such Supplemental Payments are pledged in each Fiscal Year) shall equal at least one hundred twenty percent (120%) of the Composite Annual Debt Service Requirement in such Fiscal Year. For purposes of the Toll rate covenant in the Junior Lien Trust Agreement, "Composite Annual Debt Service Requirement" means the sum of the Junior Lien Annual Debt Service Requirement and the Senior Lien Annual Debt Service Requirement. For a further description of the Toll rate covenant in the Junior Lien Trust Agreement, see "EXHIBIT A-2 GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT - Tolls" herein.

The Commission does not charge or collect tolls for the use by the traveling public of Non-System Projects or Infrastructure Projects. Payment of debt service on any Senior Lien Bonds that may be issued for Non-System Projects and any Junior Lien Bonds (including the 2020 Junior Lien Bonds) issued to finance or refinance Infrastructure Projects is not dependent on, subject to, or related in any manner to progress on or the completion or operation of any funded Non-System Project or Infrastructure Project.

Additional Bonds Tests

Additional Senior Lien Bonds

Subject to conditions and requirements set forth therein, the Senior Lien Trust Agreement permits the Commission from time to time to issue additional Series of Senior Lien Bonds that are payable from and secured by a pledge of System Pledged Revenues on a parity with the Outstanding Senior Lien Bonds for the purpose of: (a) financing System Projects, either alone or jointly with other persons, public bodies or private bodies; (b) financing Non-System Projects, either alone or jointly with other persons, public bodies or private bodies; (c) refunding Outstanding Senior Lien Bonds or Notes issued pursuant to the Senior Lien Trust Agreement; (d) completing any System Project for which Senior Lien Bonds have been previously issued; or (e) refunding Junior Lien Bonds or other subordinated indebtedness. Additional Series of Senior Lien Bonds may also be payable from and further secured by a pledge of Series Payments or Supplemental Payments, but neither the 2020 Senior Lien Bonds nor the Outstanding Senior Lien Bonds are secured by any Series Payments or Supplemental Payments. One condition for the issuance of an additional Series of Senior Lien Bonds is that the amount of the System Pledged Revenues and any Supplemental Payments during the Fiscal Year immediately preceding such issuance, or any twelve (12) consecutive calendar months selected by the Commission out of the fifteen (15) consecutive calendar months immediately preceding such issuance, subject to certain adjustments and verification, shall have been at least 150% of the maximum Annual Debt Service Requirement on the Senior Lien Bonds then outstanding and the Senior Lien Bonds then proposed to be issued. For a further discussion of the requirements for and conditions to the issuance of additional Senior Lien Bonds, see "EXHIBIT A-1 - GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT - Issuance of Bonds" herein.

Additional Junior Lien Bonds

Subject to conditions and requirements set forth therein, the Junior Lien Trust Agreement permits the Commission from time to time to issue additional Series of Junior Lien Bonds that are payable from and secured by a junior pledge of System Pledged Revenues on a parity with the Outstanding Junior Lien Bonds (including the 2020 Junior Lien Bonds) for the purpose of: (a) financing System Projects, either alone or jointly with other persons, public bodies or private bodies; (b) financing Infrastructure Projects, either alone or jointly with other persons, public bodies or private bodies; (c) refunding Outstanding Junior Lien Bonds or Junior Lien Notes issued pursuant to the Junior Lien Trust Agreement; (d) completing any System Project for which Junior Lien Bonds have been previously issued; or (e) refunding Senior Lien Bonds or subordinated indebtedness. Additional Series of Junior Lien Bonds may also be payable from and further secured by a pledge of Junior Lien Series Payments or Junior Lien Supplemental Payments. One condition for the issuance of an additional series of Junior Lien bonds to finance Projects is that either:

(i) the amount of the System Pledged Revenues and any Supplemental Payments during the immediately preceding Fiscal Year or any twelve (12) consecutive calendar months selected by the Commission out of the fifteen (15) consecutive calendar months immediately preceding the issuance of the proposed Junior Lien Bonds, adjusted as hereinafter described, shall have been at least 150% of the Maximum Composite Annual Debt Service Requirement on the Junior Lien Bonds then Outstanding, the Senior Lien Bonds then Outstanding, the Junior Lien Bonds then proposed to be issued and any Senior Lien Bonds then proposed to be issued. The System Pledged Revenues calculated pursuant to this paragraph may be adjusted, at the option of the Commission, if the Commission, prior to the issuance of the proposed Junior Lien Bonds, shall have increased the Tolls for transit over the toll facilities of the Turnpike System. If the Commission elects to adjust System Pledged Revenues, the Net Revenues for the immediately preceding Fiscal Year or the twelve (12) consecutive calendar months shall be adjusted, based upon a certificate of an Independent Consultant, to reflect the Net Revenues that would have been derived from the Turnpike System during such period if such increased Tolls of the Turnpike System had been in effect during all of such period; or

(ii) an Independent Consultant certifies that, based upon reasonable assumptions, System Pledged Revenues (plus Supplemental Payments, if any, in an amount not to exceed the aggregate Annual Debt Service Requirement for each such Fiscal Year for all Series of Senior Lien Bonds and Junior Lien Bonds to which such Supplemental Payments are pledged) are projected to be at least 150% of the Composite Annual Debt Service Requirement for the current Fiscal Year and each successive Fiscal Year during which the Junior Lien Bonds then Outstanding, the Senior Lien Bonds then Outstanding, the Junior Lien Bonds then proposed to be issued and any Senior Lien Bonds then proposed to be issued will be Outstanding.

For purposes of making the required calculations for issuance of additional Junior Lien Bonds, Composite Annual Debt Service Requirement shall mean in each Fiscal Year the sum of the Junior Lien Annual Debt Service Requirement and the Senior Lien Annual Debt Service Requirement. For a further discussion of the requirements for and conditions to the issuance of additional Junior Lien Bonds, See "EXHIBIT A-2 - GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT - Issuance of Bonds" herein.

Issuance of Subordinate Bonds

The Commission may issue other obligations secured by a pledge of the System Pledged Revenues in addition to the Junior Lien Bonds and the Senior Lien Bonds, provided such obligations contain an express statement that such obligations are junior, inferior and subordinate in all respects to the Junior Lien Bonds issued pursuant to the Junior Lien Trust Agreement as to lien on and source and security for payment from the System Pledged Revenues and Junior Lien Special Funds and in all other respects. There are no subordinate bonds currently outstanding.

THE TURNPIKE SYSTEM

General

The first completed section of the Ohio Turnpike, 22 miles from the Pennsylvania Turnpike at the Ohio-Pennsylvania border to an interchange at Mahoning County Road 18, nine miles west of the city of Youngstown, was opened for traffic on December 1, 1954. This Eastgate section had been rushed to completion to relieve congestion of traffic moving to and from the Pennsylvania Turnpike over state and other highways.

The remaining 219 miles of the Turnpike were opened on October 1, 1955. As traffic flowed through the 17 interchanges and terminals, all service and operating functions were activated – restaurants and service stations, disabled vehicle service, maintenance buildings, the Ohio State Highway Patrol ("OSHP"), and the Turnpike radio communications system.

For the most part, the Turnpike has experienced a relatively steady increase in traffic volume and revenues. In 1956, the first calendar year of full operation, 8,511,931 automobiles and 1,469,023 trucks used the Turnpike. In 2018, the total annual traffic consisted of 42,322,083 automobiles and 11,986,744 trucks. Annual revenues from tolls, restaurant and service station concessionaire rentals and other sources rose from $15,351,000 in 1956 to $353,534,000 in 2018.

The Ohio Turnpike links the East and Midwest by virtue of its strategic position along the system that directly connects toll roads between Boston, New York City and Chicago, consisting of the Massachusetts Turnpike, New York Thruway, New Jersey Turnpike, Pennsylvania Turnpike, Ohio Turnpike, Indiana Toll Road and Chicago Skyway.

The beginning of the National System of Interstate and Defense Highways early in 1956 resulted in the Commission scrapping plans to build several other toll roads in Ohio (but some of this planning was used in launching Ohio's interstate system). Thus, the Ohio Turnpike, which carries the designation of Project No. 1, is the one and only Turnpike project completed, operated and maintained by the Commission.

Even though the Commission receives no federal funding, all of the 241.26 mile Turnpike has been incorporated by the Federal Highway Administration into the Interstate Highway System. The Turnpike is designated Interstate Route 80/90 between the Ohio-Indiana line and the Lorain County West Interchange (Milemarker 142), Interstate Route 80 between the Lorain County West Interchange (Milemarker 142) and the Niles-Youngstown Interchange (Milemarker 218), and Interstate Route 76 between the Niles-Youngstown Interchange (Milemarker 218) and the Ohio-Pennsylvania line.

The Turnpike is linked directly with Interstate Route 75, Interstate Route 280, Interstate Route 480, Interstate Route 71, Interstate Route 77 and Interstate Route 680. There are 31 interchanges on the Ohio Turnpike, 26 of which are accesses to and from U.S., Ohio and Interstate routes and two of which are terminals connecting, respectively, with the Pennsylvania Turnpike in the east and the Indiana Toll Road in the west. The remaining three interchanges connect with county or local roads.

Although commonly known and referred to as the Ohio Turnpike, the toll road's official name is The James W. Shocknessy Ohio Turnpike in honor of the man who was a member and Chairman of the Commission from its inception in 1949 until his death in 1976.

Physical Characteristics

The 241.26 mile Ohio Turnpike mainline consists of 160 miles with three eastbound and westbound travel lanes flanked by paved shoulders 14 feet, 3 inches wide on the inside and 10 feet wide on the outside of the mainline roadway and 82 miles with two eastbound and westbound travel lanes flanked by paved shoulders 8 feet wide on the inside and 10 feet wide on the outside. The two-lane sections of the Turnpike include approximately 59 miles on the western end of the Turnpike (between mileposts 0 and 59) and 23 miles on the eastern end (between mileposts 218 and 241). The original two-lane sections are reinforced portland cement concrete, all of which has been resurfaced with asphaltic concrete. The shoulders are hard surfaced with three inches of bituminous (penetration) macadam, plus the thickness of the resurfacing asphalt. In the two-lane sections, the mainline roadways are separated by a center strip with a standard width between roadway lanes of 56 feet, consisting of 40 feet of grass median and the inside shoulders. The construction of the third lane sections eliminated the 56 foot center strip, replacing it with two 12 foot traffic lanes, two 14 foot, 3 inch wide inside shoulders and a 50 inch high concrete barrier. The third lane section between Interchange 59 and Interchange 218 consists primarily of full depth asphalt. Ascending grades are kept to a maximum of 2.00 percent and descending grades to a maximum of 3.14 percent. Horizontal and vertical curves are of sufficient radius to provide the best sight distance, as well as ease of travel.

All of the roads and railroads intersected by the Turnpike cross under or over the Turnpike's roadways by means of bridges. There are no crossings at grade. To preserve the minimum separation between roadways, twin bridges carry the roadways whenever the Turnpike crosses over other highways, railroads or rivers.

Employees and Employee Relations

As of December 31, 2019, the Commission had 903 employees compared with 918 employees on December 31, 2018. The Commission's employees are categorized into four groups based on labor organization representation.

The first group is those employees not represented by a labor organization. This group is comprised primarily of individuals employed by the Commission to perform supervisory, management, administrative, financial, engineering and legal functions. This group had 291 employees on December 31, 2019, with the numbers split between field supervisory personnel and personnel working at the Commission's headquarters in Berea, Ohio.

The second group includes the Commission's full-time, non-supervisory field employees in the Toll Collection, Maintenance, and Engineering Departments, except section clerks, chief mechanics and sign shop clerks. The Teamsters Local Union No. 436 is the exclusive representative of this group, which numbered approximately 420 employees as of December 31, 2019.

The third group includes the Commission's part-time toll collectors who are represented as a separate bargaining unit by the Teamsters Local Union No. 436. This group had approximately 183 part-time toll collectors as of December 31, 2019.

The Commission's full-time radio operators form the fourth group and are represented as a separate bargaining unit by the Teamsters Local Union No. 436. This group had approximately 9 full-time radio operators as of December 31, 2019.

Employee benefits provided by the Commission to all full-time employees include medical, dental and vision insurance and contributions to the Ohio Public Employees Retirement System.

The current collective bargaining agreement with each unit represented by a labor organization expired on December 31, 2019. Negotiations with each unit are currently in process and the Commission will continue to simultaneously negotiate successor collective bargaining agreements with each unit. Additional negotiation sessions are scheduled. By State law, the collective bargaining agreements continue in effect during the period of negotiations until successor agreements are reached. No management or supervisory employees are covered by the collective bargaining agreements. Agreements have been in place with each of these bargaining units for over 20 years.

If union negotiations are unsuccessful, the parties will follow the mandated State law procedure, which includes a required impasse procedure of mediation and then a formal fact-finding hearing. Under State law, only after the parties have pursued the required impasse procedures will a union have the opportunity to call for a strike. In the history of negotiations at the Commission with the current unions, the parties have resolved the agreements at the negotiation stage without the use of the subsequent impasse procedures.

Reduction in Toll Operations Workforce

Electronic tolling has enhanced the overall efficiency of the Commission's toll operations. The long-term efficiencies created as a result of *E-ZPass*® and the installation of the Automated Toll Payment Machines ("ATPMs") at several of the toll plazas as well as the impact of the implementation of the planned new tolling systems as described herein are expected to continue to reduce the number of full-time and part-time toll collectors required on a long-term basis.

As of December 31, 2019, through the combined efforts of a hiring freeze, a voluntary separation plan and layoffs, the Commission has, since 2008, permanently reduced full-time toll collector positions from 306 to 174, and part-time toll collector positions from 308 to 183. During this same time period, the Commission has reduced its overall staffing levels by 26.65%, from 1,231 to 903 on December 31, 2019.

The Commission continues to reduce the number of full and part-time toll collectors primarily through attrition as the number of cash transactions decrease because of increased *E-ZPass*® use and the installation of additional ATPMs.

Retirement Expenses and Post Employment Hospital Care Benefits

Present and retired employees of the Commission are covered under the Ohio Public Employees Retirement System ("OPERS"), a statewide public employee retirement system.

In 2019, employees covered by OPERS contributed at a statutory rate of 10.0% of earnable salary or compensation. As the employer, the Commission's statutory contribution rate for those employees was 14.0% of the same base. These employee and employer contribution rates are the maximums permitted under current State law.

OPERS is one of five statewide public employee retirement systems created by and operating pursuant to Ohio law, all of which currently have unfunded actuarial accrued liabilities. The General Assembly has the power to amend the format of those systems and to revise rates and methods of contributions to be made by public employers and their employees and eligibility criteria, benefits or benefit levels for employee members. On September 12, 2012, the General Assembly passed five separate pension reform bills intended to assist each of the five retirement systems in addressing its unfunded actuarial accrued liabilities. The bill passed with respect to OPERS provided for no change in the Commission contribution rates with respect to its employees' earnable salaries or in the OPERS employee contribution rate. With certain transition provisions applicable to certain current employees, the bills increased minimum age and service requirements for retirement and disability benefits, revised the calculation of an employee's final average salary on which pension benefits are based to include the five highest years (rather than the three highest years), provided for OPERS pension benefits to be calculated on a lower, fixed formula, changed provisions with respect to future cost–of-living adjustments to limit those adjustments to the lesser of any increase in the Consumer Price Index or three percent, and made other changes.

OPERS administers three pension plans: the Traditional Plan, the Member-Directed Plan and the Combined Plan. At December 31, 2018, the Commission reports a liability of $59,687,000 for its proportionate share of the net pension liability for the Traditional Plan and an asset for its proportionate share of the net pension asset of $468,000 for the Combined Plan. The net pension asset/liability was measured as of December 31, 2017. The total pension asset/liability used to calculate the net pension asset/liability was determined by an actuarial valuation as of December 31, 2017. The Commission's proportion of the net pension asset/liability is determined by a measure of the Commission's proportionate relationship of employer contributions made to OPERS to the total contributions made to OPERS by all employers and non-employer contributing entities to the plan. The Commission's proportion of the net asset/liability is based on the Commission's long-term share of contributions to the plan as compared to the total projected long-term contributions of employers and all non-employer contributing entities. At December 31, 2018, the Commission's proportion was 0.380459% for the Traditional Plan and 0.334825% for the Combined Plan.

The Commission provides postemployment health care benefits through its contributions to the OPERS. The OPERS maintains a cost-sharing, multiple-employer defined benefit post-employment healthcare plan, which includes a medical plan, prescription drug program and Medicare Part B premium reimbursement, to qualifying members.

In order to qualify for postretirement health care coverage, retirees must have 20 or more years of qualifying Ohio service credit. Health care coverage for disability recipients and qualified survivor benefit recipients is available. The health care coverage provided by the OPERS is considered an Other Postemployment Benefit (OPEB) as described in GASB Statement No. 45.

The Ohio Revised Code permits, but does not mandate, the OPERS to provide OPEB benefits to its eligible members and beneficiaries. Authority to establish and amend benefits is provided in Chapter 145 of the Ohio Revised Code.

Federal law requires Commission employees hired after March 31, 1986 to participate in the federal Medicare program, which requires matching employer and employee contributions, each being 1.45% of the wage base. Otherwise, Commission employees who are covered by a State retirement system are not currently covered under the federal Social Security Act. OPERS is not subject to the funding and vesting requirements of the federal Employee Retirement Income Security Act of 1974.

For further information on OPERS, see the notes to the Basic Financial Statements included in Exhibit C. OPERS issues a stand-alone financial report. Interested parties may obtain a copy by visiting https://www.opers.org/financial/reports.shtml, making a written request to the OPERS, 277 East Town Street, Columbus, Ohio 43215-4642 or by calling (614) 222-5601 or (800) 222-7377.

Services to Customers

The Commission offers a number of services for the convenience and safety of Turnpike customers. The Commission has contracted with several private companies through competitive bidding to operate restaurants and service stations at the Commission's 14 service plazas, to provide disabled vehicle service to stranded motorists and to furnish ambulance and fire-fighting assistance in the event of an accident or other emergency situation.

Disabled Vehicle Service

Roadway vehicle-repair trucks on the Turnpike are equipped to assist temporarily stranded drivers in getting vehicles started again. On-the-spot service includes changing tires, supplying emergency gasoline, replacing broken fan belts and other minor repairs. Towing service is available for the removal of vehicles requiring garage work off the Turnpike.

Service Plazas

The Commission currently operates 14 service plazas on the Turnpike to meet the needs of the traveling public. The Commission has contracted with several private companies to operate restaurants and service stations at each of the seven pairs of service plazas, which are approximately 30 miles apart. The farthest distance between pairs of service plazas is 56.1 miles. Restaurants and service stations are located at all service plazas, which are open 24 hours each day throughout the year. The service stations at the service plazas have gasoline, diesel fuel and assorted automotive accessories for sale. The restaurants at the service stations offer travelers a variety of food and beverage choices. Prices for food, fuel and other items sold at the service plazas are competitive with those charged at similar, off-Turnpike establishments in the same general vicinities. Additionally, Turnpike maps, motel-hotel lists, traffic updates and other touring aids are available at the service plazas for travelers.

Turnpike Maintenance

Providing Turnpike customers with a well-maintained highway is a task performed by the Commission's Maintenance Department. Personnel are assigned to the eight maintenance buildings, spaced at approximately 30-mile intervals along the Turnpike. Maintenance workers are responsible for keeping the Turnpike facilities operational and the roadway and pavement in a comfortable-riding, clean and safe condition by performing routine roadway maintenance, patching, joint repair, guardrail repair, lighting maintenance, fabricating and installing roadway signage, mowing, landscaping, applying herbicides and snow and ice removal. Mechanics are employed to maintain the Commission's service vehicles and equipment for such tasks. Weather monitoring stations along the road utilize embedded sensors in certain mainline bridges to provide advance notice of the need to initiate snow and ice operations. The Maintenance Department is also responsible for administering compliance with environmental and other state regulations relative to water systems, wastewater treatment plants, sanitary sewer pumping stations and underground storage tanks.

Ohio State Highway Patrol

The OSHP polices the Turnpike on a continual, full-time basis. OSHP operates patrol cars and airplanes to enforce the Commission's traffic regulations, as well as to perform service to ill, stranded or otherwise distressed travelers. Under a contract between the Commission and the OSHP, the Commission uses toll revenue to reimburse the patrol for all costs of operating on the Turnpike.

As part of its continued commitment to safety, the Commission has funded the implementation of Multi-Agency Radio Communications System ("MARCS") for OSHP on the Turnpike. This system enables

OSHP troopers and law enforcement personnel serving communities adjacent to the Turnpike to effectively communicate with each other, thus providing an additional level of safety and support for both Turnpike motorists and for communities near the Turnpike corridor.

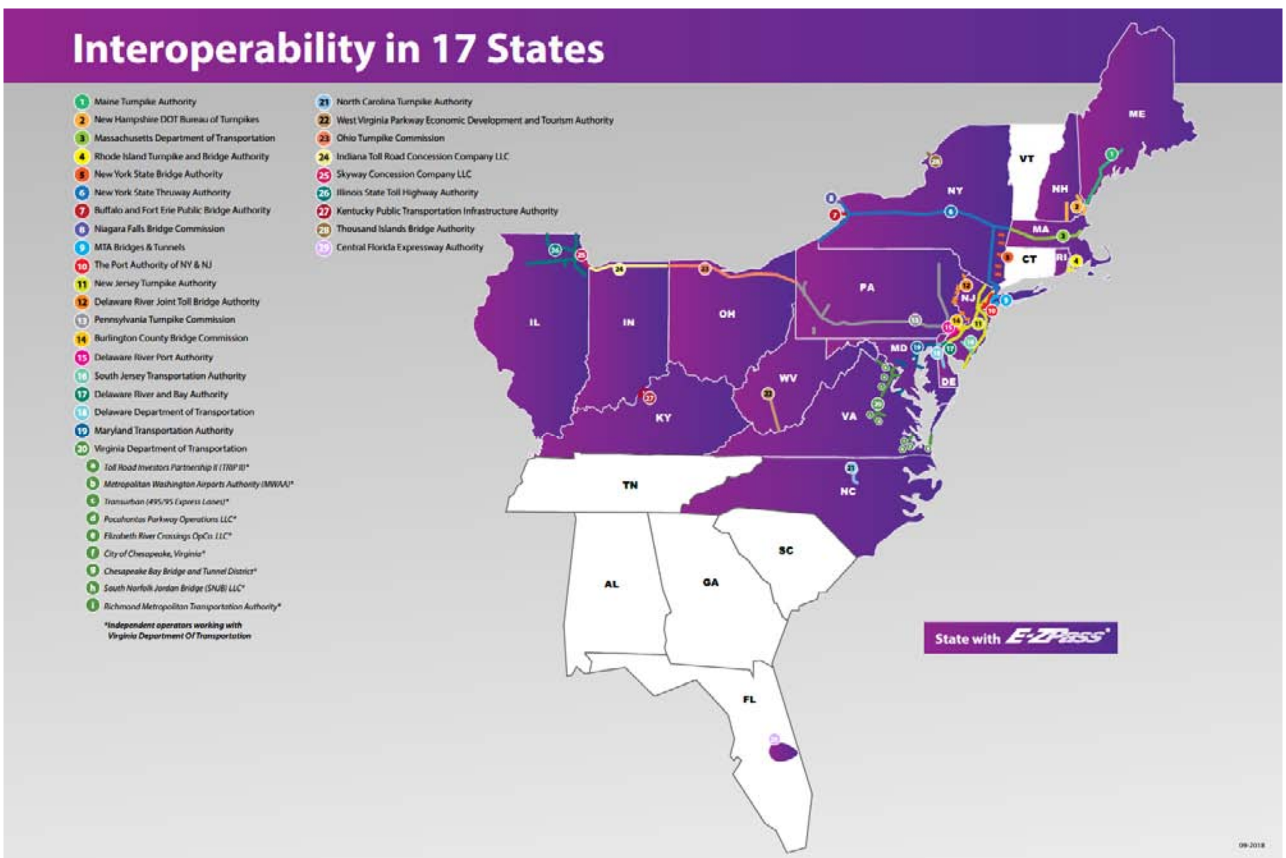
Radio Communications Systems

In the interest of improved efficiency and effectiveness, the Commission has also migrated to the Ohio MARCS 800 MHz two-way radio communication system for Turnpike operations. MARCS is of particular value to Turnpike customers as it provides greater interoperability between Turnpike personnel and emergency services providers such as OSHP, EMS, EMS life flight, fire departments and contracted disabled vehicle services when responding to vehicle accidents or incidents along the Turnpike corridor.

TOLLS AND TOLL COLLECTION

The Commission implemented its current toll collection system ("TCS") in 2009, including electronic tolling collection technology (*E-ZPass*®). Vehicles travelling the Ohio Turnpike are classified based on seven vehicle classifications, based on the number of axles and height of the vehicle over the first two axles. The vehicle classification along with distance traveled determines the appropriate toll fare. Customers using an *E-ZPass*® compatible transponder pay a lower toll fare for travel on the Ohio Turnpike than non-*E-ZPass*® customers.

The Ohio Turnpike is part of the network of 38 other U.S. toll authorities in 17 states that use *E-ZPass*®. Use of *E-ZPass*® provides the Commission with a more efficient means of collecting tolls. It also provides improved service by affording customers the convenience of not having to stop to pay their tolls.



Implementation of *E-ZPass*® also provides for increased vehicle throughput in existing toll lanes, thereby avoiding the need for future expansion of toll plaza facilities.*

The Commission currently operates ATPMs at the twenty-one least-traveled interchanges. These self-serve machines allow customers to pay their tolls with cash or credit cards without the assistance of a collector. The devices include 4-way insertion of toll tickets, coin baskets and remote functionality. With video surveillance cameras installed at each plaza and audio communications installed in the toll lanes, use of these ATPMs enables operation of these low-volume plazas in an unstaffed mode either 24 hours a day or during certain off-peak hours.

Planned Toll Collection System Modernization

The Commission hired Jacobs Engineering Group Inc. (the "Traffic Consultant") to evaluate the TCS and develop a strategic plan for modernizing the TCS because the current TCS is approaching the end of its useful life and original parts are no longer manufactured. Based on the information gathered through the Traffic Consultant's efforts, the Commission's staff identified the final preferred plan that was recommended to and approved for implementation by the Commission Board on December 18, 2017. The construction and implementation of the new TCS is currently in process and is expected to be completed by the end of 2022. For a complete description of the planned new TCS as adopted by the Commission, see Section 3 of "EXHIBIT D - TRAFFIC AND REVENUE STUDY".

Customer Service Center

As part of the TCS modernization plan, a new, state-of-the-art customer service center system ("CSC") is planned that is expected to upgrade existing customer service operations and provide significant advancements in improved customer experience, communication methods, data availability, and security primarily through the implementation of software upgrades needed to interface with the TCS modernization plan. That CSC will continue to be operated by the Commission's staff within existing space at the Commission's Berea, Ohio headquarters to service the customer service needs of the almost 400,000 *E-ZPass*® customers that have their accounts with the Commission. *E-ZPass*® usage is currently growing at approximately 2% per year and a bump in *E-ZPass*® usage is anticipated when higher speed gateless *E-ZPass*® lanes are implemented as part of the modernization plan.

The new CSC is planned to include a new *E-ZPass*® Ohio website (www.ezpassoh.com). When fully implemented, the improved CSC is expected to only perform functions related to administering and managing the *E-ZPass*® Ohio program. All unpaid toll processing functions that are expected to arise from gateless *E-ZPass*® lane operations are intended to be outsourced to one or more vendors. The implementation of the CSC is currently in process and is expected to be fully operational by May 2020. See Section 3 of "EXHIBIT D – TRAFFIC AND REVENUE STUDY."

Unpaid Toll Processing Services

The Commission plans to contract with one or more vendors to perform license plate image review, unpaid toll transaction processing functions (e.g. registered vehicle address lookup, generation and mailing of unpaid toll notices, customer service related to unpaid tolls, etc.) and collection of unpaid tolls. The Commission expects that unpaid toll processing will allow the Commission to be financially responsible while providing low speed and highway speed non-stop travel for its *E-ZPass*® travel customers.

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* The E-ZPass group voted on August 15, 2019 to accept the membership for Cline Avenue Bridge LLC and Cline Avenue Bridge LLC signed their agreements to join E-ZPass on August 26, 2019.

Capital Cost Estimates

The Traffic Consultant prepared budgetary estimates of the capital costs of modernizing the Ohio Turnpike. These costs are estimated to be approximately $204 to $232 million in 2019 dollars with approximately $65 to $72 million for the TCS, CSC and Unpaid Toll Processing capital costs and approximately $139 to $160 million for toll plaza and mainline infrastructure improvements.

Revenue and Operating Cost Impacts

The Commission currently estimates that the modernized TCS and CSC will result in approximately $257 million of operating cost savings over 30 years. In the opening year of the modernized TCS, it is estimated that there will be approximately $2.7 million less in operating costs and approximately $2.4 million more net revenue.

Toll Rate History

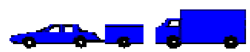
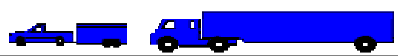
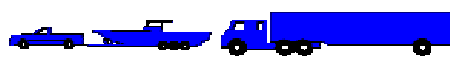
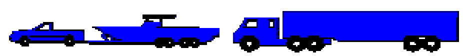
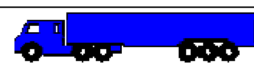
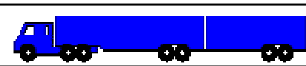
The Ohio Turnpike's toll rates for commercial vehicles, which historically have been among the lowest in the country, continue to remain among the lowest even after the adjustments and implementation of the *E-ZPass®* program.

In conjunction with the Commission's issuance of Senior Lien Bonds and Junior Lien Bonds in 2013, the Commission implemented a series of forward-looking toll increases over a 10-year period starting January 1, 2014 and ending December 31, 2023. Specifically, the Commission, at its July 15, 2013 meeting, implemented a toll increase plan that increases rates by an average of 2.7% each year (the historical rate of inflation) for those 10 years. In addition to the forward-looking toll increase plan implemented beginning in 2014, the Commission has authority to increase tolls further, including if such increase is required by the toll covenants in the Senior Lien Trust Agreement or the Junior Lien Trust Agreement. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS – Toll Rate Covenants." In addition, the Commission expects to make further modifications to its toll system that may impact how tolls are calculated and collected for certain trips. See "TOLLS AND TOLL COLLECTION - Planned Toll Collection System Modernization" herein.

As described above, the Commission implemented a forward-looking toll increase plan starting in 2014. One exception to that plan for toll increases is related to passenger vehicles using *E-ZPass®* and making local trips of less than 30 miles over the same 10 year period, for which tolls were not increased. After 2023, the Commission's projections currently assume that the toll rate for these local trips will experience a one-time increase to equal the same per mile rate as charged for all *E-ZPass®* trips. The revisions to the toll collection system currently proposed by the Commission may impact such exception. See "TOLLS AND TOLL COLLECTION – Planned Toll Collection System Modernization" herein.

The following tables set forth: (i) the axle-based vehicle classifications and recent historical toll rates (both per trip, from January 1, 2016 to January 1, 2020, and per mile, for the years 2014 to 2018); and (ii) historical comparative traffic information for the years 2014 to 2018.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION
COST OF A ONE-WAY FULL LENGTH TRIP ACROSS THE OHIO TURNPIKE
HISTORICAL AXLE BASED TOLLS THROUGH JANUARY 1, 2020

Class	Description	Example	January 1, 2016		January 1, 2017		January 1, 2018		January 1, 2019		January 1, 2020	
			E-ZPASS	NON E-ZPASS	E-ZPASS	NON E-ZPASS	E-ZPASS	NON E-ZPASS	E-ZPASS	NON E-ZPASS	E-ZPASS	NON E-ZPASS
1	Low 2-axle vehicles and all motorcycles (including motorcycles pulling trailers).		$ 12.25	$ 17.75	$ 12.50	$ 18.25	$ 12.75	$ 18.75	$ 13.25	$ 19.25	$ 13.50	$ 20.00
2	Low 3-axle vehicles and high 2-axle vehicles.		$ 21.75	$ 30.25	$ 22.25	$ 31.25	$ 22.75	$ 32.00	$ 23.50	$ 32.75	$ 24.00	$ 33.75
3	Low 4-axle vehicles and high 3-axle vehicles.		$ 26.00	$ 35.75	$ 26.75	$ 36.75	$ 27.50	$ 37.75	$ 28.25	$ 38.75	$ 29.00	$ 39.75
4	Low 5-axle vehicles and high 4-axle vehicles.		$ 32.50	$ 42.25	$ 33.25	$ 43.50	$ 34.25	$ 44.50	$ 35.25	$ 45.75	$ 36.25	$ 47.00
5	Low 6-axle vehicles and high 5-axle vehicles.		$ 38.00	$ 47.75	$ 39.00	$ 49.00	$ 40.00	$ 50.25	$ 41.00	$ 51.75	$ 42.25	$ 53.00
6	High 6-axle vehicles.		$ 54.25	$ 66.00	$ 55.50	$ 67.75	$ 57.00	$ 69.75	$ 58.75	$ 71.50	$ 60.25	$ 73.50
7	All vehicles with 7 or more axles.		$ 78.00	$ 90.00	$ 80.00	$ 92.25	$ 82.25	$ 94.75	$ 84.50	$ 97.50	$ 86.75	$ 100.00

Toll Rates Per Mile *Last Five Years*

Class		2014	2015	2016	2017	2018
Vehicle Classification by Axles and Height (Non *E-ZPass*®):						
1	Low 2-axle vehicles and all motorcycles	$ 0.07	$ 0.07	$ 0.07	$ 0.08	$ 0.08
2	Low 3-axle vehicles and high 2-axle vehicles	0.12	0.12	0.13	0.13	0.13
3	Low 4-axle vehicles and high 3-axle vehicles	0.14	0.14	0.15	0.15	0.16
4	Low 5-axle vehicles and high 4-axle vehicles	0.17	0.17	0.18	0.18	0.18
5	Low 6-axle vehicles and high 5-axle vehicles	0.19	0.19	0.20	0.20	0.21
6	High 6-axle vehicles	0.26	0.27	0.27	0.28	0.29
7	All vehicles with 7 or more axles	0.36	0.36	0.37	0.38	0.39
Vehicle Classification by Axles and Height (*E-ZPass*®):						
1	Low 2-axle vehicles and all motorcycles	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05
2	Low 3-axle vehicles and high 2-axle vehicles	0.09	0.09	0.09	0.09	0.09
3	Low 4-axle vehicles and high 3-axle vehicles	0.10	0.11	0.11	0.11	0.11
4	Low 5-axle vehicles and high 4-axle vehicles	0.13	0.13	0.13	0.14	0.14
5	Low 6-axle vehicles and high 5-axle vehicles	0.15	0.15	0.16	0.16	0.17
6	High 6-axle vehicles	0.21	0.21	0.22	0.23	0.24
7	All vehicles with 7 or more axles	0.31	0.31	0.32	0.33	0.34

Source: Ohio Turnpike and Infrastructure Commission, CFO/Comptroller's Office.

Comparative Traffic Statistics

The following tables set forth historic information with respect to System Traffic and Revenues for the period 2014 to 2018:

	2014	2015	2016	2017	2018
Number of Vehicles (In Thousands):					
Passenger Cars	40,345	42,110	43,472	43,598	42,322
Commercial Vehicles	10,923	11,284	11,425	11,615	11,987
Total	**51,268**	**53,394**	**54,897**	**55,213**	**54,309**
Percentage of Vehicles:					
Passenger Cars	78.7%	78.9%	79.2%	79.0%	77.9%
Commercial Vehicles	21.3%	21.1%	20.8%	21.0%	22.1%
Number of Miles (In Thousands):					
Passenger Cars	1,906,619	1,998,170	2,029,904	2,017,044	1,969,692
Commercial Vehicles	968,540	1,003,117	1,007,742	1,020,875	1,064,791
Total	**2,875,159**	**3,001,287**	**3,037,646**	**3,037,919**	**3,034,483**
Percentage of Miles:					
Passenger Cars	66.3%	66.6%	66.8%	66.4%	64.9%
Commercial Vehicles	33.7%	33.4%	33.2%	33.6%	35.1%
Toll Revenue (In Thousands):					
Passenger Cars	$ 114,871	$ 122,183	$ 126,063	$127,537	$ 126,365
Commercial Vehicles	149,750	158,004	162,376	168,262	179,675
Total	**$ 264,621**	**$ 280,187**	**$ 288,439**	**$295,799**	**$ 306,040**
Percentage of Toll Revenue:					
Passenger Cars	43.4%	43.6%	43.7%	43.1%	41.3%
Commercial Vehicles	56.6%	56.4%	56.3%	56.9%	58.7%
Average Miles per Trip:					
Passenger Cars	47.3	47.5	46.7	46.3	46.5
Commercial Vehicles	88.7	88.9	88.2	87.9	88.8
Average Toll Revenue per Trip:					
Passenger Cars	$2.85	$2.90	$2.90	$2.93	$ 2.99
Commercial Vehicles	13.71	14.00	14.21	14.49	14.99
Average Toll Revenue per Mile:					
Passenger Cars	$0.06	$0.06	$0.06	$0.06	$ 0.06
Commercial Vehicles	0.15	0.16	0.16	0.16	0.17

Vehicles by Class (In Thousands)

Class		2014	2015	2016	2017	2018
Vehicle Classification by Axles and Height:						
1	Low 2-axle vehicles and all motorcycles	40,345	42,110	43,472	43,598	42,322
2	Low 3-axle vehicles and high 2-axle vehicles	1,251	1,328	1,379	1,417	1,458
3	Low 4-axle vehicles and high 3-axle vehicles	663	713	734	769	796
4	Low 5-axle vehicles and high 4-axle vehicles	451	473	499	512	534
5	Low 6-axle vehicles and high 5-axle vehicles	8,120	8,335	8,358	8,442	8,722
6	High 6-axle vehicles	258	257	273	291	294
7	All vehicles with 7 or more axles	180	178	182	184	183
Subtotal		51,268	53,394	54,897	55,213	54,309
Add Non-Revenue[1]		367	386	443	416	419
Total Vehicles		**51,635**	**53,780**	**55,340**	**55,629**	**54,728**

Percentage of Vehicles Using *E-ZPass®*:	2014	2015	2016	2017	2018
Passenger cars (Class 1)	45.5%	47.6%	50.2%	52.8%	55.5%
Commercial vehicles (Class 2-7)	80.0%	82.1%	83.6%	84.7%	85.9%
Total	52.9%	54.9%	57.1%	59.5%	62.2%

Source: Ohio Turnpike and Infrastructure Commission, CFO/Comptroller's Office.

Notes: [1] Non-revenue vehicles represent traffic of officials, employees, agencies and representatives of the Commission while in the discharge of their official duties, police officers of the United States, of the State of Ohio and of its political subdivisions, and vehicles of contractors used in the maintenance of the Turnpike and its buildings.

Toll Revenue by Class *(In Thousands)*

Class		2014	2015	2016	2017	2018
Vehicle Classification by Axles and Height:						
1	Low 2-axle vehicles and all motorcycles	$ 114,871	$ 122,183	$ 126,063	$127,537	$ 126,365
2	Low 3-axle vehicles and high 2-axle vehicles	7,065	7,682	8,029	8,367	8,848
3	Low 4-axle vehicles and high 3-axle vehicles	5,432	6,025	6,312	6,724	7,190
4	Low 5-axle vehicles and high 4-axle vehicles	4,213	4,561	4,865	5,126	5,612
5	Low 6-axle vehicles and high 5-axle vehicles	121,024	127,382	129,926	133,982	143,277
6	High 6-axle vehicles	4,661	4,795	5,333	5,858	6,146
7	All vehicles with 7 or more axles	7,355	7,559	7,911	8,204	8,602
Total Toll Revenue		**$ 264,621**	**$ 280,187**	**$ 288,439**	**$295,799**	**$306,040**

Percentage of Toll Revenue from *E-ZPass®*:	**2014**	**2015**	**2016**	**2017**	**2018**
Passenger cars (Class 1)	36.9%	38.7%	40.8%	43.2%	45.8%
Commercial Vehicles (Class 2-7)	77.3%	79.8%	81.7%	83.0%	84.4%
Total	59.8%	61.9%	63.8%	65.9%	68.5%

Source: Ohio Turnpike and Infrastructure Commission, CFO/Comptroller's Office.

Toll Rates for the Years 2020 Through 2023

The table below sets forth the axle-based vehicle classifications and approved toll rates for the years 2020 through 2023.

The Commission may increase rates further if such increase is required by the toll covenants in the Senior Lien Trust Agreement or the Junior Lien Trust Agreement. See "SECURITY AND SOURCE OF PAYMENT FOR THE 2020 BONDS – Toll Rate Covenant" herein.

The Commission's projections currently assume that after 2023 tolls will increase for all vehicles, regardless of class or payment method, by 2.7 percent each year for 5 years beginning on January 1, 2024 and then, beginning on January 1, 2029, 2.0 percent annually thereafter. See "EXHIBIT D – TRAFFIC AND REVENUE STUDY" herein.

The toll increase projections have been determined by the Commission taking into account the amount necessary to meet existing and projected debt service and operational and maintenance obligations of the Commission. For a complete description of toll increases adopted by the Commission, see "EXHIBIT D - TRAFFIC AND REVENUE STUDY" and "TOLLS AND TOLL COLLECTION" herein.

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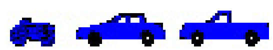
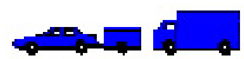
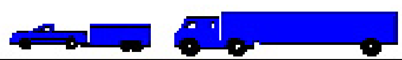
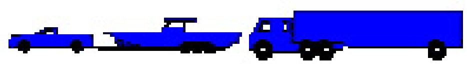
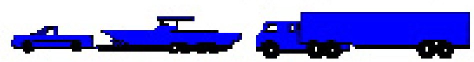
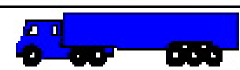
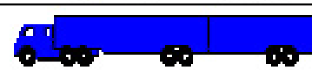
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION
APPROVED TOLL RATE SCHEDULE FOR YEARS 2020 THROUGH 2023
COST OF A ONE-WAY FULL LENGTH TRIP ACROSS THE OHIO TURNPIKE

Class	Description	Example	January 1, 2020		January 1, 2021		January 1, 2022		January 1, 2023	
			E-ZPASS	NON E-ZPASS	E-ZPASS	NON E-ZPASS	E-ZPASS	NON E-ZPASS	E-ZPASS	NON E-ZPASS
1	Low 2-axle vehicles and all motorcycles (including motorcycles pulling trailers).		$ 13.50	$ 20.00	$ 14.00	$ 20.50	$ 14.25	$ 21.00	$ 14.75	$ 21.50
2	Low 3-axle vehicles and high 2-axle vehicles.		$ 24.00	$ 33.75	$ 24.75	$ 34.75	$ 25.50	$ 35.50	$ 26.00	$ 36.50
3	Low 4-axle vehicles and high 3-axle vehicles.		$ 29.00	$ 39.75	$ 29.75	$ 40.75	$ 30.50	$ 42.00	$ 31.25	$ 43.00
4	Low 5-axle vehicles and high 4-axle vehicles.		$ 36.25	$ 47.00	$ 37.25	$ 48.25	$ 38.25	$ 49.50	$ 39.25	$ 51.00
5	Low 6-axle vehicles and high 5-axle vehicles.		$ 42.25	$ 53.00	$ 43.25	$ 54.50	$ 44.50	$ 56.00	$ 45.75	$ 57.50
6	High 6-axle vehicles.		$ 60.25	$ 73.50	$ 62.00	$ 75.50	$ 63.50	$ 77.50	$ 65.25	$ 79.50
7	All vehicles with 7 or more axles.		$ 86.75	$ 100.00	$ 89.00	$ 102.75	$ 91.50	$ 105.50	$ 94.00	$ 108.25

OTHER REVENUE SOURCES

The Ohio Turnpike is a fee-for-service facility, with 90.0% of its revenue derived from tolls. However, the Commission has worked diligently to produce revenue from other sources in order to keep tolls as low as possible. In 2018, such additional sources included the following categories, and provided the following additional revenue for the Commission: food and fuel concessions ($17,314,000), investments ($16,709,000), fuel taxes ($3,459,000), and other sources such as advertising, and special permits ($3,529,000).

CERTAIN FINANCIAL INFORMATION

Management of the Commission is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the Commission 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 generally accepted accounting principles. The internal control structure is 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.

Risk Management

The Commission is self-insured for worker's compensation. Reimbursement for medical bills, and employee lost time compensation are paid directly by the Commission in accordance with the BWC Billing and Reimbursement Manual.

The Commission is generally self-insured up to $100,000 per occurrence in accordance with its comprehensive insurance program, which includes: Commercial General Liability (including terrorism coverage); Automobile Liability; Public Officials Liability; Employment Practices Liability; Employers Liability; Employee Benefits Liability ($1,000 deductible per occurrence); Crime Insurance ($50,000 single loss retention); Umbrella and Excess Liability Insurance coverage; Bridge and Use Occupancy ($100,000 deductible per occurrence); Property, Computer Equipment, Maintenance Equipment and Boiler & Machinery ($50,000 deductible per occurrence); Cyber Security ($50,000 retention each claim); and Pollution Liability coverage ($50,000 deductible each incident). In addition, the Commission purchases commercial stop-loss insurance for employee health care claims in excess of $250,000 per covered person per contract year. Paid claims have not exceeded the limits of the Commission's commercial policies for each of the last three fiscal years. The Commission also pays unemployment claims to the State of Ohio as incurred.

Matters are reported to the insurer(s) when it is probable that a liability may exist or loss has occurred and the estimated amount or nature of that liability/loss is such that one or more insurance coverages may respond. Claim liabilities are based upon the estimated ultimate net cost of resolving the claims, including specific incremental claim adjustment expenses.

Accounting System

In order to facilitate compliance with its Master Trust Agreements, the Commission's accounting system is organized and operated on a "fund basis." The operations of each fund are accounted for using a separate set of self-balancing accounts. The accounts of all funds are combined into a single proprietary (enterprise) fund for external reporting purposes. The accounting policies of the Commission are more fully described in Notes to the Financial Statements of the Commission set forth as Exhibit C hereto.

Debt Administration: Outstanding Bonds

Pursuant to the Senior Lien Trust Agreement, the Fifth Supplemental Trust Agreement and a resolution adopted by the Commission on June 22, 1998, the Commission issued its $298,575,000 Turnpike Revenue Refunding Bonds, 1998 Series A, dated September 1, 1998. The Outstanding aggregate principal amount of 1998 Series A Bonds was $179,420,000 as of December 31, 2019.

Pursuant to the Senior Lien Trust Agreement, the Seventeenth Supplemental Trust Agreement and a resolution adopted by the Commission on October 25, 2010, the Commission issued its $131,290,000 Turnpike Revenue Refunding Bonds, 2010 Series A Bonds, dated November 1, 2010. The Outstanding aggregate principal amount of 2010 Series A Bonds was $21,650,000 as of December 31, 2019.

Pursuant to the Senior Lien Trust Agreement, the Nineteenth Supplemental Trust Agreement and a resolution adopted by the Commission on July 15, 2013, the Commission issued its $73,495,000 Turnpike Revenue Bonds, 2013 Series A Bonds, dated August 1, 2013. The Outstanding aggregate principal amount of 2013 Series A Bonds was $73,495,000 as of December 31, 2019.

Pursuant to the Senior Lien Trust Agreement, the Twentieth Supplemental Trust Agreement and a resolution adopted by the Commission on August 21, 2017, the Commission issued its $114,670,000 Turnpike Revenue Refunding Bonds, 2017 Series A Bonds, dated September 1, 2017. The Outstanding aggregate principal amount of 2017 Series A Bonds was $113,265,000 as of December 31, 2019.

Pursuant to the Senior Lien Trust Agreement, the Twenty-Second Supplemental Trust Agreement and a resolution adopted by the Commission on January 22, 2018, the Commission issued its $73,880,000 Turnpike Revenue Bonds, 2018 Series A Bonds, dated February 15, 2018. The Outstanding aggregate principal amount of 2018 Series A Bonds was $73,880,000 as of December 31, 2019.

The Outstanding Senior Lien Bonds are payable from and secured by a pledge of and a senior lien on System Pledged Revenues on a parity with the 2020 Senior Lien Bonds and with any other bonds that may be issued and Outstanding under the Senior Lien Trust Agreement in the future.

Pursuant to the Junior Lien Trust Agreement, the First Supplemental Trust Agreement and a resolution adopted by the Commission on July 15, 2013, the Commission issued its $994,812,816 Turnpike Junior Lien Revenue Bonds, 2013 Series A Bonds, dated August 1, 2013. The outstanding aggregate accreted principal amount of 2013 Series A Junior Lien Bonds was $1,116,656,485 as of December 31, 2019.

Pursuant to the Junior Lien Trust Agreement, the Second Supplemental Trust Agreement and a resolution adopted by the Commission on January 22, 2018, the Commission issued its $425,965,000 Turnpike Junior Lien Revenue Bonds, 2018 Series A Bonds, dated February 15, 2018. The outstanding aggregate principal amount of 2018 Series A Junior Lien Bonds was $425,965,000 as of December 31, 2019.

The 2013 Junior Lien Bonds, the 2018 Junior Lien Bonds and the 2020 Junior Lien Bonds are subordinate to the Senior Lien Bonds issued by the Commission under the Senior Lien Trust Agreement. The 2020 Junior Lien Bonds will be equally and ratably secured with the 2013 Junior Lien Bonds and the 2018 Junior Lien Bonds, along with any additional Junior Lien Bonds that may be issued under the Junior Lien Trust Agreement, by a junior pledge of and junior lien on System Pledged Revenues (as defined in the Junior Lien Trust Agreement). System Pledged Revenues must be applied to payment obligations relating to the Senior Lien Bonds before being used to pay any obligations relating to the Junior Lien Bonds.

Debt Service Coverage Policy for Senior Lien Bonds

By a Resolution adopted on July 15, 2013, the Commission established a policy that it will use its best efforts to cause System Pledged Revenues to equal at least 200% of Senior Lien Debt Service Requirements, and to take action necessary to re-establish or maintain such percentage, including review of revenues and reduction of expenditures. This policy is in addition to the requirement contained in the Senior Lien Trust Agreement that System Pledged Revenues, plus Supplemental Payments, if any, equal at least 120% of the Annual Debt Service Requirement for the Senior Lien Bonds. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS – Toll Rate Covenants" herein. However, this is a best efforts policy as described above, is not a legal obligation of the Commission, is subject to change at any time, and should not be relied upon by the Holders or Beneficial Owners of the 2020 Bonds. The actual results for the five most recent years are shown in the table titled "Revenue Bond Coverage" herein.

Days Cash on Hand Policy

By a Resolution adopted on July 15, 2013, the Commission also adopted a policy that it will use its best efforts to maintain a minimum of 365 days cash on hand among the following reserves: (1) the General Reserve Fund, (2) the Non-Trust Reserve Fund, (3) the Service Plaza Capital Reserve Fund, (4) the Fuel Tax Fund, (5) the System Project Fund and (6) the Renewal and Replacement Reserve. However, this is a best efforts policy, is not a legal obligation of the Commission, is subject to change at any time, and should not be relied upon by the Holders or Beneficial Owners of the 2020 Bonds.

RESULTS OF OPERATIONS

Set forth below are certain revenue and expense items and certain other financial information derived from the Commission's audited financial statements for each of the Commission fiscal years 2014 through 2018. The revenues and operating expenses below were derived by adjusting information contained in the Commission's audited financial statements, which are prepared in conformity with generally accepted accounting principles. This information is qualified by, and should be read in conjunction with, the audited financial statements for the Commission's fiscal year ended December 31, 2018 included as Exhibit C to this Official Statement. See also "MANAGEMENT DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS" below.

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Revenue Bond Coverage
Dollars in Thousands

	2014	2015	2016	2017	2018
Pledged Revenues					
Passenger Car Toll Revenues	$ 114,871	$ 122,183	$ 126,063	$ 127,537	$ 126,365
Commercial Vehicle Toll Revenues	149,750	158,004	162,376	168,262	179,675
Special Toll Permit Revenues	3,460	3,413	3,427	3,423	3,529
Pledged Concession Revenues	14,437	15,432	15,631	16,418	16,637
Investment Earnings	441	557	841	1,506	4,165
Other Pledged Revenues	4,106	4,245	4,967	5,581	6,166
Total Pledged Revenues	$ 287,065 [1]	$ 303,834 [1]	$ 313,305 [1]	$ 322,727 [1]	$ 336,537 [1]
Expenses Paid from Pledged Revenues [2]:					
Administration and Insurance	9,762	10,269	11,177	11,240	11,638
Maintenance of Roadway and Structures	36,702	35,810	38,319	37,936	39,770
Services and Toll Operations	50,646	51,911	54,072	56,200	54,503
Traffic Control, Safety, Patrol and Communications	13,657	13,912	14,399	13,386	13,429
Total Expenses Paid from Pledged Revenues	110,767	111,902	117,967	118,762	119,340
Deposit to Reserve Account	(238)	376	374	354	151
Net Revenues Available for Debt Service	$ 176,536	$ 191,556	$ 194,964	$ 203,611	$ 217,046
Senior Lien Debt Service Requirements:					
Principal	$ 29,228	$ 30,737	$ 32,266	$ 34,277	$ 36,693
Interest	30,660	29,149	27,628	25,093	26,120
Less Interest Earned	(513)	(685)	(877)	(933)	(1,264)
Total Senior Lien Debt Service Requirements	$ 59,375	$ 59,201	$ 59,017	$ 58,437	$ 61,549
Calculated Debt Coverage Ratio	2.97	3.24	3.30	3.48	3.53
Junior Lien Debt Service Requirements:					
Principal	$ -	$ -	$ -	$ -	$ 6,725
Interest	36,146	36,146	36,146	36,146	52,790
Less Interest Earned	(830)	(725)	(931)	(991)	(1,972)
Less Interest Income transferred from Infrastructure Fund	(3,936)	(3,729)	(2,725)	(1,427)	(4,931)
Total Junior Lien Debt Service Requirements	$ 31,380	$ 31,692	$ 32,490	$ 33,728	$ 52,612
Combined Debt Service Requirement	$ 90,755	$ 90,893	$ 91,507	$ 92,165	$ 114,161
Combined Debt Coverage Ratio	1.95	2.11	2.13	2.21	1.90

(1) Gross Revenues per the Amended and Restated Master Trust Agreement dated April 8, 2013, as amended in 2013 - consisting of tolls, special toll permits, certain realized investment earnings, appropriations from the Ohio Department of Transportation, leases, licenses, royalties, advertising, miscellaneous sales, fees, charges and certain concession revenues.

(2) Operating expenses exclude non-cash GASB 68 pension expense and GASB OPEB expense.

Set forth below are certain revenue and expense items and certain other financial information derived from the Commission's unaudited financial statements for the nine months ended September 30, 2019 and the nine months ended September 30, 2018. This information has not been reviewed by the Commission's auditors. This information is qualified by, and should be read in conjunction with, the audited financial statements for the Commission's fiscal year ended December 31, 2018 included as Exhibit C to this Official Statement.

Interim Revenue Bond Coverage (Unaudited)

Dollars in Thousands

	9 Months Ended 9/30/2019	9 Months Ended 9/30/2018
Pledged Revenues		
Passenger Car Toll Revenues	$ 95,357	$ 96,342
Commercial Vehicle Toll Revenues	137,797	135,836
Special Toll Permit Revenues	2,669	2,647
Pledged Concession Revenues	12,258	12,278
Investment Earnings	3,804	2,873
Other Pledged Revenues	4,996	4,573
Total Pledged Revenues	$ 256,881 (1)	$ 254,549 (1)
Expenses Paid from Pledged Revenues (2):		
Administration and Insurance	9,245	8,560
Maintenance of Roadway and Structures	29,503	28,011
Services and Toll Operations	40,229	40,978
Traffic Control, Safety, Patrol and Communications	10,785	10,042
Total Expenses Paid from Pledged Revenues	89,762	87,591
Deposit to Reserve Account	127	151
Net Revenues Available for Debt Service	$ 166,992	$ 166,807
Senior Lien Debt Service Requirements:		
Principal	$ 41,292	$ 27,461
Interest	18,127	19,500
Less Interest Earned	(1,016)	(854)
Total Senior Lien Debt Service Requirements	$ 58,403	$ 46,107
Calculated Debt Coverage Ratio	2.86	3.62
Junior Lien Debt Service Requirements:		
Principal	$ 4,262	$ 4,708
Interest	41,854	38,760
Less Interest Earned	(1,977)	(1,427)
Less Interest Income transferred from Infrastructure Fund	(9,986)	(4,931)
Total Junior Lien Debt Service Requirements	$ 34,153	$ 37,110
Combined Debt Service Requirement	$ 92,556	$ 83,217
Combined Debt Coverage Ratio	1.80	2.00

(1) Gross Revenues per the Amended and Restated Master Trust Agreement dated April 8, 2013, as amended in 2013 - consisting of tolls, special toll permits, certain realized investment earnings, appropriations from the Ohio Department of Transportation, leases, licenses, royalties, advertising, miscellaneous sales, fees, charges and certain concession revenues.

(2) Operating expenses exclude non-cash GASB 68 pension expense and GASB OPEB expense.

MANAGEMENT DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS

Discussion of Operating Results: 2014 through September 30, 2019

Over the last five years, the Commission has continued to recover from a decline in traffic and revenues because of the recession while implementing the Governor's Jobs and Transportation Plan which will, when fully implemented, provide $1.38 billion for Infrastructure Projects across northern Ohio. The number of vehicles and the number of vehicle miles traveled has increased steadily since the recession. The increase in traffic combined with five annual 2.7% toll increases in January of 2014 through January of 2018 has caused annual operating revenue to increase by $57.4 million or 20.8% since 2013. During this time period the Commission has managed to control operating and maintenance costs (excluding depreciation and GASB 68 expense) so that they have increased by an average of $2.1 million per year or 2.0% since 2013.

2014

Passenger car traffic volume increased by 1.5 percent and commercial traffic volume increased by 3.3 percent during 2014. The number of miles traveled by passenger cars increased by 0.8 percent while the miles traveled by commercial vehicles increased by 3.5 percent during 2014. Toll rates were increased for all classes of vehicles by 2.7 percent on January 1, 2014. The increased toll revenue from passenger cars of approximately $2.0 million or 1.8 percent was a result of the toll rate increase and the increase in passenger car vehicle miles traveled partially offset by a lower average toll rate resulting from the effect of increased *E-ZPass®* use. Revenues from commercial vehicles increased $7.9 million or 5.6 percent in 2014 as a result of the toll rate increase and the increase in commercial vehicle miles traveled. Total expenses increased by $217.4 million or 94.2 percent in 2014 compared to the prior year. The primary increase is due to $182.8 million increase in Infrastructure payments to ODOT and a $29.7 million increase in interest expense due to the issuance of the debt in August of 2013. Fringe benefit expenses, which are allocated to each area based on wages, increased $2.5 million over 2013 due to higher health insurance costs and higher workers' compensation costs. The 5.0 percent increase in Administration and Insurance expense was primarily due to the increase in fringe benefit costs. The 4.8 percent increase in Maintenance of Roadway and Structures expense is the result of higher wages, higher fringe benefit costs and increased snow and ice removal costs due to harsher winter weather in 2014. The 0.5 percent increase in Services and Toll Operations expense is due primarily to higher fringe benefit costs and higher credit card fees partially offset by a one-time charge in 2013 for the demolition of a set of service plazas that are not currently planned to be reconstructed. The Commission made $190.8 million in payments to ODOT in 2014 to pay for Infrastructure Projects.

2015

Passenger car traffic volume increased by 4.4 percent and commercial traffic volume increased by 3.3 percent during 2015. The number of miles traveled by passenger cars increased by 4.8 percent while the miles traveled by commercial vehicles increased by 3.6 percent during 2015. Toll rates were increased for all classes of vehicles by 2.7 percent on January 1, 2015. The increased toll revenue from passenger cars of approximately $7.3 million or 6.4 percent was a result of the toll rate increase and the increase in passenger car vehicle miles traveled partially offset by a lower average toll rate resulting from the effect of increased *E-ZPass®* use. Revenues from commercial vehicles increased $8.3 million or 5.5 percent in 2015 as a result of the toll rate increase and the increase in commercial vehicle miles traveled. Total expenses increased by $118.8 million or 26.5 percent in 2015 compared to the prior year. Total expenses includes payments to ODOT and payments to ODOT increased by $115.5 million in 2015. Fringe benefit expenses, which are allocated to each area based on wages, decreased $1.0 million from 2014 due to lower pension expenses due to the implementation of GASB 68 and lower workers' compensation costs. The 4.3 percent increase in Administration and Insurance expense was primarily due to an increase in outside legal and professional fees.

The 3.1 percent decrease in Maintenance of Roadway and Structures expense is the result of lower wages in 2015 compared to the harsher winter weather in 2014 partially offset by higher salt costs due to an increase in the price of salt. The 1.7 percent increase in Services and Toll Operations expense is due primarily to higher credit card fees. The Commission made $306.3 million in payments to ODOT in 2015 to pay for Infrastructure Projects. Interest expense decreased $0.5 million in 2015 due to the payments made on outstanding debt.

2016

Passenger car traffic volume increased by 3.2 percent and commercial traffic volume increased by 1.2 percent during 2016. The number of miles traveled by passenger cars increased by 1.6 percent while the miles traveled by commercial vehicles increased by 0.5 percent during 2016. The increased toll revenue from passenger cars of approximately $3.9 million or 3.2 percent that resulted from the toll rate increase and the increase in passenger car vehicle miles traveled was partially offset by a lower average toll rate resulting from the effect of increased *E-ZPass®* use. Revenues from commercial vehicles increased $4.4 million or 2.8 percent in 2016 as a result of the toll rate increase and the increase in commercial vehicle miles traveled. Total expenses decreased by $16.1 million in 2016 compared to the prior year. Total expenses includes payments to ODOT and payments to ODOT decreased by $26.9 million in 2016. Fringe benefit expenses, which are allocated to each area based on wages, increased $6.6 million from 2015 primarily due to a $4.1 million increase in pension expenses and a $2.0 million increase in employee health benefit costs. The 12.8 percent increase in Administration and Insurance expense was primarily due to the increase in fringe benefit costs. The 11.3 percent increase in Maintenance of Roadway and Structures expense is the result of higher fringe benefit costs, higher contamination remediation costs and higher salt costs due to an increase in the price of salt. The 7.5 percent increase in Services and Toll Operations expense is due primarily to the increase in fringe benefit costs and higher credit card fees. The Commission made $279.4 million in payments to ODOT in 2016 to pay for Infrastructure Projects. Interest expense decreased $1.5 million in 2016 primarily due to an increase in capitalized interest on construction projects.

2017

Passenger car traffic volume increased by 0.3 percent and commercial traffic volume increased by 1.7 percent during 2017. The number of miles traveled by passenger cars decreased by 0.6 percent while the miles traveled by commercial vehicles increased by 1.3 percent during 2017. Toll rates were increased for all classes of vehicles by 2.7 percent on January 1, 2017. The toll rate increase was partially offset by the decrease in passenger car vehicle miles traveled and the effect of increased E-ZPass use, which resulted in an increase in toll revenue from passenger cars of approximately $1.5 million or 1.2 percent. Revenues from commercial vehicles increased $5.9 million or 3.6 percent in 2017 as a result of the toll rate increase and the increase in commercial vehicle miles traveled. Total expenses decreased by $154.6 million or 28.1 percent in 2017 compared to the prior year. Total expenses includes payments to ODOT and payments to ODOT decreased by $173.0 million in 2017. Fringe benefit expenses, which are allocated to each area based on wages, increased $10.9 million from 2016 due primarily to a $9.9 million increase in pension expenses and a $0.7 million increase in employee health benefit costs. The 9.7 percent increase in Administration and Insurance expense was primarily due to the increase in fringe benefit costs. The 10.8 percent increase in Maintenance of Roadway and Structures expense is the result of higher fringe benefit costs partially offset by lower contamination remediation costs and lower salt costs due to a decrease in the price of salt from the high levels in 2015. The 10.9 percent increase in Services and Toll Operations expense is due primarily to the increase in fringe benefit costs, higher wage rates and higher credit card fees. The Commission made $106.4 million in payments to ODOT in 2017 to pay for Infrastructure Projects, a decrease of $173.0 million from 2016. Interest expense decreased $0.3 million in 2017 primarily due lower interest expense due to a reduction in outstanding debt from 2016 partially offset by a decrease in capitalized interest on construction projects.

2018

Passenger car traffic volume decreased by 2.9 percent and commercial traffic volume increased by 3.2 percent during 2018. The number of miles traveled by passenger cars decreased by 2.3 percent while the miles traveled by commercial vehicles increased by 4.3 percent during 2018. Toll rates were increased for all classes of vehicles by 2.7 percent on January 1, 2018. The toll rate increase was offset by the decrease in passenger car vehicle miles traveled and the effect of increased E-ZPass use, which resulted in a decrease in toll revenue from passenger cars of approximately $1.2 million or 0.9 percent. Revenues from commercial vehicles increased $11.4 million or 6.8 percent in 2018 as a result of the toll rate increase and the increase in commercial vehicle miles traveled. Total expenses decreased by $42.8 million or 10.8 percent in 2018 compared to the prior year. Total expenses includes payments to ODOT and payments to ODOT decreased by $58.3 million in 2018. Fringe benefit expenses, which are allocated to each area based on wages, decreased $6.7 million from 2017 due primarily to a $8.3 million decrease in pension expenses and a $1.3 million decrease in employee health benefit costs offset by a $3.4 million increase in OPEB expense. The 1.1 percent decrease in Administration and Insurance expense was primarily due to the decrease in fringe benefit costs. The 2.5 percent decrease in Maintenance of Roadway and Structures expense is the result of lower fringe benefit costs and lower salt costs due to a decrease in the price of salt partially offset by higher contamination remediation costs. The 4.9 percent decrease in Services and Toll Operations expense is due primarily to the decrease in fringe benefit costs, lower wages due to a reduction in personnel and lower utility costs partially offset by higher credit card fees. The Commission made $48.1 million in payments to ODOT in 2018 to pay for Infrastructure Projects, a decrease of $58.3 million from 2017. Interest expense increased $18.8 million in 2018 primarily due to the issuance of the 2018 Series A bonds.

January 1, 2019 through September 30, 2019

Passenger car traffic volume decreased by 4.3 percent and commercial traffic volume decreased by 1.6 percent during the first nine months of 2019. The number of miles traveled by passenger cars decreased by 2.5 percent while the miles traveled by commercial vehicles decreased by 0.7 percent during the first nine months of 2019. The decrease in toll revenue from passenger cars of approximately $1.0 million or 1.0 percent resulted from the decrease in passenger car vehicle miles traveled and a lower average toll rate resulting from the effect of increased E-ZPass® use partially offset by the toll rate increase. Revenues from commercial vehicles increased $2.0 million or 1.4 percent in the first nine months of 2019 as a result of the toll rate increase partially offset by the decrease in commercial vehicle miles traveled. Operating expenses increased by $2.2 million in in the first nine months of 2019 compared to the prior year. The 8.0 percent increase in Administration and Insurance expense was primarily due to increased salary costs, increased legal fees and higher insurance and claim costs. The 5.3 percent increase in Maintenance of Roadway and Structures expense is primarily the result of higher wage costs and lower property damage reimbursements. Services and Toll Operation Expense decreased by 1.8 percent due to lower toll collector wage costs. The 7.4 percent increase in Traffic Control, Safety, Patrol and Communications expense is due primarily to increased equipment maintenance costs and increased Ohio State Highway Patrol service costs. The Commission made $67.6 million in payments to ODOT in the first nine months of 2019 to pay for Infrastructure Projects.

LONG-TERM TURNPIKE SYSTEM CAPITAL IMPROVEMENT PROGRAM

Overview of Approved 2020 Capital Budget and Projected Capital Program for 2020-2030

The Commission prepares a one-year capital budget which is approved by the Commission before the start of each calendar year. The capital budget details the construction projects and equipment purchases planned for the year that are necessary to maintain the Turnpike System in good condition.

Each year the Commission also prepares a long-term projection of future capital expenditures for at least the next ten years. The long-term projection is used to plan for sequencing of large capital projects and to forecast the need for toll increases or debt issuances.

The table below sets forth the Commission's approved capital plan for 2020 and the long-term projection for the next ten years in 2020 dollars. The long-term projections of future capital expenditures have been prepared by the Commission's Chief Engineer and reviewed by AECOM Technical Services, Inc. as General Consulting Engineers for the Commission.

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TOTAL CAPITAL PROGRAM	2019 BUDGET	10 YEAR PROJECTION 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
TOTAL	$ 184,354,920	$ 148,185,553	$ 193,272,440	$ 183,653,471	$ 120,716,333	$ 124,498,763	$ 154,897,846	$ 154,247,496	$ 158,920,187	$ 169,761,587	$ 124,640,947
Pavement Replacement	$ 69,431,611	$ 35,614,620	$ 64,209,884	$ 57,218,021	$ 47,563,004	$ 38,128,985	$ 78,316,936	$ 80,431,493	$ 82,603,143	$ 42,416,714	$ 43,561,965
Resurfacing	$ 16,000,000	$ 24,700,000	$ 20,533,393	$ 26,510,370	$ 27,226,150	$ 27,961,256	$ 22,842,440	$ 23,459,185	$ 24,092,583	$ 31,105,590	$ 31,945,441
Bridge Deck Replacements	$ 59,090,636	$ 25,872,485	$ 12,261,369	$ 11,146,405	$ 10,209,806	$ 11,883,534	$ 14,162,313	$ 13,338,223	$ 13,560,683	$ 15,623,490	$ 13,141,193
Bridge Deck Overlays	$ -	$ -	$ 2,200,006	$ 2,711,288	$ 2,939,187	$ 2,383,062	$ 2,447,404	$ 3,183,747	$ 3,097,618	$ 2,651,045	$ 3,267,147
Bridge Painting	$ 4,339,000	$ 4,013,347	$ 6,922,687	$ 7,109,599	$ 7,301,558	$ 7,498,700	$ 7,701,165	$ 7,909,097	$ 8,122,642	$ 8,341,954	$ 8,567,187
Misc. Bridge Repairs	$ -	$ -	$ 4,810,681	$ 4,940,569	$ 5,073,964	$ 5,210,961	$ 5,351,657	$ 5,496,152	$ 5,644,548	$ 2,827,781	$ 2,904,131
Service Plazas	$ 1,970,000	$ 4,760,000	$ 2,581,341	$ 2,169,030	$ 1,237,552	$ 2,287,739	$ 4,046,375	$ 2,010,787	$ 3,854,813	$ 2,262,225	$ 1,161,652
Toll Plazas	$ 2,950,000	$ 21,593,115	$ 24,062,999	$ 24,382,576	$ 2,550,972	$ 13,662,886	$ 65,264	$ 67,026	$ 68,836	$ 70,695	$ 363,016
Maintenance Building's	$ 740,000	$ 815,000	$ 586,668	$ 602,508	$ 618,776	$ 635,483	$ 652,641	$ 670,262	$ 688,360	$ 41,002,824	$ 726,033
Telecommunications	$ -	$ -	$ 9,386,694	$ -	$ -	$ -	$ -	$ 402,157	$ -	$ 4,241,671	$ -
Culverts & Drainage	$ -	$ -	$ 293,334	$ 301,254	$ 309,388	$ 317,742	$ 326,321	$ 335,131	$ 344,180	$ 353,473	$ 363,016
Interchange Repaving	$ 3,050,000	$ 4,700,000	$ 4,121,932	$ 3,904,254	$ 3,062,942	$ 1,437,463	$ 4,170,377	$ 1,829,816	$ 1,664,453	$ 2,922,512	$ 3,284,572
Miscellaneous	$ 5,240,551	$ 1,415,000	$ 1,290,670	$ 1,566,522	$ 1,361,307	$ 1,525,159	$ 2,936,885	$ 2,681,050	$ 2,409,258	$ 2,827,781	$ 1,887,685
Toll Collection System	$ 6,700,000	$ 13,900,000	$ 29,333,418	$ 30,125,420	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Renewal Replacment	$ 14,443,122	$ 10,481,986	$ 10,266,696	$ 10,543,897	$ 10,828,582	$ 11,120,954	$ 11,421,220	$ 11,729,593	$ 12,046,292	$ 12,371,542	$ 12,705,573
Sign Upgrades	$ 400,000	$ 320,000	$ 410,668	$ 421,756	$ 433,143	$ 444,838	$ 456,849	$ 703,776	$ 722,778	$ 742,292	$ 762,334

Replacement of the Original Concrete Pavement

The Commission has completed a review and analysis of the condition of the concrete pavement of the original two directional roadway lanes (965 lane miles), which is more than 60 years old. A Master Plan has been developed identifying the required pavement replacement sequence. The first pavement section was reconstructed in 2011 and the last pavement section is projected to be reconstructed in 2041.

The Commission has projected between $120.7 million and $193.2 million annually through 2029 for all capital projects, including replacement of the original concrete pavement and is being funded over the next ten years with $80 million in proceeds from the 2018 Senior Lien Bond issuance and an anticipated $140 million from additional debt issuances. The remainder is expected to be funded from operations.

Funding of Capital Improvement Program

While it is anticipated that the Commission will primarily finance its ongoing capital improvement program from its existing cash balances and resources generated from future operations, at the discretion of the Commission, additional bonds may be issued in the future to finance a portion of these costs. The amount of any Senior Lien Bonds issued on a parity basis with the Outstanding Senior Lien Bonds, including the 2020 Senior Lien Bonds, under the Senior Lien Trust Agreement will be limited by the provisions of the Senior Lien Trust Agreement. See "EXHIBIT A-1 – GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT – Issuance of Bonds" herein. The amount of any Junior Lien Bonds issued on a parity basis with the Outstanding Junior Lien Bonds under the Junior Lien Trust Agreement will be limited by the provisions of the Junior Lien Trust Agreement. See "EXHIBIT A-2 – GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT – Issuance of Bonds" herein.

THE INFRASTRUCTURE PROJECT PROGRAM

General

In Ohio, the Transportation Review Advisory Council (the "TRAC") is the body that reviews and prioritizes the state's transportation projects. The TRAC is the only statutorily enacted independent council of its kind in the country. The TRAC utilizes a three-tiered process to prioritize statewide transportation projects. "Tier 1" projects are deemed to be of the highest priority. In 2012, ODOT determined that it had a $1.6 billion shortfall for the funding of "Tier 1" projects and an $8 billion shortfall for the funding of Tier 2 and Tier 3 projects. To address this announced shortfall, the Ohio Jobs and Transportation Plan (the "Plan") was adopted to fund certain highway infrastructure projects that have a transportation–related nexus to the Turnpike System. In connection with the Plan, the Commission issued junior lien Turnpike revenue bonds to fund certain Infrastructure Projects which were determined to have a transportation-related nexus to the Turnpike System and which were previously reviewed and recommended by the TRAC. See "THE COMMISSION – The Commission's Role in the Ohio Jobs and Transportation Plan" herein.

Infrastructure Project Selection Process

An "Infrastructure Project" for which the Commission was authorized to issue bonds is generally defined by R.C. 5537.18 as any public highway (including all bridges, tunnels, overpasses, underpasses, interchanges, entrance plazas, approaches, and those portions of connecting public roads that serve interchanges) that is constructed or improved with infrastructure funding approved by the Commission.

The Director of ODOT was required to submit to the Commission an application for each Infrastructure Project in accordance with R.C. 5537.18 and Chapter 5537-10-01 of the Ohio Administrative Code ("OAC") in order to receive funding from the Commission. In selecting Infrastructure Projects for which applications were made to the Commission for funding, the Director of ODOT considered the physical proximity of the project to the Turnpike System. R.C. 5537.18 also required that not less than 90% of the total cost of the Infrastructure Project funding requests submitted by the Director of ODOT be for Infrastructure Projects that were at least partially located within 75 miles of the Turnpike System.

To be considered for funding by the Commission, an Infrastructure Project was first reviewed and recommended by the TRAC using a process that accounted for transportation factors (e.g., safety, capacity increase, congestion decrease, emission reductions), community and economic growth and development factors and project sponsor investment factors in accordance with Chapter 5512 of the Ohio Revised Code.

The Commission evaluated each application for Infrastructure Project funding in accordance with the procedures and criteria established in its rules, Chapter 5537-10 of the Ohio Administrative Code. The Commission adopted a rule under which it applied the statutory criteria established for determining the required "nexus". These criteria included: 1) physical proximity of the Infrastructure Project to and a direct or indirect physical connection between the Infrastructure Project and the Ohio Turnpike System; 2) impact of the Infrastructure Project on traffic density, flow through, or capacity on the Ohio Turnpike System; 3) impact of the Infrastructure Project on the Ohio Turnpike System toll revenue or other revenues; 4) impact of the Infrastructure Project on the movement of goods and services on or in the area of the Ohio Turnpike System; and 5) enhancement or improvement by and through the Infrastructure Project of access to, use of, and egress from the Ohio Turnpike System and access to and from connected areas of population, commerce, and industry. Once the Commission reviewed the funding requests, it approved applications and formally voted to authorize the funding of the Infrastructure Project. Once funding was authorized, an agreement was entered into with ODOT to fund the Infrastructure Project. Under R.C. 5537.18, a determination or approval by the Commission is conclusive and incontestable.

All Infrastructure Project requests have now been approved and all related bonds have been issued by the Commission.

PROJECTED OPERATING RESULTS AND DEBT SERVICE COVERAGE

Projected debt coverage ratios of 1.85 or better are expected on the Senior Lien Bonds and the Junior Lien Bonds combined.

The following table shows estimated annual net revenues of the Turnpike System for the fiscal years ending 2020 through 2030. These net revenues were derived by deducting estimated expenses, estimated by the Traffic Consultant, from the annual revenues of the Turnpike System as estimated by the Traffic Consultant. In the opinion of the Traffic Consultant, its forecast of traffic volume and revenue is reasonable and has been prepared in accordance with accepted practices for such study. Reference is made to the Traffic and Revenue Study for the data and assumptions on which the projections of the Commission's net revenues are based. The Traffic and Revenue Study should be read in its entirety for a description of the specific and overall assumptions made by the Traffic Consultant in making those projections. See "EXHIBIT D - TRAFFIC AND REVENUE STUDY" and "INVESTMENT CONSIDERATIONS" herein.

The table below reflects the Commission's assumptions described under "PLAN OF FINANCE" and "DEBT SERVICE". Actual operating results and debt service coverage may vary from the projections in the following table due to several factors. These factors include, but are not limited to, fluctuating economic conditions, changes in construction schedules, and the timing and amount of future debt issuance. Accordingly, there may be material variances between the following projections and actual results during the forecast period of 2020 through 2030.

The Commission's independent auditors have not compiled, examined or performed any procedures with respect to the prospective financial information contained in the following table, nor have they expressed any opinion or other form of assurance on such information or its achievability, and assume no responsibility for, and disclaim any association with, the prospective financial information.

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PROJECTED OPERATING RESULTS ($000,s)

(FY 2020 - 2030)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross Revenues											
Passenger Car Toll Revenue	128,500	131,400	133,700	136,200	139,800	144,700	148,600	152,400	155,300	158,300	163,000
Commercial Toll Revenue	188,200	195,700	204,000	211,900	220,200	228,800	237,800	247,000	256,700	265,000	273,600
Total Toll Revenue	316,700	327,100	337,700	348,100	360,000	373,500	386,400	399,400	412,000	423,300	436,600
Special Toll Permits	3,629	3,719	3,812	3,907	4,005	4,105	4,208	4,313	4,421	4,531	4,645
Fee Revenue	-	-	-	2,200	2,100	2,100	2,100	2,100	2,100	2,100	2,100
Concessions/Service Plazas	17,733	18,176	18,630	19,096	19,573	20,063	20,564	21,078	21,605	22,145	22,699
Lease & License/Other	7,300	7,800	8,300	8,800	9,300	9,800	10,300	10,800	11,300	11,800	12,300
Pledged Funds Investment income	5,100	4,500	4,300	4,700	5,300	4,900	5,000	5,000	5,800	6,100	5,900
Total Other Revenue	33,761	34,195	35,042	38,703	40,279	40,968	42,172	43,292	45,226	46,677	47,644
Total Gross Revenue	350,461	361,295	372,742	386,803	400,279	414,468	428,572	442,692	457,226	469,977	484,244
Gross Operating Expenses Paid from Pledged Revenues	125,000	128,500	131,900	135,300	138,000	141,400	145,100	148,900	152,800	156,700	160,600
Net Revenues Available for Debt Service	225,461	232,795	240,842	251,503	262,279	273,068	283,472	293,792	304,426	313,277	323,644
Sr Lien Debt Service Requirements:											
Existing Debt Service	56,151	60,156	60,783	53,847	45,661	51,827	32,459	28,275	14,958	12,291	12,120
2021 Issuance ($140 million)	-	5,489	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587
Less Interest Earned	(1,331)	(1,568)	(1,577)	(1,735)	(1,689)	(1,724)	(1,615)	(1,591)	(1,516)	(1,501)	(1,500)
Total Sr Lien Debt Service Requirements	54,820	64,077	65,793	58,699	50,559	56,690	37,431	33,271	20,029	17,376	17,207
Jr Lien Debt Service Requirements:											
Existing Debt Service	53,746	52,342	55,717	78,158	85,140	78,869	92,986	101,172	119,489	127,160	132,325
Less Interest Earned	(2,469)	(2,462)	(2,788)	(2,915)	(2,954)	(2,919)	(2,998)	(3,044)	(3,147)	(3,190)	(3,219)
Less Interest on Infrastructure Funds	(5,500)	(3,200)	(1,125)	(225)	-	-	-	-	-	-	-
Total Jr Lien Debt Service Requirements	45,778	46,680	51,804	75,018	82,187	75,950	89,988	98,128	116,342	123,969	129,106
Composite Debt Service Requirements	100,598	110,757	117,596	133,717	132,745	132,640	127,419	131,398	136,371	141,346	146,313
Sr Lien Debt Coverage	4.11x	3.63x	3.66x	4.28x	5.19x	4.82x	7.57x	8.83x	15.2x	18.03x	18.81x
Composite Debt Coverage	2.24x	2.1x	2.05x	1.88x	1.98x	2.06x	2.22x	2.24x	2.23x	2.22x	2.21x

LONG-TERM PRO FORMA DEBT SERVICE COVERAGE

Attached as Exhibit F is a table projecting operating results and projected debt service coverage for the Commission for the years 2020 through 2050 upon the issuance of the 2020 Bonds.

The net revenues in the table were derived by deducting estimated expenses, estimated by the Traffic Consultant, from the annual revenues of the Turnpike System as estimated by the Traffic Consultant. In the opinion of the Traffic Consultant, its forecast of traffic volume and revenue is reasonable and has been prepared in accordance with accepted practices for such study. Reference is made to the Traffic and Revenue Study for the data and assumptions on which the projections of the Commission's net revenues are based. The Traffic and Revenue Study should be read in its entirety for a description of the specific and overall assumptions made by the Traffic Consultant in making those projections. See "EXHIBIT D - TRAFFIC AND REVENUE STUDY" and "INVESTMENT CONSIDERATIONS" herein.

Actual operating results and debt service coverage may vary from the projections in the table shown as Exhibit F due to several factors. These factors include, but are not limited to, fluctuating economic conditions, changes in construction schedules, and the timing and amount of future toll increases. Accordingly, there may be material variances between the projections shown in the table attached as Exhibit F and actual results during the forecast period of 2020 through 2050.

The Commission's independent auditors have not complied, examined or performed any procedures with respect to the prospective financial information contained in the table attached as Exhibit F, nor have they expressed any opinion or other form of assurance on such information or its achievability, and assume no responsibility for, and disclaim any association with, the prospective financial information.

INVESTMENT CONSIDERATIONS

The following is a discussion of certain investment considerations that should be evaluated in connection with an investment in the 2020 Bonds. This discussion does not purport to be either comprehensive or definitive. The order in which such considerations and 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. Moreover, there may well be other considerations and risks associated with an investment in the 2020 Bonds in addition to those set forth herein. Investors are advised to read the entire Official Statement, including the Exhibits hereto, to obtain information essential to the making of an informed investment decision.

Traffic Study

As the Traffic Consultant for the Commission, Jacobs Engineering Group Inc. was requested by the Commission to prepare a traffic and toll revenue projection study (the "Traffic and Revenue Study") presenting its analyses and findings relative to recent trends in traffic and revenue with respect to the Turnpike System. See "EXHIBIT 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. The Traffic and Revenue Study is not a guarantee of any future events or trends and the forecasts therein are subject to future economic and social conditions and demographic developments that 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 Commission.

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 Commission.

In addition, as set forth in the Traffic and Revenue Study, there is a considerable uncertainty inherent in future traffic and revenue forecasts for any toll facility, and differences between forecasted and actual results (which may be material) may occur due to events and circumstances beyond the control of the forecasters, including without limitation economic conditions and other factors. While future traffic volume and revenues cannot be predicted with certainty, the Commission reasonably expects that it will have sufficient revenue to meet the then existing debt and operational obligations of the Commission. See "EXHIBIT D – TRAFFIC AND REVENUE STUDY."

Commission Revenues May Decline

The information provided with respect to toll revenues collected by the Commission is based on historical data. The amount of future toll revenues to be collected by the Commission depends upon a number of factors, some of which are not in the control of the Commission. Some of these factors include a decline in traffic on the Turnpike System due to general economic conditions, diversion of traffic to alternative non-toll routes, increased fuel costs, limited supply of fuel, 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, as well as international events affecting fuel supply and costs. Although the Commission has covenanted in the Senior Lien Trust Agreement and the Junior Lien Trust Agreement to fix, charge and collect tolls for the use of the Turnpike System in amounts required by the toll covenants in such Trust Agreements, there can be no assurance that the traffic on the Turnpike System will continue to be sufficient for the Commission to generate the necessary revenues to meet its obligations under the Senior or Junior Lien Trust Agreements.

Ratings of the 2020 Bonds Could be Lowered or Withdrawn

Three credit rating agencies have assigned credit ratings to the 2020 Bonds. The ratings of the 2020 Bonds are not a recommendation to purchase, hold or sell the 2020 Bonds, and the ratings do not comment on the market price or suitability of the 2020 Bonds for a particular investor. The ratings of the 2020 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 Commission's financial strength.

Certain Matters Relating to Enforceability of Obligations

The remedies available to owners of the 2020 Bonds upon an event of default under the Senior Lien Trust Agreement or other documents described herein 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 Senior Lien Trust Agreement, Junior Lien Trust Agreement and such other documents may not be readily available or may be limited. The various legal opinions to be delivered concurrently with the issuance of the 2020 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 2020 Bonds could be limited by the provisions of the Federal Bankruptcy Code, as now or hereafter enacted (the "Bankruptcy Code") or by other laws 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 Commission, 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 OHIO TURNPIKE ACT DOES NOT CURRENTLY AUTHORIZE THE COMMISSION TO FILE A PETITION UNDER THE BANKRUPTCY CODE.

Changes in Ohio Tax Law

Legislation affecting obligations such as the 2020 Bonds might be considered by the Ohio General Assembly. Court proceedings might also be filed, the outcome of which could modify the tax treatment of obligations such as the 2020 Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the 2020 Bonds will not have an adverse effect on the Ohio tax status of interest or other income on the 2020 Bonds or the market value or marketability of the 2020 Bonds. These adverse effects could result, for example, from changes to Ohio personal income tax rates, changes in the structure of the Ohio personal income tax (including replacement with another type of tax), or repeal (or reduction in the benefit) of the exclusion of interest on the 2020 Bonds from income for Ohio personal income tax purposes for all or certain taxpayers. Prospective purchasers of the 2020 Bonds should consult their own tax advisors regarding any pending or proposed state tax legislation, as to which Bond Counsel will express no opinion.

Legislative Action

Legislation is introduced from time to time in the State Legislature which, if adopted, may affect the Commission and/or the Turnpike System. The Commission cannot predict whether or not these bills will be enacted into law or how such legislation may affect the Commission and its ability to pay debt service on the 2020 Bonds.

ELIGIBILITY UNDER OHIO LAW FOR INVESTMENT AND AS SECURITY FOR THE DEPOSIT OF PUBLIC MONEYS

To the extent that a particular investor is governed by Ohio law with respect to its investments, and subject to any applicable limitations under other provisions of Ohio law, the 2020 Bonds are lawful investments for banks, savings and loan associations, credit union share guaranty corporations, trust companies, trustees, fiduciaries, insurance companies, including domestic for life and domestic not for life, trustees or other officers having charge of sinking and bond retirement or other funds of the State or its political subdivisions and taxing districts, the commissioners of the sinking fund of the State, the administrator of workers' compensation, the State teachers retirement system, the public employees retirement system, the school employees retirement system, and the Ohio police and fire pension fund, and are acceptable as security for the repayment of the deposit of public moneys.

Beneficial Owners of the 2020 Bonds should make their own determination as to such matters of legality of investment in, or pledge of book-entry interests in, the 2020 Bonds.

LITIGATION

To the knowledge of the Executive Director of the Commission, no litigation or administrative action or proceeding is pending or threatened restraining or enjoining, or seeking to restrain or enjoin, the issuance and delivery of the 2020 Bonds, or the collection of System Pledged Revenues to pay the debt service on the 2020 Bonds or any Outstanding Bonds, or contesting or questioning the proceedings and authority under which the 2020 Bonds are authorized and are to be issued, sold, executed or delivered, or the validity of the 2020 Bonds. A no-litigation certificate to such effect will be delivered to the Underwriters at the time of original delivery of the 2020 Bonds to the Underwriters.

The Commission is a party to various legal proceedings seeking damages or injunctive relief generally incidental to its operations. These proceedings are unrelated to the issuance of the 2020 Bonds or the pledge of the security therefor. The ultimate disposition of such proceedings is not presently determinable, but will not, in the opinion of officials of the Commission, have a material adverse effect on the issuance of the 2020 Bonds, the pledge of the security therefor, or the Commission's performance of its obligations under the Senior Lien Trust Agreement or the Junior Lien Trust Agreement.

UNDERWRITING

Citigroup Global Markets Inc., as representative of the underwriters identified on the cover page (the "Underwriters") and pursuant to a Bond Purchase Agreement with the Commission (the "Purchase Contract"), has agreed to purchase the 2020 Bonds at a price equal to $457,050,933.07. The purchase price reflects an underwriting discount of $1,264,066.93. The obligation of the Underwriters to accept delivery of the 2020 Bonds is subject to various conditions set forth in the Purchase Contract, but the Underwriters are obligated to purchase all of the 2020 Bonds if any are purchased.

The Underwriters are purchasing the 2020 Bonds as originally issued for purpose of resale. The Underwriters reserve the right to join with dealers and other underwriters in offering the 2020 Bonds to the public. The Underwriters may offer and sell the 2020 Bonds to certain dealers (including dealer banks and dealers depositing the 2020 Bonds into unit investment trusts, certain of which may be sponsored or managed by the Underwriters), and others at prices lower than the public offering prices noted on the cover page. The initial offering prices of the 2020 Bonds may be changed, from time to time, 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 the issuer 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 activities may involve securities and instruments of the issuer.

The underwriters and their respective affiliates also may communicate independent investment recommendations, market advice, or trading ideas and/or publish or express independent research views in respect of such assets, securities or other financial instruments and at any time may hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and other financial instruments.

Citigroup Global Markets Inc., an underwriter of the 2020 Bonds, has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, "Fidelity"). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup Global Markets Inc. will compensate Fidelity for its selling efforts.

BofA Securities, Inc., an underwriter of the Bonds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for its selling efforts with respect to the Bonds.

RATINGS

Fitch Ratings, Moody's Investors Service and S&P Global Ratings have assigned ratings of "AA", "Aa2" and "AA-", respectively, to the 2020 Senior Lien Bonds and ratings of "A+", "Aa3" and "A+", respectively, to the 2020 Junior Lien Bonds. All rating services reported stable outlooks for both series of 2020 Bonds.

Each such rating reflects only the views of such rating agency. Any explanation of the significance of the rating may only be obtained from Fitch Ratings, 33 Whitehall Street, New York, New York 10004, telephone (800) 893-4824; Moody's Investors Service, Inc., 7 World Trade Center at 250 Greenwich Street, New York, New York 10007, telephone (212) 553-1653; and S&P Global Ratings, 55 Water Street, New York, New York 10041, telephone (212) 512-4595, respectively.

The Commission furnished to the rating agencies certain information and materials, some of which may not have been included in this Official Statement, relating to the 2020 Bonds, the Commission and the Turnpike System. Generally, rating agencies base their ratings on such information and materials, as well as investigation, studies and assumptions by the rating agency. There can be no assurance that a rating, when assigned, will continue for any given period of time or that it will not be lowered or withdrawn entirely by a rating agency if, in its judgment, circumstances so warrant. In addition, the Commission currently expects to provide to the rating agencies (but assumes no obligation to furnish to the Underwriters or the Holders) further information and materials that any of them may request. The Commission does not, however, obligate itself hereby to furnish such information and materials, and may issue unrated bonds and notes from time to time. Failure by the Commission to furnish such information and materials, or the issuance of unrated bonds or notes, may result in the suspension or withdrawal of a rating agency's rating on the 2020 Bonds. Any lowering, suspension or withdrawal of such ratings may have an adverse effect on the marketability or market price of the 2020 Bonds. A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time.

LEGAL MATTERS

Legal matters incident to the issuance of the 2020 Senior Lien Bonds and the 2020 Junior Lien Bonds and with regard to the exemption from Ohio taxation of interest and other income on the 2020 Bonds (see "TAX MATTERS" herein) are subject to the approving opinions of Squire Patton Boggs (US) LLP, Bond Counsel. A signed copy of those opinions, dated and speaking as of the date of original delivery of the Bonds to the Underwriters, will be delivered to the Underwriters at the time of original delivery. Assuming no change in applicable law prior to the date of delivery of such opinions, the opinions will be substantially in the forms attached hereto as Exhibit B-1 and Exhibit B-2.

In its capacity as Bond Counsel, Squire Patton Boggs (US) LLP, has reviewed those portions (excluding certain information concerning the book entry system therein and in Exhibit E) of this Official Statement pertaining solely to the 2020 Bonds, and the Senior Lien Trust Agreement and the Junior Lien Trust Agreement contained under the captions "DESCRIPTION OF THE 2020 BONDS," "SECURITY FOR AND

SOURCES OF PAYMENT OF THE 2020 BONDS," "LEGAL MATTERS," "TAX MATTERS" and Exhibit A-1 and Exhibit A-2 attached hereto. Said firm has not been retained to pass upon, and will express no opinion as to the accuracy, completeness or fairness of any other information in this Official Statement, including its exhibits (other than Exhibits A-1, A-2 and B), or in any other reports, financial information, offering or disclosure documents or other information pertaining to the Commission or the 2020 Bonds that may be prepared or made available by the Commission or others to the Holders of the 2020 Bonds or others.

Certain legal matters will be passed upon for the Commission by its General Counsel, Jennifer L. Stueber, Esq. Certain legal matters will be passed upon for the Underwriters by Tucker Ellis LLP.

MUNICIPAL ADVISOR

The Commission has retained PFM Financial Advisors LLC, Cleveland, Ohio as Municipal Advisor with respect to the authorization and issuance of the 2020 Bonds. The Municipal Advisor is not obligated to undertake or assume responsibility for, nor has it undertaken or assumed responsibility for, an independent verification of the accuracy, completeness or fairness of the information contained in this Official Statement. The Municipal Advisor is an independent advisory firm and is not engaged in the business of underwriting, trading, or distributing municipal securities or other public securities.

VERIFICATION AGENT

Before delivery of the 2020 Bonds, Robert Thomas CPA, LLC will deliver a report on the mathematical accuracy of certain computations contained in schedules provided to them by the Underwriters. Those computations relate to the adequacy of the cash and securities deposited with the Escrow Trustee for the Series 2013 Senior Lien Bonds and the Series 2013 Junior Lien Bonds to pay the debt service on the Refunded Bonds to their respective call dates and to pay the redemption prices of the Refunded Bonds on those call dates. Those computations will be relied on by Squire Patton Boggs (US) LLP, as Bond Counsel, to support its opinions with respect to the Refunded Bonds.

EXPERTS

The Commission has retained Jacobs Engineering Group Inc. as traffic consultant to assist the Commission with traffic and revenue projections. Jacobs Engineering Group prepared the Traffic and Revenue Study dated January 17, 2020 included herein as EXHIBIT D. Jacobs Engineering Group has reviewed the excerpts therefrom under the caption "PROJECTED OPERATING RESULTS AND DEBT SERVICE COVERAGE" and "LONG-TERM PRO-FORMA COVERAGE" above. AECOM Technical Services, Inc. is currently acting as General Engineering Consultants for the Commission and completed the study upon which the 10 year projections in the Capital Improvement Program are based. The financial statements of the Commission for the fiscal year ended December 31, 2018 included in Exhibit C of this Official Statement have been audited by Plante & Moran, PLLC, independent auditors, as stated in their report appearing in Exhibit C.

CONTINUING DISCLOSURE

The Commission will execute a Continuing Disclosure Certificate dated February 13, 2020 to provide certain financial and operating information (the "Annual Report") not later than July 1 following the end of the preceding fiscal year, and to provide notices of certain events enumerated in Rule 15c2-12 promulgated by the Securities and Exchange Commission ("SEC"). Specifically, the Commission agrees to provide the Annual Report to the Municipal Securities Rulemaking Board ("MSRB") through its Electronic Municipal Market Access System ("EMMA") and to provide notice of the occurrence of the enumerated events to EMMA, all pursuant to Rule 15c2-12, as amended from time to time. See "EXHIBIT G – FORM OF

CONTINUING DISCLOSURE CERTIFICATE" for detailed provisions of the Continuing Disclosure Certificate.

The Annual Report will consist generally of the audited financial statements of the Commission and the current operating data of the type included under the captions "Comparative Traffic Statistics," "Vehicles by Class," "Toll Revenue by Class", and "Toll Rates Per Mile" and "Approved Toll Rate Schedule for Years 2020-2023" under the caption "TOLLS and TOLL COLLECTION" and the table titled "Revenue Bond Coverage" under the caption "RESULTS OF OPERATIONS." Any of the forgoing information may be supplied by including any specific reference information previously supplied to the MSRB or to the SEC. Information will not be included by reference from any final official statement unless such final official statement is available from the MSRB. See "EXHIBIT G – FORM OF CONTINUING DISCLOSURE CERTIFICATE" for detailed provisions of the Continuing Disclosure Certificate.

The Continuing Disclosure Certificate was executed by the Commission to assist the Underwriters in complying with Rule 15c2-12. The Commission has agreed to give notice in a timely manner to the MSRB of any failure to supply the information required to be provided in the Continuing Disclosure Certificate; however, any such failure will not constitute a default under the terms of the 2020 Bonds. See "EXHIBIT G – FORM OF CONTINUING DISCLOSURE CERTIFICATE" for detailed provisions of the Continuing Disclosure Certificate.

The Commission has complied in all material respects with its prior continuing disclosure agreements under Rule 15c2-12 during the past five fiscal years, but the Commission notes that certain filings made by the Commission were not properly matched with all required CUSIP numbers. Procedures are in place to ensure that all subsequent filings are property made and notices are given in a timely manner.

The Commission reserves the right to amend the Continuing Disclosure Certificate, and noncompliance with any provision of that Continuing Disclosure Certificate may be waived, as may be necessary or appropriate to (a) achieve its compliance with any applicable federal securities law or rule, (b) cure any ambiguity, inconsistency or formal defect or omission, and (c) address any change in circumstances arising from a change in legal requirements, change in law or change in the identity, nature or status of the Commission or type of business conducted by the Commission. See "EXHIBIT G – FORM OF CONTINUING DISCLOSURE CERTIFICATE" for detailed provisions of the Continuing Disclosure Certificate.

TAX MATTERS

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law: (i) interest on the 2020 Bonds is not excluded from gross income for federal tax purposes; and (ii) interest on, and any profit made on the sale, exchange or other disposition of, the 2020 Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. Bond Counsel expresses no opinion as to any other tax consequences regarding the 2020 Bonds. The legal defeasance of the 2020 Bonds might result in a deemed sale or exchange of the 2020 Bonds under certain circumstances; owners of the 2020 Bonds should consult their tax advisors as to the federal income tax consequences of such an event. Prospective purchasers of the 2020 Bonds should consult their tax advisors as to the federal, state and local, and foreign tax consequences of their acquisition, ownership, and disposition of the 2020 Bonds.

The following discussion is generally limited to "U.S. owners," meaning beneficial owners of 2020 Bonds that for United States federal income tax purposes are individual citizens or residents of the United States, corporations or other entities taxable as corporations created or organized in or under the laws of the United States or any state thereof (including the District of Columbia), and certain estates or trusts with specific connections to the United States. ***Partnerships holding 2020 Bonds, and partners in such partnerships, should consult their tax advisors regarding the tax consequences of an investment in the 2020 Bonds (including their status as U.S. owners).***

Prospective purchasers of the 2020 Bonds upon their original issuance at prices other than the respective prices indicated on the inside cover of this Official Statement, and prospective purchasers of the 2020 Bonds at other than their original issuance, should consult their own tax advisors regarding other tax considerations such as the consequences of market discount, as to all of which Bond Counsel expresses no opinion.

Payment of Interest

In general, interest paid or accrued on the 2020 Bonds will be treated as ordinary income to U.S. owners. A U.S. owner using the accrual method of accounting for U.S. federal income tax purposes must include interest paid or accrued on the 2020 Bonds in ordinary income as the interest accrues, while a U.S. owner using the cash receipts and disbursements method of accounting for U.S. federal income tax purposes must include interest in ordinary income when payments are received or constructively received by the owner.

Sale, Exchange, Retirement or Other Taxable Disposition of 2020 Bonds

Upon the sale, exchange, retirement or other taxable disposition of a 2020 Bond, a U.S. owner will recognize gain or loss equal to the difference between the amount realized from the sale, exchange, retirement or other disposition and the owner's adjusted basis in the 2020 Bond or applicable portion of the adjusted basis. The owner's adjusted basis generally will equal the cost of the 2020 Bond to the owner, reduced by any principal payments on the 2020 Bond previously received by the owner (including any other payments on the 2020 Bond that are not qualified stated interest payments). Any gain or loss recognized upon a sale, exchange, retirement or other disposition of a 2020 Bond will generally be capital gain or loss and will be long-term capital gain or loss if the U.S. owner's holding period in the 2020 Bond exceeds one year. Long-term capital gains of individuals are currently eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding

General information reporting requirements will apply to payments of principal and interest made on the 2020 Bonds and the proceeds of the sale of 2020 Bonds to non-corporate holders of the 2020 Bonds, and "backup withholding," currently at a rate of 24%, will apply to such payments if the owner fails to provide an accurate taxpayer identification number in the manner required or fails to report all interest required to be shown on its federal income tax returns. A beneficial owner of 2020 Bonds that is a U.S. owner generally can obtain complete exemption from backup withholding by providing a properly completed IRS Form W-9 (Request for Taxpayer Identification Number and Certification).

Medicare Tax Affecting U.S. Owners

A U.S. owner that is an individual or estate, or a trust not included in a special class of trusts that is exempt from such tax, is subject to a 3.8% Medicare tax on the lesser of (1) the U.S. owner's "net investment income" for the taxable year and (2) the excess of the U.S. owner's modified adjusted gross income for the taxable year over a certain threshold (which in the case of individuals is between $125,000 and $250,000, depending on the individual's circumstances). A U.S. owner's net investment income generally includes interest income on, and net gains from the disposition of, 2020 Bonds, unless such interest income or net gains are derived in the ordinary course of a trade or business (other than a trade or business that consists of certain passive or trading activities). A U.S. owner that is an individual, estate, or trust, should consult its tax advisor regarding the applicability of the Medicare tax.

Non-U.S. Owners

Under the Code, interest on any 2020 Bond whose beneficial owner is not a U.S. owner is generally not subject to United States income tax or withholding tax (including backup withholding) if the non-U.S. owner provides the payer of interest on the 2020 Bonds with an appropriate statement as to its status as a non-U.S. owner. This statement can be made on IRS Form W-8BEN or a successor form. If, however, the non-U.S. owner conducts a trade or business in the United States and the interest on the 2020 Bonds held by the non-U.S. owner is effectively connected with such trade or business, that interest will be subject to United States income tax but will generally not be subject to United States withholding tax (including backup withholding). The foregoing is a brief summary of certain federal income tax consequences to a non-U.S. owner. ***Non-U.S. owners should consult their tax advisors regarding the tax consequences of an investment in the 2020 Bonds.***

Foreign Account Tax Compliance Act

The Foreign Account Tax Compliance Act ("FATCA") generally imposes a 30% withholding tax on interest payments to (i) certain foreign financial institutions (including certain investment funds) that fail to certify their FATCA status and (ii) non-financial foreign entities if certain disclosure requirements related to direct and indirect United States shareholders are not satisfied. Proposed Treasury Regulations, which may be relied upon until final Treasury Regulations are promulgated, suspend the requirement to apply the 30% withholding tax to gross proceeds from the sale or other disposition of 2020 Bonds. This requirement otherwise would have applied to a sale or other disposition of 2020 Bonds made on or after January 1, 2019.

In the case of payments made to a "foreign financial institution" (generally including an investment fund), as a beneficial owner or as an intermediary, the FATCA withholding tax generally will be imposed, subject to certain exceptions, unless such institution (i) enters into (or is otherwise subject to) and complies with an agreement with the U.S. government (a "FATCA Agreement") or (ii) is required by and complies with applicable foreign law enacted in connection with an intergovernmental agreement between the United States and a foreign jurisdiction (an "IGA"), in either case to, among other things, collect and provide to the U.S. or other relevant tax authorities certain information regarding U.S. account holders of such institution. In the case of payments made to a foreign entity that is not a financial institution (as a beneficial owner), the FATCA withholding tax generally will be imposed, subject to certain exceptions, unless such entity either provides the withholding agent with a certification that it does not have any "substantial" U.S. owner (generally, any specified U.S. person that directly or indirectly owns more than a specified percentage of such entity) or identifies its "substantial" U.S. owners.

If 2020 Bonds are held through a foreign financial institution that enters into (or is otherwise subject to) a FATCA Agreement, such foreign financial institution (or, in certain cases, a person paying amounts to such foreign financial institution) generally will be required, subject to certain exceptions, to withhold the 30% FATCA tax on payments of dividends or the items described above made to (i) a person (including an individual) that fails to comply with certain information requests or (ii) a foreign financial institution that has not entered into (and is not otherwise subject to) a FATCA Agreement and that is not required to comply with FATCA pursuant to applicable foreign law enacted in connection with an IGA. Coordinating rules may limit duplicative withholding in cases where the withholding described above in **"Non-U.S. Owners"** or **"Information Reporting and Backup Withholding"** also applies.

If any amount of, or in respect of, U.S. withholding tax were to be deducted or withheld from payments on 2020 Bonds as a result of a failure by an investor (or by an institution through which an investor holds the 2020 Bonds) to comply with FATCA, none of the Issuer, any paying agent or any other person would, pursuant to the terms of the 2020 Bonds, be required to pay additional amounts with respect to any 2020 Bond as a result of the deduction or withholding of such tax. ***Non-U.S. owners should consult their tax advisors regarding the application of FATCA to the ownership and disposition of 2020 Bonds.***

CONCLUDING STATEMENT

Quotations in this Official Statement from, and summaries and explanations of the Code, the Ohio Revised Code, the Senior Lien Trust Agreement, the Junior Lien Trust Agreement and the Continuing Disclosure Certificate, do not purport to be complete. Reference is made to the pertinent provisions of the Code, the Ohio Revised Code and those documents for complete statements of their provisions. Copies of the Senior Lien Trust Agreement, the Junior Lien Trust Agreement and the Continuing Disclosure Certificate are available upon request from the Comptroller of the Commission, 682 Prospect Street, Berea, Ohio 44017, telephone (440) 234-2081.

To the extent that any statement made in this Official Statement involve matters of opinion or estimates, whether or not expressly stated to be such, they are made as such and not as representations of fact or certainty, and no representation is made that any such statements will be realized. Information in this Official Statement has been derived by the Commission from official and other sources and is believed by the Commission to be reliable, but information other than that obtained from official records of the Commission has not been independently confirmed or verified by the Commission and its accuracy is not guaranteed.

Neither this Official Statement nor any statement which may have been made orally or in writing is to be construed as or as part of a contract with the original purchasers or subsequent holders of the 2020 Bonds or the owners of any interest therein.

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This Official Statement has been duly prepared and delivered by the Commission, and executed for and on behalf of the Commission by its Executive Director.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

January 29, 2020

/s/ Ferzan M. Ahmed
Ferzan M. Ahmed, P.E., Executive Director

EXHIBIT A-1

GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT

The following terms shall have the following meanings in this Official Statement unless the context otherwise requires:

"Act" shall mean Chapter 5537 of the Ohio Revised Code, as amended and supplemented from time to time.

"Additional System Payments" shall constitute a "Special Fund" under Section 5537.01(Q) of the Ohio Revised Code, as amended from time to time, and shall specifically mean:

(1) payments payable to the Commission pursuant to any agreement or arrangement between the Commission and the United States of America, any state, county, municipality, political subdivision, public body or other governmental entity, or under any law, statute, ordinance, resolution or other authorizing instrument of such an entity, which payments by their terms are available and expressly pledged by the Commission for the payment of debt service on all Bonds issued and Outstanding under the Trust Agreement for so long as any Bonds are Outstanding or until such earlier time as all conditions for the release of such payments provided in the applicable Supplemental Trust Agreement are met;

(2) Additional System Payments shall not include Series Payments, Supplemental Payments, payments that constitute Gross Revenues, or payments pursuant to a Bond Credit Facility or a Qualified Swap Agreement;

(3) payments described in paragraph (1) above shall not constitute Additional System Payments in any Fiscal Year unless:

(a) the source of such payment is a sales tax, gas or fuel tax, franchise fee, ad valorem tax, real estate tax, utility or other public service tax, excise tax, income tax or use tax; or

(b) for each Series of Bonds, amounts derived from sources described in paragraph (1) above allocable to such Series of Bonds pro rata on the basis of Annual Debt Service for such Fiscal Year, together with the Series Payments for such Series of Bonds (other than those described in paragraph (3)(a) of the definition of Series Payments), do not constitute in excess of twenty percent (20%) of Annual Debt Service.

"Additional System Payments Account" shall mean the account of that name in the Revenue Fund.

"Ambac" means Ambac Assurance Corporation, a Wisconsin domiciled stock insurance company, or any successor thereto.

"Annual Budget" shall mean the budget required, pursuant to the Trust Agreement, to be adopted by the Commission each Fiscal Year, as such budget may be amended from time to time.

"Annual Debt Service" shall mean the regularly scheduled principal and interest payments coming due on the Bonds Outstanding in each Fiscal Year, whether at maturity or pursuant to mandatory sinking fund redemption, provided, however, that amounts due on January 1 of any year shall be included in the Annual Debt Service for the preceding Fiscal Year. The assumptions set forth in paragraphs (4), (5), (6), (7) and (8) of the definition of Annual Debt Service Requirement shall be applied in calculating Annual Debt Service.

"Annual Debt Service Requirement" shall mean:

(1) at any time, the sum of the amounts required to be deposited in the applicable Fiscal Year into the:

(a) Interest Account,

(b) Principal Account, and

(c) Bond Redemption Account,

in accordance with the Trust Agreement;

(2) in determining the amount of such required deposits, a credit shall be allowed for amounts already on deposit in any of the foregoing accounts, including, without limitation,

(a) interest earnings on the:

(i) Interest Account,

(ii) Principal Account,

(iii) Bond Redemption Account, and

(iv) Debt Service Reserve Account;

(b) capitalized interest; and

(c) deposits of Series Payments, but only with respect to debt service payments for the Series of Bonds secured by Series Payments, such credit not to exceed the total amounts at any time required to be deposited into the accounts set forth in paragraph (1) above, after taking into consideration the credits provided for in paragraph (2) (a) and (b) above;

(3) for purposes of calculating the requirements for the collection of Tolls (see "EXHIBIT A - GLOSSARY OF TERMS and SUMMARY OF THE TRUST AGREEMENT - Tolls"), and the requirements for the issuance of Bonds (see "EXHIBIT A - GLOSSARY OF TERMS and SUMMARY OF THE TRUST AGREEMENT - Issuance of Bonds"):

(a) the amount of interest earnings on the accounts as provided in paragraph 2(a) above for the applicable Fiscal Year shall be calculated using the lower of (i) the current interest rate in effect for such investments, or (ii) the average interest rate in effect for such investments during any 12 consecutive calendar months of the 15 consecutive calendar months immediately preceding the date of calculation; and

(b) the amount of credit allowed in paragraph (2)(c) above for Series Payments for the applicable Fiscal Year for each Series of Bonds secured by Series Payments shall not exceed 100% of the Series Payments expected to be available for deposit into the accounts set forth in paragraph (1) above, as determined by the Supplemental Trust Agreement providing for the payment of such Series Payments, or to the extent the Series Payments are not determined by the Supplemental Trust Agreement, the amount that would have been available for such deposits, as estimated by an Independent Consultant, had such Series Payments been in effect for the immediately preceding Fiscal Year;

(4) except for purposes of calculating the requirements for the issuance of Bonds, unless the interest rate for a Series of Variable Rate Bonds is fixed for the duration of the applicable Fiscal Year(s), in which case the actual rate shall be used, the interest rate on such Series of Variable Rate Bonds Outstanding shall be assumed to be a rate equal to 100% of the 30 Year Bond Buyer Revenue Bond Index, and with respect to a Series of Variable Rate Bonds which are Taxable Bonds, the interest rate shall be assumed to be a rate equal to 115% of the 30 Year Bond Buyer Revenue Bond Index;

(5) for purposes of calculating the requirements for the issuance of Bonds, the Annual Debt Service Requirement shall be calculated with respect to a Series of Variable Rate Bonds assuming the interest rate equals the maximum rate payable thereon in accordance with the applicable Supplemental Trust Agreement;

(6) for purposes of calculating the requirements for the issuance of Bonds, the Annual Debt Service Requirement with respect to a Series of Notes shall be calculated assuming that the interest rate equals 100% of the 30 Year Bond Buyer Revenue Bond Index and assuming substantially level debt service payments in each year over the maximum number of years (not exceeding 30 years) over which the principal of the Notes may be paid as determined by the Commission;

(7) if a Series of Variable Rate Bonds is subject to purchase by the Commission pursuant to a mandatory or optional tender by the owner thereof, the "tender" date or dates shall be ignored and the stated maturity dates thereof shall be used for purposes of calculating the Annual Debt Service Requirement with respect to such Bonds. If, with respect to any Series of Bonds, the Commission enters into a Qualified Swap Agreement, providing for payments to the Commission which are associated with the payment of interest on such Bonds, in an amount equal to interest on a notional amount equal to the aggregate principal amount of such Bonds Outstanding, based upon a fixed rate, or a variable index or formula different from that used to calculated interest on such Bonds, and if payments under such Qualified Swap Agreement will continue until the final maturity of such Bonds, then the effective rate of interest to the Commission with respect to such Bonds taking into account (a) the actual interest rate borne by such Bonds, (b) payments to be received by the Commission pursuant to such agreement and (c) payment obligations of the Commission to such counterparty pursuant to such agreement, all based upon interest on such notional amount as determined by reference to a fixed rate or variable index or formula, shall be used for purposes of calculating the Annual Debt Service Requirement with respect to such Bonds; and

(8) if two Series of Variable Rate Bonds, or one or more maturities within a Series, of equal par amounts, are issued simultaneously with inverse floating interest rates providing a composite fixed interest rate for such Bonds taken as a whole, such composite fixed rate shall be used in determining the Annual Debt Service Requirement with respect to such Bonds.

"Authenticating Agent" shall mean the Trustee and the Registrar for the Series of Bonds and any bank, trust company or other entity designated as an Authenticating Agent for such Series of Bonds by or in accordance with the Trust Agreement, each of which shall be a transfer agent registered in accordance with Section 17(c) of the Securities Exchange Act of 1934, as amended.

"Authorized Officer of the Commission" shall mean the Executive Director, the Chairman, the Vice Chairman, the Secretary-Treasurer, or any other officer or employee of the Commission, authorized by resolution duly adopted by the Commission to perform specific acts or duties.

"Bond" or "Bonds" shall mean all Bonds issued and outstanding under the Existing Master Trust Agreement and the bonds or notes issued under the provisions and within the limitations of the Trust Agreement, payable from the System Pledged Revenues, which Bonds shall be pari passu with all Bonds issued pursuant to the Trust Agreement. Except as expressly provided in the Trust Agreement, "Bonds" shall include Notes.

"Bond Credit Facility" shall mean a Bond Insurance Policy or a Bond Letter of Credit.

"Bond Insurance Policy" shall mean an insurance policy issued for the benefit of the Holders of any Bonds, pursuant to which the issuer of such insurance policy is obligated to pay when due the principal of and interest on such Bonds to the extent of any deficiency in the amounts in the funds and accounts held under the Trust Agreement, in the manner and in accordance with the terms provided in such insurance policy. The issuer of such insurance policy shall be an institution whose insurance policy results in the Bonds which are secured by such insurance policy being rated in one of the two highest rating categories by each Rating Agency which has a rating outstanding on such Bonds.

"Bond Letter of Credit" shall mean an irrevocable, transferable letter of credit issued for the benefit of the Holders of any Bonds, pursuant to which the issuer of such letter of credit is obligated to pay when due the principal of and interest on such Bonds to the extent of any deficiency in the amounts in the funds and accounts held under the Trust Agreement, in the manner and in accordance with the terms provided in such letter of credit. The issuer of such letter of credit shall be a banking association, bank or trust company or branch thereof whose letter of credit results in the Bonds which are secured by such letter of credit being rated in one of the two highest rating categories by each Rating Agency which has a rating outstanding on such Bonds.

"Bond Redemption Account" shall mean the account of that name in the Debt Service Fund created in the Trust Agreement.

"Bond Register" shall mean the books kept by the Registrar for the registration of the Bonds.

"Capital Appreciation Bonds" or "CABs" shall mean Bonds the interest on which is compounded periodically and is payable only at maturity or upon redemption prior to maturity.

"Capital Appreciation and Income Bonds" shall mean Bonds the interest on which is not paid prior to a specified Interest Commencement Date and is compounded periodically on certain designated dates prior to the Interest Commencement Date.

"Code" shall mean the Internal Revenue Code of 1986, as amended, and applicable temporary, proposed or permanent regulations promulgated thereunder.

"Commission" shall mean the Ohio Turnpike and Infrastructure Commission as created and established by the Act.

"Composite Annual Debt Service Requirement" shall mean in each Fiscal Year the sum of the Annual Debt Service Requirement and the annual debt service requirement with respect to Junior Lien Bonds issued under the Junior Lien Bond Master Trust Agreement.

"Consulting Engineers" shall mean the engineer or engineering firm or corporation retained by the Commission to perform the acts and carry out the duties provided for such Consulting Engineers in the Trust Agreement.

"Cost of Issuance" shall mean all charges, costs and expenses of the Commission incurred in connection with the authorization, issuance, sale and delivery of the Bonds including, but not limited to, legal fees, accounting fees, Municipal Advisory fees, Bond Credit Facility premiums, fiscal or escrow agent fees, printing fees, travel expenses and Rating Agency fees.

"Cost of Operation, Maintenance and Administration" shall mean all costs and expenses paid from the Expense Fund which are the obligation of the Commission in keeping the System open to public travel or attributable to the System and includes, without limitation, reasonable expenses of administration of the Commission, costs of collecting and accounting for Tolls, insurance, employee bond premiums, fees of the Consulting Engineers, Independent Consultant, accountants and legal fees, and, with respect to Toll facilities, all other expenses which would not be incurred if such facilities were being operated as free facilities. Cost of Operation, Maintenance and Administration does not include costs with respect to Non-System Projects, depreciation expense or any amounts paid from the Renewal and Replacement Fund, System Projects Fund or from any source other than Gross Revenues.

"Debt Service Fund" shall mean the fund of that name created in the Trust Agreement.

"Debt Service Reserve Account" shall mean the account of that name in the Debt Service Fund created in the Trust Agreement.

"Debt Service Reserve Requirement" shall mean the lower of (1) the Maximum Annual Debt Service Requirement, without credit for Series Payments otherwise permitted by paragraphs (2)(c) and (3)(b) of the definition of Annual Debt Service Requirement, or (2) the maximum amount permitted by the Code to be funded from Bond proceeds without requiring yield restriction.

"Defeasance Obligation" shall mean to the extent permitted by law:

(a) Direct obligations of or obligations which are unconditionally guaranteed by the United States of America, including obligations issued or held in book entry form on the books of the Department of the Treasury of the United States of America and including advance refunded tax-exempt bonds secured by direct obligations of the United States of America or obligations unconditionally guaranteed by the United States of America which are rated in the highest rating category by a Rating Agency currently rating the Bonds (without regard to gradations such as (+) or (-) or other similar notation);

(b) Evidences of indebtedness issued by the Bank for Cooperatives, Federal Home Loan Banks, Federal Home Loan Mortgage Corporation (including participate certificates), Federal Land Banks, Federal Financing Banks, or any other agency or instrumentality of the United States of America created by an act of Congress which is substantially similar to the foregoing in its legal relationship to the United States of America; provided that the obligations of such agency or instrumentality are unconditionally guaranteed by the United States of America;

(c) Evidences of ownership of proportionate interests in future interest and principal payments on specified obligations described in paragraph (a) above held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor on the underlying obligations described in paragraph (a) above, such as CATS, TIGRS and STRIPS, and which underlying obligations are not available to satisfy any claim of the custodian or any person claiming through the custodian or to whom the custodian may be obligated; or

(d) stripped interest obligations of the Resolution Funding Corporation.

All obligations shall be non-callable prior to their stated maturity or redemption date.

"Event of Default" shall have the meaning ascribed thereto under the caption "THE TRUST AGREEMENT - Events of Default and Remedies."

"Expense Fund" shall mean the fund of that name created in the Trust Agreement.

"Expense Reserve Account" shall mean the account of that name in the Expense Fund created in the Trust Agreement.

"FGIC" means Financial Guaranty Insurance Company, a New York stock insurance company, or any successor thereto.

"Financial Institutions" shall mean the financial institution or institutions providing a Bond Credit Facility in connection with one or more Series of Bonds then Outstanding.

"Financial Security" means Financial Security Assurance Inc., a New York stock insurance company, or any successor thereto, including Assured Guaranty Municipal Corp.

"Fiscal Year" shall mean the period commencing with January 1 of each year and ending with December 31 of that same year or such other twelve (12) consecutive month period designated by the Commission.

"General Reserve Fund" shall mean the fund of that name created in the Trust Agreement.

"Gross Revenue Account" shall mean the account of that name created in the Trust Agreement.

"Gross Revenues" shall mean (1) all Tolls, (2) investment income received on any amounts held in the Revenue Fund, the General Reserve Fund, the System Projects Fund, the Expense Fund and the Renewal and Replacement Fund, (3) the proceeds of any use and occupancy insurance on any portion of the System, (4) moneys received from the Ohio Department of Transportation and designated by the Commission for use as System Pledged Revenues and (5) commencing January 1, 2004, all concession revenues derived from the operation of the service plazas (other than funds contractually committed to the Service Plaza Capital Improvements Reserve and other than any allocation of the State Fuel Tax revenues) and all revenues derived from leases, licenses, royalties, advertising and miscellaneous sales, fees and charges together with all investment earnings thereon. "Gross Revenues" shall not include Supplemental Payments, Series Payments, Additional System Payments, revenues derived from the operation of Non-System Projects, amounts received pursuant to a Bond Credit Facility, amounts received pursuant to a Qualified Swap Agreement, or the proceeds of any gifts, grants, or other payments to the Commission from the United States of America, any state or any public or private instrumentality, individual or entity that are not in the nature of a Toll.

"Holder of Bonds" or "Bondholder" or "Holders" or any similar term shall mean any person who shall be the owner of any Bond or Bonds as shown on the Bond Register.

"Independent Consultant" shall mean an independent licensed professional engineer (or firm of independent licensed professional engineers) of recognized national standing in the field of estimating and projecting traffic on, or revenues of, toll facilities which engineer has been selected by the Commission. Said engineer (or firm of engineers) may be retained by the Commission for other purposes. In connection with matters not related to traffic and revenue projection of tolled facilities, the Commission may select members of another professional discipline to deliver any Independent Consultant's certificate required by the terms of the Trust Agreement, provided further that any members of such discipline thereafter selected by the Commission shall be independent and shall be of recognized national standing in such discipline.

"Interest Account" shall mean the account of that name in the Debt Service Fund created in the Trust Agreement.

"Interest Commencement Date" shall mean, with respect to any particular Capital Appreciation and Income Bonds, the date specified in the Supplemental Trust Agreement providing for the issuance of such Capital Appreciation and Income Bonds (which date must be prior to the maturity date for such Capital Appreciation and Income Bonds) after which interest accruing on such Capital Appreciation and Income Bonds shall be payable periodically, with the first payment date being the applicable Interest Payment Date immediately succeeding such Interest Commencement Date.

"Interest Payment Date" shall mean for each Series of Bonds such dates of each Fiscal Year on which interest on Outstanding Bonds of such Series is payable, as set forth in the Supplemental Trust Agreement providing for the issuance of such Series of Bonds.

"Junior Lien Master Trust Agreement" shall mean the Junior Lien Master Trust Agreement dated as of August 1, 2013 between the Commission and the Junior Lien Trustee.

"Junior Lien Bonds" shall mean bonds of the Commission issued pursuant to the Junior Lien Bond Master Trust Agreement and which are subordinate to the Bonds.

"Junior Lien Trustee" shall mean the Trustee at the time serving under the Junior Lien Master Trust Agreement, initially The Huntington National Bank, Columbus, Ohio, and any successor Junior Lien Trustee as determined under or pursuant to the Junior Lien Master Trust Agreement.

"Major Bridge" shall mean any one or all of the following bridges: the Cuyahoga River bridge, the Huron River bridge, the Sandusky River bridge, the Maumee River bridge, the CSX Railroad bridge, the Norfolk Southern Railroad bridge, Vermillion River bridge, and Tinkers Creek bridge.

"Master Trust Agreement" shall mean the Master Trust Agreement, dated as of February 15, 1994, between the Commission and the Trustee, as amended by the First through Seventeenth Supplemental Trust Agreements, and as amended and restated by the Amended and Restated Master Trust Agreement (Eighteenth Supplemental Trust Agreement), dated as of April 8, 2013, between the Commission and the Trustee, as further amended from time to time.

"Maximum Annual Debt Service Requirement" shall mean, at any time, the highest Annual Debt Service Requirement occurring in the current or any succeeding Fiscal Year.

"Net Revenues" shall mean the amount remaining after the deduction from Gross Revenues of the required deposits to the Expense Fund.

"Non-System Project" shall mean any transportation-related project authorized by the Act and designated as a Non-System Project by a resolution of the Commission. Non-System Projects shall not be part of the System, unless designated as such pursuant to the Master Trust Agreement.

"Non-System Project Operating Expenses" means the expenses incurred by the Commission for operation, maintenance and repair, ordinary replacement and ordinary reconstruction of a Non-System Project or any part thereof and shall include, without limiting the generality of the foregoing, administrative expenses, premiums and reserves for insurance and self-insurance, fees or premiums for a Bond Credit Facility, Reserve Credit Facility, legal and engineering expenses, payments into pension, retirement, health and hospitalization funds, and any other expenses required to be paid by the Commission in connection with the operation of such Non-System Project, all to the extent properly and directly attributable to the operation of such Non-System Project, and rental payments in connection with operating leases entered in the ordinary course of business, all to the extent properly and directly attributable to a Non-System Project, and the expenses and compensation of the fiduciaries required to be paid under agreements applicable to such Non-System Projects, but does not include (1) any costs or expenses for new construction or for major reconstruction or (2) any provision for interest, depreciation, amortization or similar charges.

"Notes" means notes issued by the Commission in anticipation of the issuance of Bonds pursuant to the Act, or to pay costs of refunding or retiring Notes or Bonds previously issued pursuant to the Act, which Notes shall be on a parity with the Bonds.

"Operation, Maintenance and Administrative Expenses Account" shall mean the account of that name in the Expense Fund.

"Outstanding" or "outstanding" when used with reference to the Bonds, shall mean, as of any date of determination, all Bonds theretofore authenticated and delivered except:

(1) Bonds theretofore cancelled by the Registrar or delivered to the Registrar for cancellation;

(2) Bonds which are deemed paid in accordance with Article IX of the Trust Agreement;

(3) Bonds in lieu of which other Bonds have been issued pursuant to the provisions of the Trust Agreement relating to Bonds destroyed, stolen or lost, unless evidence satisfactory to the Registrar has been received that any such Bond is held by a bond fide purchaser; and

(4) for purposes of any consent or other action to be taken under the Trust Agreement by the Holders of a specified percentage of principal amount of Bonds, Bonds held by or for the account of the Commission.

"Paying Agent" shall mean the Trustee or, with respect to any Series of Bonds, the paying agent designated by the Supplemental Trust Agreement authorizing the issuance of such Series of Bonds, or any successor thereto.

"Permitted Investments", unless varied by the terms of a Supplemental Trust Agreement as to a particular Series of Bonds, (i) shall mean any investments in which the Commission is authorized to invest pursuant to the laws of the State, and (ii) with respect to moneys held by the Trustee, shall mean any of the following securities:

(a) Defeasance Obligations;

(b) obligations issued by any agency of the United States of America, including, without limitation, the Government National Mortgage Association, or by any instrumentality of the United States of America, including, without limitation, the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation;

(c) general obligations of any state of the United States of America, including the State, or any political subdivision of a state; provided that such general obligations carry one of the two highest ratings of one of the Rating Agencies;

(d) certificates of deposit or banker's acceptances, whether negotiable or nonnegotiable, issued by a bank, trust company or savings association organized under the laws of any state of the United States of America or any national banking association (including the Trustee), which institution has a combined capital and surplus of at least $100,000,000 in dollars of the United States of America, provided, that such certificates of deposit or banker's acceptances do not exceed in the aggregate ten percent (10%) of the combined capital, surplus and undivided profits of the institution issuing the same and provided further that such certificates of deposit or banker's acceptances shall be in the possession of the Trustee or its agents and shall be either (A) continuously and fully insured by the Federal Deposit Insurance Corporation, or (B) continuously and fully secured by such securities as are described in clauses (a) through (c), inclusive, above ("Pledged Securities") which shall have a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such certificates of deposit or banker's acceptances, and that the institution issuing each such certificate of deposit or banker's acceptance required to be so secured shall furnish the Trustee with a covenant satisfactory to it that the aggregate market value of all such obligations securing each such certificate of deposit or banker's acceptance will at all times be an amount at least equal to the principal amount of each such certificate of deposit or banker's acceptance and that the Trustee shall be entitled to rely on each such covenant;

(e) any repurchase agreement with an institution described in clause (d) above, which repurchase agreement is fully collateralized at all times by Pledged Securities based upon the market value of such obligations;

(f) any money market fund invested solely in obligations described in clauses (a), (b) or (c) above or invested in repurchase agreements fully collateralized by obligations described in clauses (a) or (b) above;

(g) the investment pool created and administered by the Treasurer of the State of Ohio under Section 135.45 of the Ohio Revised Code; and

(h) investment agreements with institutions whose long-term unsecured debt is rated in one of the two highest rating categories of one of the Rating Agencies;

provided that for purposes of clauses (d) and (e) above the respective Pledged Securities shall be in the possession of the Trustee or its agent and shall be free and clear of all liens or rights of any third party, and in which obligations the Trustee shall have a first perfected security interest.

"Principal Account" shall mean the account of that name in the Debt Service Fund created in the Trust Agreement.

"Project" shall mean any System Project or Non-System Project.

"Project Cost" with respect to any Project, shall mean (1) the costs incurred or to be incurred by the Commission in connection with or incidental to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such Project, including legal, administrative, engineering, planning, design studies, insurance costs and financing costs of such Project, (except to the extent such costs are funded from the proceeds of any indebtedness of the Commission, the payment of which is included as a Project Cost under clause (3) below), (2) amounts, if any, required by the Trust Agreement to be paid into any fund or account upon the issuance of any Series of Bonds, (3) payments when due (whether at the maturity of principal or the due date of interest or upon redemption) on Notes, (4) costs of equipment, supplies and reserves required by the Commission for the commencement of operation of such Project, (5) costs of acquisition by the Commission of real or personal property or any interest therein, including land and improvements required for relocation and relocation costs and land required for right of way, environmental mitigation or other Commission purposes, (6) any other costs properly attributable to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such Project as permitted by Section 5537.01(B) of the Ohio

Revised Code, as amended from time to time, and (7) interest on Bonds during the estimated period of construction and for a reasonable period thereafter.

"Qualified Swap Agreement" shall mean an agreement between the Commission and a counterparty creating Qualified Swap Payments.

"Qualified Swap Payments" shall mean a payment required to be made pursuant to a Qualified Swap Agreement, such as an interest rate swap, collar, cap or other functionally similar agreement, such payment being equal to interest on a notional amount, based upon a fixed rate or a variable index or formula, provided that the long-term unsecured debt of such counterparty, or the entity that has unconditionally guaranteed such counterparty's obligations is at the time rated in one of the two highest rating categories (without regard to gradations such as pluses (+) or minuses (-) or other similar notations) by each Rating Agency then maintaining a rating on the Series of Bonds to which such agreement pertains; or, the payment obligations of the counterparty, or the entity that has unconditionally guaranteed such counterparty's obligations, are rated in one of the three (3) highest rating categories (without regard to gradations) and are collateralized by direct obligations of, or obligations the principal and interest on which are guaranteed by, the United States of America, that (a) are deposited with the Commission or an agent of the Commission; and (b) maintain a market value of not less than one hundred five percent (105%) of the net market value of the payment agreement to the Commission, as such net market value may be defined and determined from time to time under the terms of the payment agreement.

"Rating Agency" shall mean Moody's Investors Service, or S&P Global Ratings, or Fitch Ratings, and their successors, or any other nationally recognized bond rating agency.

"Rebate Account" shall mean an account of that name in the Rebate Fund established for a Series of Bonds into which the funds constituting the Rebate Amount shall be deposited; each such account shall be termed the "[Series of Bonds] Rebate Account."

"Rebate Amount" shall mean a rebate amount required to be paid by the Commission to the United States of America pursuant to the Code.

"Rebate Fund" shall mean the fund of that name created in the Trust Agreement.

"Registrar" shall mean, with respect to any Series of Bonds, the Trustee or registrar designated by the Supplemental Trust Agreement with respect to such Series of Bonds, or any successor thereto.

"Renewal and Replacement Fund" shall mean the fund of that name created in the Trust Agreement.

"Renewal and Replacement Requirement" shall mean the amount, if any, for the then current Fiscal Year in the Annual Budget.

"Reserve Account Credit Facility" shall mean a Reserve Account Insurance Policy or a Reserve Account Letter of Credit.

"Reserve Account Credit Facility Rating Requirement" shall mean, for purposes of the provisions of the Trust Agreement relating to a rating downgrade of a Reserve Account Credit Facility subsequent to its deposit in the Debt Service Reserve Account, the requirement that the provider of a Reserve Account Credit Facility be rated in one of the two highest rating categories (without giving effect to modifiers or qualifiers within a rating category) by at least two Rating Agencies.

"Reserve Account Insurance Policy" shall mean an insurance policy, surety bond or other acceptable evidence of insurance deposited in the Debt Service Reserve Account in lieu of or in partial substitution for cash or securities required to be deposited therein. The issuer providing such Reserve Account Insurance Policy shall be an insurer which has been assigned one of the two highest ratings by any Rating Agency which has a rating outstanding on the Bonds.

"Reserve Account Letter of Credit" shall mean an irrevocable, transferable letter of credit deposited in the Debt Service Reserve Account in lieu of or in partial substitution for cash or securities on deposit therein. The issuer providing such letter of credit shall be a banking association, bank or trust company or branch thereof whose letter of credit results in the Bonds which are secured by such letter of credit being rated in one of the two highest rating categories by each Rating Agency which has a rating outstanding on such Bonds.

"Revenue Fund" shall mean the fund of that name created in the Trust Agreement (the full name of this fund is the "General Revenue Fund").

"Series" shall mean such Bonds designated as a separate Series of Bonds in accordance with a Supplemental Trust Agreement.

"Series Payments" shall mean (1) payments which are:

(a) payable to the Commission pursuant to any agreement between the Commission and any private, nongovernmental corporation, organization, association, individual or other entity, which payments by their terms automatically recur without approval that is discretionary to the entity providing such payments for so long as any Bonds secured thereby are Outstanding or until such earlier time as all conditions for the release of such payments, if any, provided in the applicable Supplemental Trust Agreement are met, or

(b) payable to the Commission pursuant to any agreement between the Commission and the United States of America, any state, county, municipality, political subdivision, public body or other governmental entity, or under any law, statute, ordinance, resolution or other authorizing instrument of such an entity, providing such payments for so long as any Bonds secured thereby are Outstanding or until such earlier time as all conditions for the release of such payments, if any, provided in the applicable Supplemental Trust Agreement are met; and

in each case above, available and expressly pledged by the Commission for the payment of debt service on one or more, but less than all, Series of Bonds issued and Outstanding under the Trust Agreement;

(2) Series Payments shall not include Supplemental Payments or payments pursuant to a Bond Credit Facility or a Qualified Swap Agreement;

(3) payments described in paragraph (1) above shall not constitute Series Payments in any Fiscal Year unless:

(a) the source of such payments is a sales tax, gas or fuel tax, franchise fee, ad valorem tax, real estate tax, utility or other public service tax, excise tax, income tax or use tax; or

(b) amounts derived from sources described in paragraph (1) above together with the Additional System Payments (other than those described in paragraph (3)(a) of the definition of Additional System Payments) allocable to such Series of Bonds pro rata on the basis of Annual Debt Service for such Fiscal Year do not constitute in excess of twenty percent (20%) of Annual Debt Service.

"Series Payments Fund" shall mean the fund of that name created in the Trust Agreement.

"State" shall mean the State of Ohio.

"Supplemental Authorizing Resolution" shall mean, as to any Series of Bonds, the resolution or resolutions authorizing and providing for the sale and issuance of such Series of Bonds.

"Supplemental Payments" shall mean:

(1) payments payable to the Commission pursuant to any agreement between the Commission and any private or governmental entity, or under any law, statute, ordinance, resolution or other authorizing instrument of such an entity, which payments are available and expressly pledged by the Commission for the payment of debt service with respect to one or more Series, or all Series, of Bonds Outstanding hereunder, but which are restricted to use only in the event System Pledged Revenues or, if applicable, Series Payments, are insufficient to make payments required hereunder with respect to such Series of Bonds. Such payments must:

(a) by their terms automatically recur without appropriation, approval or similar action that is discretionary to the entity providing such payments for so long as any Bonds secured thereby are Outstanding or until such earlier time as all conditions for the release of such payments, if any, provided in the applicable Supplemental Trust Agreement are met; and

(b) be available and expressly pledged by the Commission for the payment of debt Service on one or more Series of Bonds issued and Outstanding under the Trust Agreement.

(2) Supplemental Payments shall not include Series Payments or payments pursuant to a Bond Credit Facility or a Qualified Swap Agreement.

"Supplemental Payments Fund" shall mean the fund of that name created in the Trust Agreement.

"Supplemental Trust Agreement" shall mean one or more Supplemental Trust Agreements, as the same may be amended and supplemented from time to time, authorized by Supplemental Authorizing Resolutions.

"System" shall mean (a) the highway extending approximately 241 miles across the State from a point on the Ohio-Pennsylvania line near Petersburg, Ohio (being also the western terminus of the Pennsylvania Turnpike), in a northwesterly and westerly direction to a point on the Ohio-Indiana line in Williams County, Ohio (being the easterly terminus of the Indiana Toll Road), under the operating jurisdiction of the Commission, and popularly called "the Ohio Turnpike", and including all bridges, tunnels, overpasses, underpasses, interchanges, entrance plazas, approaches, toll facilities, service facilities, administration, and storage and other buildings and facilities necessary for the operation or utilization thereof, all with such modifications or alterations thereof as permitted by the Act and the Trust Agreement, and all property, rights, easements and interests owned or acquired for the operation or utilization thereof or for use in connection therewith, as well as those additions, extensions and improvements thereto as contemplated by the Trust Agreement or the Junior Lien Bond Master Trust Agreement, and (b) System Projects.

"System Pledged Revenues" shall mean Net Revenues plus Additional System Payments.

"System Project" shall mean any project authorized by the Act as of February 15, 1994 and designated as a System Project by official action of the Commission.

"System Projects Fund" shall mean the fund of that name created in the Trust Agreement.

"Taxable Bonds" shall mean Bonds issued on the basis that the interest thereon shall not, in any manner, be exempt from federal income taxation or excludible from gross income for federal income tax purposes.

"30 Year Bond Buyer Revenue Bond Index" shall mean the weekly index compiled by *The Bond Buyer* consisting of twenty-five (25) tax-exempt revenue bonds rated "AA" or "A" which have maturities of thirty (30) years, published immediately preceding the first day of the calendar month in which any calculation utilizing such index is made; if such index, or an equivalent successor index is no longer published, the 30 Year Bond Buyer Revenue Bond Index shall be determined in such manner as the Commission shall determine will provide substantially the same rate that would have been provided by the 30 Year Bond Buyer Revenue Bond Index and with respect to which the Commission receives confirmation from each Rating Agency then maintaining ratings on Bonds Outstanding that calculation of the 30 Year Bond Buyer Revenue Bond index in such manner will not result in a reduction or withdrawal of the then applicable ratings on the Bonds.

"Tolls or tolls" shall mean Tolls, special fees or permit fees, or other charges by the Commission to the owners, lessors, lessees or operators of motor vehicles for the operation of or the right to operate those vehicles on the System, and any other fees and charges authorized by the Act in connection with any System Project.

"Trust Agreement" shall mean collectively the Master Trust Agreement and all Supplemental Trust Agreements supplemental thereto.

"Trustee" shall mean the Trustee at the time serving under the Trust Agreement, initially The Huntington National Bank, Cleveland, Ohio, and any successor Trustee as determined under or pursuant to the Trust Agreement.

"Variable Rate Bonds" shall mean Bonds with a variable, adjustable, convertible or other similar rate which is not fixed in percentage for the entire remaining term thereof.

"Verification Agent" shall mean an independent public accounting firm, or other firm that employs one or more certified public accountants for the purpose, engaged by the Commission to perform the acts and carry out the duties provided for a Verification Agent in the Trust Agreement.

Any reference to the Commission or to its members, officers or to other public officers, boards, commissions, departments, institutions, agencies, bodies or entities shall include those which succeed to its functions, duties or responsibilities by operation of law, and also those who at the time may legally act in its place.

References to the Act, to any act or resolution of the General Assembly, or to a section, chapter, division, paragraph or other provision of the Ohio Revised Code or the Constitution of Ohio, or the laws of Ohio, shall include the Act, that act or resolution, and that section, chapter, division, paragraph or other provision and those laws as from time to time amended, modified, supplemented, revised or superseded, unless expressly stated to the contrary, provided that no such amendment, modification, supplementation, revision or supersession shall alter the obligation to pay the Annual Debt Service on Bonds Outstanding, or on Bonds in anticipation of which Notes are Outstanding, or to pay any obligations of the Commission to Financial Institutions relating to any Series of Bonds Outstanding, at the time of any such action, in the amount and manner, at the times and from the sources provided in the Trust Agreement, except as otherwise therein permitted.

SUMMARY OF THE TRUST AGREEMENT

The following, in addition to information contained under the captions "DESCRIPTION OF THE 2020 BONDS" and "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS", summarizes certain provisions of the Trust Agreement, to which document in its entirety reference is made for the detailed provisions thereof.

So long as the 2020 Senior Lien Bonds are immobilized in a Book Entry System with DTC or another depository, that depository or its nominee is for all purposes of the Trust Agreement considered by the Commission and the Trustee to be the Holder of the 2020 Senior Lien Bonds, and Beneficial Owners will not be considered Holders and will have no rights as Holders under the Trust Agreement. See "EXHIBIT E - BOOK ENTRY ONLY SYSTEM"."

Security

The Trust Agreement provides for a pledge of the System Pledged Revenues by the Commission to the Trustee for the benefit of the Holders and the Financial Institutions. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS."

Funds and Accounts

The Trust Agreement establishes the following funds and accounts: the Revenue Fund, and within such fund the Gross Revenue Account and the Additional System Payments Account; the Expense Fund, and within such fund the Operation, Maintenance and Administrative Expenses Account and the Expense Reserve Account; the Debt Service Fund, and within such fund the Interest Account, the Principal Account, the Bond Redemption Account and the Debt Service Reserve Account; the Series Payments Fund, and within such fund, to the extent necessary to segregate and separately account for Series Payments, one or more separate accounts; the Renewal and Replacement Fund; the System Projects Fund, and within such fund, to the extent necessary, one or more separate Construction Accounts; the General Reserve Fund; the Supplemental Payments Fund, and within such fund, to the extent necessary to segregate and separately account for Supplemental Payments, one or more separate accounts; and the Rebate Fund, and within such fund a separate Rebate Account for each Series of Bonds, to the extent required by applicable law.

The funds and accounts created by the Trust Agreement constitute trust funds for the purposes provided in the Trust Agreement and are for purposes of accounting, kept separate and distinct from all other funds of the Commission and are be used only for the purposes and in the manner provided in the Trust Agreement.

The Debt Service Fund and the accounts therein (the Interest Account, the Principal Account, the Bond Redemption Account and the Debt Service Reserve Account) are held by the Trustee. The Revenue Fund, the Series Payments Fund, the Expense Fund, the Renewal and Replacement Fund, the System Projects Fund, the General Reserve Fund and the Rebate Fund have been established and are maintained by the Commission in a bank or trust company which is eligible under the laws of the State to receive deposits of public funds. The Supplemental Payments Fund and the accounts therein have been established and are held in compliance with the document or agreement providing for such Supplemental Payments.

Revenue Fund: The Commission covenants that Gross Revenues will be collected by the Commission, or its agents, and deposited into the Gross Revenue Account in the Revenue Fund. All Additional System Payments will be deposited by the Commission into the Additional System Payments Account in the Revenue Fund immediately upon receipt. All Series Payments shall be deposited by the Commission into the Series Payments Fund (or if established, the applicable subaccount therein) immediately upon receipt thereof.

Expense Fund: Amounts on deposit in the Operation, Maintenance and Administrative Expenses Account will be applied by the Commission from time to time to pay the Cost of Operation, Maintenance and Administration. Amounts on deposit in the Expense Reserve Account will be applied by the Commission from time to time to pay Cost of Operation, Maintenance and Administration to the extent amounts on deposit in the Operation, Maintenance and Administrative Expenses Account are insufficient for such purpose.

Debt Service Fund: Amounts on deposit in the Principal Account, Bond Redemption Account and Interest Account will be transferred by the Trustee to the Paying Agent at the times as are necessary to make payments of principal and interest on the Bonds or Qualified Swap Payments, as the case may be.

Amounts on deposit in the Bond Redemption Account will be applied solely to the purchase or redemption of Bonds. Moneys in the Bond Redemption Account will first be applied to the payment of the mandatory sinking fund installments coming due on the next semiannual and annual redemption dates, if any, of Bonds subject to mandatory sinking fund redemption. The Commission may at any time purchase any of such Bonds at prices not greater than the applicable redemption price of such Bonds as of such date. If the Bonds are not then redeemable prior to maturity, the Commission may purchase such Bonds at prices not greater than the redemption price of such Bonds on the next ensuing redemption date. The Trustee is required to use all moneys in the Bond Redemption Account for the redemption prior to maturity of such Bonds in such manner and at such times as shall be determined by a Supplemental Trust Agreement; provided, that the Commission will not be obligated to redeem, in advance of the mandatory sinking fund installment next coming due, such Bonds prior to maturity unless and until there are sufficient moneys on deposit in the Bond Redemption Account to provide for the redemption of at least Twenty-five Thousand Dollars ($25,000) principal amount of Bonds at any one time. If by the application of moneys in the Bond Redemption Account, the Commission purchases or calls for redemption in any year Bonds in excess of the installment requirement for such year, such excess of Bonds so purchased or redeemed will be credited in such manner and at such times over the remaining installment payment dates as the Commission shall determine.

Moneys in the Debt Service Reserve Account will be used only for deposit into the Interest Account, the Principal Account or the Bond Redemption Account when the moneys in the Revenue Fund or any other fund or account held pursuant to the Trust Agreement and available for such purpose are insufficient therefor. In the event that any moneys are withdrawn from the Debt Service Reserve Account for deposit into the Interest Account, the Principal Account or the Bond Redemption Account, such withdrawals are required to be subsequently restored from the first System Pledged Revenues (and, to the extent available therefor, Series Payments) available to the Commission after all required payments have been made into the Interest Account, the Principal Account and the Bond Redemption Account, including any deficiencies for prior payments, unless restored by provision or reinstatement of a Reserve Account Credit Facility.

Any moneys in the Debt Service Reserve Account in excess of the Debt Service Reserve Requirement for the Bonds or, if the Commission has exercised its option 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, will be transferred by the Trustee to the Commission and deposited by the Commission in the General Reserve Fund.

The Commission may elect, by resolution adopted prior to the issuance of any Series of Bonds, to fully fund the Debt Service Reserve Account over a period specified in such resolution not to exceed the period during which capitalized debt service in 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 Commission will be required to make substantially equal monthly installments in order that the amounts on deposit therein and available amounts under any Reserve Account Credit Facility at the end of such period will equal the Debt Service Reserve Requirement.

In lieu of the amounts required to be on deposit in the Debt Service Reserve Account, the Commission may at any time cause to be deposited into the Debt Service Reserve Account a Reserve Account Credit Facility for the benefit of the Holders in an amount, which together with other amounts on deposit therein equals the Debt Service Reserve Requirement or, if the Commission has exercised its option 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, which Reserve Account Credit Facility shall be payable or available to be drawn upon, as the case may be (upon the giving of notice as required thereunder) on any interest or principal payment date on which a deficiency exists in the Interest Account, the Principal Account or the Bond Redemption Account which cannot be cured by moneys in any other fund or account held pursuant to the Trust Agreement and available for such purpose. If a disbursement is made under the Reserve Account Credit Facility, the Commission will be obligated either to reinstate the amount available under such Reserve Account Credit Facility or to deposit into the Debt Service Reserve Account from the System Pledged Revenues (and, to the extent available therefor, Series Payments), funds in the amount sufficient to cause the amount on deposit in the Debt Service Reserve Account to equal the Debt Service Reserve Requirement or, if the Commission has exercised its option 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, or a combination of such alternatives.

In the event that any Reserve Account Credit Facility is not rated in one of the two highest rating categories (without giving effect to modifiers or qualifiers within a rating category) by at least two Rating Agencies (the "Reserve Account Credit Facility Rating Requirement"), the Commission shall deposit an amount into the Debt Service Reserve Account so that such funds, together with any other amounts on deposit as well as any Reserve Account Credit Facilities that do meet the Reserve Account Credit Facility Rating Requirement, equal the Debt Service Reserve Requirement.

In the alternative, in lieu of the deposit set forth in the preceding paragraph, the Commission may deposit another Reserve Account Credit Facility that meets the Reserve Account Credit Facility Rating Requirement to insure over the Reserve Account Credit Facility that does not meet the Reserve Account Credit Facility Rating Requirement.

In the event that the Commission deposits cash or a Reserve Account Credit Facility to insure over an existing Reserve Account Credit Facility that does not satisfy the Reserve Account Credit Facility Rating Requirement, the Trustee shall note on its books that such cash or Reserve Account Credit Facility is for purpose of insuring over the existing Reserve Account Credit Facility.

In the event that the Trustee is required to draw upon the Debt Service Reserve Account in order to make payments due into the Debt Service Fund, the Trustee shall draw on such moneys and Reserve Account Credit Facilities in the following order of priority:

FIRST, from moneys deposited into the Debt Service Reserve Account, other than moneys deposited due to a Reserve Account Credit Facility not meeting the Reserve Account Credit Facility Rating Requirement;

SECOND, on all Reserve Account Credit Facilities (other than those Reserve Account Credit Facilities deposited as a result of another Reserve Account Credit Facility not meeting the Reserve Account Credit Facility Rating Requirement) on a pro-rata basis (including those Reserve Account Credit Facilities not meeting the Reserve Account Credit Facility Rating Requirement); and

THIRD, on Reserve Account Credit Facilities and cash that have been deposited as a result of another Reserve Account Credit Facility not meeting the Reserve Account Credit Facility Rating Requirement, on a pro-rata basis, but only to the extent that the provider of the Reserve Account Credit Facility not meeting the Reserve Account Credit Facility Rating Requirement fails to pay amounts as due.

Reserve Account Credit Facilities drawn on in "SECOND" above shall be drawn on a pro-rata basis only, regardless of whether the providers of the Reserve Account Credit Facilities not meeting the Reserve Account Credit Facility Rating Requirement fail to pay, unless and until Reserve Account Credit Facilities or cash in "THIRD" above have been drawn to pay amounts as due.

In the event that the Commission deposits cash as a result of an existing Reserve Account Credit Facility not meeting the Reserve Account Credit Facility Rating Requirement and that existing Reserve Account Credit Facility subsequently meets the Reserve Account Credit Facility Rating Requirement, upon the written request of the CFO/Comptroller of the Commission, the Trustee shall transfer the amount of that previous deposit to the Commission.

See "SECURITY AND SOURCE OF PAYMENT OF THE 2020 BONDS – Debt Service Reserve Requirements - Senior Lien Bond Reserve" and "Debt Service Reserve Account Credit Facility – Senior Lien Bonds").

If the Commission fails to pay any unreimbursed draws and related expenses with respect to the Reserve Account Credit Facility issued by Financial Security, Financial Security is entitled to exercise any and all legal and equitable remedies available to it, including those provided under the default provisions of the Trust Agreement, other than (i) acceleration of the maturity of the Bonds, or (ii) any remedies which, in the opinion of the Trustee, would adversely affect owners of the Bonds. See "GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT – Events of Default and Remedies."

Renewal and Replacement Fund: The moneys in the Renewal and Replacement Fund will be used, when necessary, for the purpose of paying the cost of replacement or renewal of capital assets or facilities of the System, or extraordinary repairs of the System. The moneys in the Renewal and Replacement Fund will be used for payment into the Interest Account, the Principal Account and the Bond Redemption Account when the moneys in the Revenue Fund and, to the extent available therefor, in the Series Payments Fund are insufficient therefor. Moneys in the Renewal and Replacement Fund will also be used for the benefit of the Junior Lien Bonds to the extent and in the manner provided by the Junior Lien Bond Master Trust Agreement. If the Commission determines that the amount on deposit in the Renewal and Replacement Fund is excessive for the purposes of the Renewal and Replacement Fund, the excess amount may be withdrawn from the Renewal and Replacement Fund by the Commission and transferred to and deposited in the System Projects Fund.

System Projects Fund: The moneys in the System Projects Fund will be used, when necessary, for the purpose of paying all or part of the Project Costs of System Projects. Prior to the expenditure of such moneys from the Systems Project Fund, however, there shall be delivered to the Trustee a Certificate of the Commission, signed by the Executive Director, stating that prior to and in connection with expenditure, (i) no default exists under the Trust Agreement and (ii) no event exists which, with the giving of notice or the passage of time, would constitute an Event of Default. The moneys in the System Projects Fund will be used for payment into the Interest Account, the Principal Account and the Bond Redemption Account when the money in the Revenue Fund, the Renewal and Replacement Fund and, to the extent available therefor, the Series Payments Fund are insufficient therefor. Moneys in the System Projects Fund will also be used for the benefit of the Junior Lien Bonds to the extent and in the manner provided by the Junior Lien Bond Master Trust Agreement. In the event the Commission shall certify that the amount on deposit in the System Projects Fund is excessive for the purposes of the System Projects Fund, such excess amount may be withdrawn from the System Projects Fund by the Commission and deposited in the General Reserve Fund.

Series Payments Fund: Amounts on deposit in the respective accounts within the Series Payments Fund will be applied to make the deposits to the Interest Account, the Principal Account, the Bond Redemption Account and the Debt Service Reserve Account with respect to the respective Series of Bonds secured thereby to the extent and in the manner provided or permitted in the governing document providing for the payment of such Series Payments, or, if the governing document does not so provide, then as directed by the Commission. Funds derived from Series Payments will secure and only be used to make payments with respect to the particular Series of Bonds to which such payments are pledged and such amounts will not be available or used to make payments with respect to any other Series of Bonds.

Supplemental Payments Fund: If in any month the System Pledged Revenues and Series Payments are not sufficient to make the required deposits into the Interest Account, the Principal Account, the Bond Redemption Account or the Debt Service Reserve Account, moneys in the Supplemental Payments Fund will be applied to pay the portion of such deficiency allocable to the Bonds secured by the Supplemental Payments. Funds derived from Supplemental Payments will secure and only be used to make payments with respect to the Series of Bonds for which such Supplemental Payments are available in accordance with the terms of the governing document providing for such Supplemental Payments and such amount will not be available or used to make payments with respect to other Series of Bonds.

Rebate Fund: The Commission will deposit or cause to be deposited into the appropriate Rebate Account in the Rebate Fund, from investment earnings or moneys deposited in the other funds and accounts created under the Trust Agreement, or from any other legally available funds of the Commission, an amount equal to the Rebate Amount. The moneys deposited in the Rebate Fund shall be used only for the payment of the Rebate Amount to the United States of America.

To the extent moneys on deposit in the appropriate Rebate Account in the Rebate Fund are insufficient for the purpose of paying the Rebate Amount, and other funds of the Commission are not available to pay the Rebate Amount, then the Rebate Amount is required to be paid first from System Pledged Revenues and, to the extent the System Pledged Revenues are insufficient to pay the Rebate Amount, then from moneys on deposit in any of the funds and accounts created under the Trust Agreement.

After making the required determination or calculation of the Rebate Amount or causing the same to be made, and upon verification of such determination or calculation by the Commission, if required, the Commission may, to the extent permitted by the Code, withdraw funds which may be on deposit in the appropriate Rebate Account in an amount not to exceed an amount which would maintain a balance in such account sufficient to pay the then-current cumulative Rebate Amount, and use such funds for any other purpose authorized by law.

General Reserve Fund: The monies in the General Reserve Fund will be used in such manner, in such priority, and at such times as the Commission determines (a) to purchase or redeem Bonds (at redemption prices not exceeding the redemption prices of such Bonds on the next ensuing redemption date), (b) for any transportation-related lawful purpose of the Commission, including, without limitation, to reimburse the provider of any Supplemental Payments in accordance with the document providing for such Supplemental Payments, payment of Project Costs with respect to Non-System Projects or payment of Non-System Project Operating Expenses, or (c) for payments by the Commission under any reimbursement agreement with respect to any Bond Credit Facility or any other financial agreement entered into with respect to the Bonds, or any Series thereof; provided, however, that none of such monies may be used for the purposes described in this paragraph unless all payments required to be made to other funds (see "EXHIBIT A - GLOSSARY OF TERMS and SUMMARY OF THE TRUST AGREEMENT - Application of Monies in Revenue Fund"), including any deficiencies for prior payments, have been made in full to the date of such use, and the Commission has fully complied with all covenants and agreements contained in the Trust Agreement.

Investment and Valuation of Funds

The Revenue Fund, the Debt Service Fund, the Renewal and Replacement Fund, the Expense Fund, the System Projects Fund, the General Reserve Fund, the Series Payments Fund and all other special funds created and established by the Trust Agreement constitute trust funds under the Trust Agreement. All moneys held in such funds and accounts will be invested at the direction of the Commission in Permitted Investments. Moneys on deposit in the Debt Service Reserve Account may be invested in any Permitted Investments. Moneys on deposit in the Principal Account, the Interest Account or the Bond Redemption Account will be invested only in Permitted Investments described in clauses (a), (b), (f) or (g) of the definition of Permitted Investments (See "EXHIBIT A - GLOSSARY OF TERMS and THE TRUST AGREEMENT"). Permitted Investments must mature not later than the earliest of (a) the final maturity of the Bonds, (b) the time such moneys are reasonably required for the purposes set forth for such fund or account in accordance with the Trust Agreement, (c) the time permitted by the Act and applicable law, and (d) with respect to Permitted Investments described in clauses (a) through (d) of the definition of Permitted Investments held in the Debt Service Reserve Account, ten (10) years from the date of investment.

Unless otherwise provided by a Supplemental Trust Agreement, all income and earnings received from the investment and reinvestment of moneys on deposit in the Debt Service Reserve Account will be transferred as soon as practicable to the Interest Account, the Principal Account or the Bond Redemption Account for use for the next payment due from such accounts. All income and earnings received from the investment and reinvestment of moneys on deposit in the Interest Account, the Principal Account and the Bond Redemption Account will remain in such accounts for use for the next payment due from such account. All income and earnings received by the investment and reinvestment of moneys on deposit in any construction fund will remain in such fund for use in the expenditures required from such fund. All income and earnings on the Supplemental Payments Fund and the Series Payments Fund will be applied in the manner provided in the document governing such payments. All income and earnings received from the investment of moneys on deposit in the Rebate Fund shall be retained in such fund. All income and earnings received from the investment and reinvestment of moneys on deposit in any other fund created by the Trust Agreement will be transferred as soon as practicable to the Revenue Fund. Earnings in all funds and accounts will be available for payments of the Rebate Amount.

In computing the amount in any fund or account created under the Trust Agreement, Permitted Investments will be valued at the "cost" thereof, exclusive of accrued interest. A valuation of amounts on deposit in the Debt Service Reserve Account must be conducted by the Trustee on March 1 of each Fiscal Year to determine if the amount on deposit therein is equal to the Debt Service Reserve Requirement or, if the Commission has exercised its option 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. If a deficiency exists, the Commission must make up such deficiency from a deposit of System Pledged Revenues. If a surplus exists, such surplus shall be transferred into the Revenue Fund.

Application of Monies in Revenue Fund

On or before the tenth (10th) day of each month, amounts on deposit in the Revenue Fund as of the close of business on the last day of the preceding month will be disposed of in the following manner and priority and in an amount sufficient to make the required payment and deposit and all past due payments and deposits within such priority (provided that (a) the selection of the Gross Revenue Account or the Additional System Payments Account as the source of distribution will be determined as provided in the agreements relating to the Additional System Payments; and (b) monies in the Additional System Payments Account will not be used to make payments into the Expense Fund):

(a) for deposit into the Operation, Maintenance and Administrative Expenses Account in an amount equal to one-twelfth (1/12) of the Cost of Operation, Maintenance and Administration, as set forth in the Annual Budget of the Commission for such 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, Maintenance and Administration Expense 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 on deposit in the Operation, Maintenance and Administrative Expenses Account shall be applied by the Commission from time to time to pay the Cost of Operation, Maintenance and Administration;

(b) for deposit into the Expense Reserve Account, the amount necessary to cause the amount on deposit therein to equal at the election of the Commission (i) the greater of one-twelfth (1/12) of the Cost of Operation, Maintenance and Administration set forth in the Annual Budget of the Commission for such Fiscal Year or the highest monthly Cost of Operation, Maintenance and Administration during the previous Fiscal Year, or (ii) such other amount as is recommended in a report of the Consulting Engineer to be necessary;

(c) (i) for deposit into the Interest Account, an amount equal to the sum of (1) one-sixth (1/6) of the interest becoming due on the next semiannual Interest Payment Date with respect to Bonds that bear interest payable semiannually, (2) the amount of interest next becoming due or maturing on the Bonds that bear interest payable monthly, (3) the amount of interest accruing in such month on Bonds that bear interest payable on other than a monthly or semiannual basis (other than Capital Appreciation Bonds and Capital Appreciation and Income Bonds), and (4) the amount of any Qualified Swap Payment payable by the Commission accruing in such month;

(ii) for deposit in the Principal Account, an amount equal to one-sixth (1/6) of the principal amount of the Bonds which will mature and become due on the next semiannual maturity date and one-twelfth (1/12) of the principal amount of the Bonds which will mature and become due on the next annual maturity date in such Fiscal Year; and

(iii) for deposit into the Bond Redemption Account, an amount sufficient to pay one-sixth (1/6) of the principal amount of Bonds subject to mandatory sinking fund redemption on the next semiannual redemption date and one-twelfth (1/12) of the principal amount of Bonds subject to mandatory sinking fund redemption on the next annual redemption date;

In making such deposits, the Trustee will reduce the amounts of the required deposits by any investment earnings which have accrued in such accounts during the preceding period;

(d) for deposit into the Debt Service Reserve Account, an amount which, together with the funds on deposit therein and the available amounts under any Reserve Account Credit Facility as provided below, will be sufficient to make the amount on deposit therein equal to the Debt Service Reserve Requirement or if the Commission has exercised its option 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;

(e) for deposits and payments required pursuant to the Junior Lien Bond Master Trust Agreement;

(f) for deposits and payments with respect to obligations secured by the System Pledged Revenues junior and subordinate to the Junior Lien Bonds as required pursuant to the resolution, indenture or the other instrument pursuant to which such obligations are issued;

(g) for deposit into the Renewal and Replacement Fund of an amount equal to one-twelfth (1/12) of the Renewal and Replacement Requirement for such Fiscal Year;

(h) for deposit into the System Projects Fund, such sums as shall be certified by the Commission as necessary to be deposited therein in such Fiscal Year to finance all or part of System Projects as the Commission may determine, provided, however, that such required amounts for deposit may be increased or decreased as the Commission shall certify if necessary for the purposes of the System Projects Fund;

(i) thereafter, the balance of any amounts remaining in the Revenue Fund may be transferred to the General Reserve Fund.

<u>Calculation of System Pledged Revenues</u>

The Commission shall, during the final month of each Fiscal Year, calculate the System Pledged Revenues. In the event that System Pledged Revenues exceed 200% of the Annual Debt Service Requirement, the Commission shall release the excess amount of concession revenues and lease, license, royalty, advertising and miscellaneous sales, fees and charges revenues from System Pledged Revenues.

<u>Issuance of Bonds</u>

The Commission may issue Bonds for the purpose of:

(a) financing System Projects, either alone or jointly with other persons, public bodies or private bodies;

(b) financing Non-System Projects, either alone or jointly with other persons, public bodies or private bodies;

(c) refunding Outstanding Bonds or Notes issued pursuant to the Trust Agreement;

(d) completing any System Project for which Bonds have been previously issued; or

(e) refunding Junior Lien Bonds or other subordinated indebtedness.

Each Series of Bonds (including the 2020 Senior Lien Bonds) must be authorized by a Supplemental Authorizing Resolution adopted by the Commission and must be issued pursuant to a Supplemental Trust Agreement.

No Bonds shall be issued unless all conditions described in paragraphs (a) through (e) below are met.

(a) The Commission must be current in all deposits into the various funds and accounts and all payments theretofore required to have been deposited or made by it under the provisions of the Trust Agreement and the Commission must be in compliance with the covenants and provisions of the Trust Agreement unless, upon the issuance of such Bonds, the Commission will be in compliance with all such covenants, all as certified to the Trustee by the Commission.

(b) (i) The amount of the System Pledged Revenues and any Supplemental Payments during the immediately preceding Fiscal Year or any twelve (12) consecutive calendar months selected by the Commission out of the fifteen (15) consecutive calendar months immediately preceding the issuance of said Bonds, adjusted as hereinafter described, as verified in writing to the Trustee by the Verification Agent, shall have been at least 150% of the Maximum Annual Debt Service Requirement on the Bonds then Outstanding and the Bonds then proposed to be issued. The System Pledged Revenues calculated pursuant to the condition described in this paragraph may be adjusted, at the option of the Commission, if the Commission, prior to the issuance of the proposed Bonds, has increased the Tolls for transit over the toll facilities of the System. If the Commission elects to adjust Systems Pledged Revenues, the Net Revenues for the immediately preceding Fiscal Year or the twelve (12) consecutive calendar months will be adjusted, based upon a certificate of the Independent Consultant, to reflect the Net Revenues which would have been derived from the System during such period if such increased Tolls of the System had been in effect during all of such period; and

(ii) if the Commission shall be constructing or shall be acquiring a System Project from the proceeds of such Bonds and assuming, except as provided below, that the Tolls in effect at the time of issuance of such Bonds will be the Tolls to be charged and collected when such System Project is completed and open for transit, the average annual System Pledged Revenues estimated by an Independent Consultant, and certified to the Trustee, to be derived during the first three (3) full Fiscal Years of operation after completion of the construction or acquisition of said System Project, plus an amount equal to the Supplemental Payments (not to exceed the portion of the Maximum Annual Debt Service Requirement attributable to the Series of Bonds secured by such Supplemental Payments) available (or, as provided by a projection of an Independent Consultant, that would have been available had the pledge of such Supplemental Payments been in effect) during any twelve (12) consecutive calendar months out of the fifteen (15) consecutive calendar months preceding the date of calculation, will be equal to at least 120% of the Maximum Annual Debt Service Requirement on the Bonds then Outstanding and the Bonds then proposed to be issued, and the Commission shall be projected to be in compliance with the requirements of the Section 4.04(a) of the Senior Lien Bond Master Trust Agreement for the first three (3) full Fiscal Years of operation after completion as certified by the Independent Consultant. Any adjustment (including any increase or decrease) to the Toll rate structure scheduled to be put in place during such first three (3) full Fiscal Years of operation may only be incorporated into the System Pledged Revenues estimate by the Independent Consultant pursuant to this paragraph if the Commission shall have established a forecast of Tolls to be charged and collected when such System Project is completed and open for transit. For purposes of calculating the System Pledged Revenues, the amount of Additional System Payments to be included shall be equal to the amount of such Additional System Payments received (or, as provided by a projection of an Independent Consultant, that would have been received had the agreement providing for such Additional System Payments been in effect) in any twelve (12) consecutive calendar months out of the fifteen (15) consecutive calendar months preceding the date of calculation.

(c) There shall be delivered to the Trustee certain documents, opinions and certificates, including evidence of authorization by the Commission of the issuance and delivery of the Bonds, and a certification of an Authorized Officer of the Commission that it is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Bonds or the Trust Agreement.

(d) Unless the Supplemental Trust Agreement for any Series of Bonds provides for the funding of the Debt Service Reserve Account in installments, the Debt Service Reserve Account must be fully funded immediately upon the issuance of such Series of Bonds.

(e) A Series of Bonds may be issued for purposes of financing one or more Non-System Projects only if the System Pledged Revenues, plus an amount equal to the Supplemental Payments (not to exceed the portion of the Maximum Annual Debt Service Requirement attributable to the Series of Bonds secured by such Supplemental Payment) for any twelve (12) consecutive calendar months of the fifteen (15) consecutive calendar months immediately preceding the issuance of such Bonds shall have been at least one hundred twenty percent (120%) of the Maximum Annual Debt Service Requirement on the Bonds then Outstanding and the Bonds proposed to be issued. For purposes of calculating the System Pledged Revenues and Supplemental Payments to be pledged to the Bonds proposed to be issued, the amount to be included for purposes of satisfying the condition described in this paragraph is required to be the amount received or projected by an Independent Consultant in writing to the Trustee that would have been received or available, had the pledge of such Additional System Payments or Supplemental Payments been in effect during such period.

The Commission need not comply with the provisions described in clause (b) of the preceding paragraph if and to the extent the Bonds to be issued qualify as either “Refunding Bonds” or “Completion Bonds,” as described below.

(a) “Refunding Bonds,” that is, Bonds delivered in lieu of, or in substitution for, or to provide for the payment of, Bonds or Notes Outstanding under the Trust Agreement, if the Commission causes to be delivered to the Trustee a certificate of a Verification Agent setting forth:

(1) the Annual Debt Service Requirements for the then current and each future Fiscal Year to and including the latest maturity of any Bonds of any Series then Outstanding:

(A) with respect to the Bonds of all Series Outstanding immediately prior to the date of authentication and delivery of such Refunding Bonds, and

(B) with respect to the Bonds of all Series to be Outstanding immediately thereafter, and

(2) that the Annual Debt Service Requirement set forth for each Fiscal Year pursuant to (1)(B) above is no greater than that set forth for each such Fiscal Year pursuant to (1)(A) above, or

(b) “Completion Bonds,” that is, Bonds delivered to provide for the payment of the cost of a System Project subsequent to the original issuance of Bonds for such System Project, provided that the conditions described in subparagraphs (1) and (2) below are met.

(1) The net amount of such Completion Bonds available for deposit into the System Projects Fund will be equal to or less than (A) ten percent (10%) of the original estimated cost of such System Project at the time of the original issuance of Bonds, or (B) such a greater amount, provided that an Independent Consultant certifies that such greater amount is necessary for completion of the System Project and that issuance of such Completion Bonds in such amount will not reduce projected Net Revenues after the payment of Annual Debt Service on the Bonds for the first full Fiscal Year following completion of the System Project and each future Fiscal Year to and including the latest maturity of any Bonds Outstanding assuming the issuance of the Completion Bonds as compared with the projected Net Revenues after the payment of Annual Debt Service for the same periods assuming that the Completion Bonds were not issued; and

(2) The Commission causes to be delivered to the Trustee a certificate of the Consulting Engineer stating:

(A) the cost of completing such System Project, and

(B) that other funds available or reasonably expected to become available for such cost, together with the proceeds of such Completion Bonds, will be sufficient to pay such cost.

Tolls

The Commission will at all times charge and collect or cause to be charged and collected Tolls for the use of the System at rates not less than those set forth in the schedule of such Tolls then in effect and as shall be required in order to satisfy the requirements described in subparagraphs (a), (b) and (c) below.

(a) Gross Revenues in each Fiscal Year will equal at least one hundred percent (100%) of the aggregate of:

(i) the Cost of Operation, Maintenance and Administration for such Fiscal Year as provided in the Annual Budget; and

(ii) any amounts required to be deposited into the Expense Reserve Account in such Fiscal Year.

(b) System Pledged Revenues in each Fiscal Year will equal at least one hundred percent (100%) of the aggregate in such Fiscal Year of (i) the Annual Debt Service Requirement, (ii) required deposits to the Debt Service Reserve Fund, (iii) deposits and payments required pursuant to the Junior Lien Bond Master Trust Agreement, (iv) deposits and payments required pursuant to any resolution, indenture or other authorizing instrument under which any obligations of the Commission secured by a pledge of the System Pledged Revenues junior and subordinate to the Junior Lien Bonds are issued, and (v) the Renewal and Replacement Requirement.

(c) System Pledged Revenues (plus Supplemental Payments, if any, in an amount not to exceed the aggregate Annual Debt Service Requirement for such Fiscal Year for all Series of Bonds to which such Supplemental Payments are pledged in each Fiscal Year) will equal at least one hundred twenty percent (120%) of the Annual Debt Service Requirement in such Fiscal Year.

The collection of System Pledged Revenues in any Fiscal Year in an amount in excess of the amounts required as described above for any Fiscal Year will not be taken into account as a credit against the requirements described above for any subsequent Fiscal Year.

On or before July 31 in each year, the Commission is required to complete a review of the financial condition of the Commission for the purpose of estimating whether the Gross Revenues for such Fiscal Year will be sufficient to provide, together with Series Payments, Additional System Payments and Supplemental Payments, the amounts described in clauses (a), (b) and (c) above (the "Revenue Requirement"). If the Commission determines that such amounts may not be sufficient to satisfy the Revenue Requirement for the then current Fiscal Year, it will forthwith cause the Independent Consultant to make a study for the purpose of recommending a schedule of Tolls which, in the opinion of the Independent Consultant, will cause amounts to be received in the following Fiscal Year equal to the amounts necessary to satisfy the Revenue Requirement for such Fiscal Year. No later than February 1 of the following year, the Commission will establish and place in effect a schedule of Tolls which will cause amounts to be received in such following and each subsequent Fiscal Year to be sufficient to restore the amount of any deficiency at the earliest practicable time. If, in any Fiscal Year, the amounts received are not sufficient to satisfy the Revenue Requirement, the Commission is required to (a) cause the Independent Consultant to make a study for the purpose stated in the immediately preceding sentence unless it has already obtained a revenue study and recommendation in compliance with such sentence, and (b) as promptly as practicable and in any case no later than the next July 1, establish and place in effect a schedule of Tolls as recommended by the Independent Consultant.

Except as specifically provided in the Trust Agreement, the Commission will not effect any reduction in any rate of Toll fixed for transit over the System or eliminate any Toll charged for use of the System unless it first provides thirty (30) days' notice to the Trustee and then only if, accompanying said notice, all of the documents described in subparagraphs (a), (b) and (c) below are filed with the Trustee:

(a) A certificate of an Independent Consultant setting forth estimates of the Gross Revenues, System Pledged Revenues, Supplemental Payments and Series Payments for the then current and each future Fiscal Year during which any Bonds are scheduled to be Outstanding, which may take into consideration, among other things, the additional use of the System projected to result from such reduction in the rate of Toll, and a favorable recommendation from the Independent Consultant that such proposed reduction be placed in effect.

(b) A certificate of the Commission setting forth for the Fiscal Years set forth in the certificate of the Independent Consultant and based on the same assumptions as used in the certificate described in paragraph (a) above, estimates of the Cost of Operation, Maintenance and Administration and deposits to the Expense Reserve Account for the System prepared in accordance with the Trust Agreement.

(c) a certificate of an Authorized Officer of the Commission:

(i) setting forth the Composite Annual Debt Service Requirement for the then current and each future Fiscal Year during which any Bonds are scheduled to be Outstanding;

(ii) certifying that the estimated System Pledged Revenues and Supplemental Payments for the then current and each future Fiscal Year during which any Bonds are scheduled to be Outstanding are not less than 1.50 times the Composite Annual Debt Service Requirement for such respective current or future Fiscal Year;

(iii) certifying that the Commission is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Trust Agreement; and

(iv) certifying that immediately prior to such proposed reduction the amount on deposit in the Debt Service Reserve Account was equal to the Debt Service Reserve Requirement or if the Commission has exercised its option 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.

Except as specifically provided in the Trust Agreement, the Commission will not construct any System Project for which a Toll, consistent with Tolls charged on other portions of the System, is not charged unless there is filed with the Trustee:

(a) a certificate of an Independent Consultant setting forth estimates of the Gross Revenues, System Pledged Revenues, Supplemental Payments and Series Payments for the then current and each future Fiscal Year during which any Bonds are scheduled to be Outstanding;

(b) a certificate of the Commission setting forth for the Fiscal Years set forth in the certificate of the Independent Consultant and based on the same assumptions as used in the certificate required by paragraph (a) above, estimates of the Cost of Operation, Maintenance and Administration and deposits to the Expense Reserve Account prepared in accordance with the Trust Agreement;

(c) a certificate of an Authorized Officer of the Commission:

(i) setting forth the Composite Annual Debt Service Requirement for the then current and each future Fiscal Year during which any Bonds are scheduled to be Outstanding;

(ii) certifying that the estimated System Pledged Revenues and Supplemental Payments (as derived from the certificates pursuant to paragraph (a) above) for the then current and each future Fiscal Year during which any Bonds are scheduled to be Outstanding are not less than 1.20 times the Composite Annual Debt Service Requirement for such respective current or future Fiscal Year;

(iii) certifying that the Commission is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Trust Agreement; and

(iv) certifying that the amount on deposit in the Debt Service Reserve Account is equal to the Debt Service Reserve Requirement or if the Commission has exercised its option 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.

With respect to each System Project, the Commission is required to classify Tolls for use of that System Project in a reasonable way to cover all traffic, so that the Tolls will be uniform in application to all traffic on that System Project falling within any reasonable class regardless of the status or character of any person, firm or corporation participating in the traffic, except by reason of privileges based upon frequency, volume, type of vehicle, time of such traffic, distance traveled, weight or method of payment.

The Commission may increase Tolls from time to time. The Commission may make any other adjustment or reclassification of Tolls or establish special Tolls, introductory Tolls or temporary Tolls, provided such adjustments or reclassification will not cause the Commission to fail to satisfy the Revenue Requirement.

The failure in any Fiscal Year to satisfy the Revenue Requirement will not constitute an Event of Default under the Trust Agreement if the Commission complies with the requirements described in the third paragraph under "THE TRUST AGREEMENT - Tolls"; provided that if the Independent Consultant is of the opinion, as shown by its certificate filed with the Commission, that a schedule of Tolls and other rates and charges for the System which would provide funds to meet the Revenue Requirement is impracticable at that time, then the Commission is required to fix and establish such schedule of Tolls as is recommended by the Independent Consultant to satisfy as nearly as practicable the Revenue Requirement, and in such event the failure of the Commission to satisfy the Revenue Requirement and the other requirements described in the third paragraph under "THE TRUST AGREEMENT - Tolls" shall not constitute an Event of Default under the provisions of the Trust Agreement.

The Commission covenants that it will not allow or permit any free use of the toll facilities of the System except to officials, employees, agents, vendors or contractors of the Commission while engaged in official business of the Commission or law enforcement officers or emergency vehicles or clearly marked federal or state military vehicles while in the discharge of their official duties, or in the event of an emergency in which temporary free passage is required in order to assure the safety and security of patrons on the System.

Insurance

The Commission is required to maintain (a) property risk insurance during the construction, reconstruction or improvement of any part of the System, as shall be determined by the Commission; (b) property insurance with respect to System Major Bridges in a commercially reasonable amount as determined by the Commission; (c) use and occupancy insurance covering a period of suspension of not less than 12 months and such longer period as the Commission may approve, which insurance may exclude loss sustained by the Commission during the first 7 days of any total or partial interruption of use; and public liability and property damage insurance in at least the amount, and covering at least the risks, as the Commission may determine. All insurance policies related to the above-described coverages are open to inspection of the Bondholders and their representatives at all reasonable times.

Disposition of Property

The Commission shall not, except as in the Trust Agreement otherwise permitted, sell, lease or otherwise dispose of or encumber the System or any part thereof and will not create or permit to be created any charge or lien on the revenues derived therefrom. However, the Commission may:

(a) Lease or contract with respect to the operation of Service Facilities, as defined in the Act, to the extent Service Facilities are part of the System.

(b) Sell, exchange or otherwise dispose of any machinery, fixtures, apparatus, tools, instruments or other moveable property acquired by it from whatever source of moneys, if the Executive Director determines that they are no longer needed or useful in connection with the operation and maintenance of the System.

(c) Sell, exchange or otherwise dispose of any real property or release, relinquish or extinguish any interest therein as the Commission by resolution declares is not needed or serves no useful purpose in connection with the maintenance and operation of the System, if the Consulting Engineers in writing approve that resolution.

The Commission is required to notify the Trustee of any disposition of any property constituting a portion of the System with a fair market value in excess of $500,000 and the amount and application of the proceeds of that disposition.

Other Covenants

The Commission covenants that (a) it will operate and maintain the System in conformity with all applicable legal requirements; it will not make any modifications or alterations of the System which substantially increase the cost of operating the System or substantially affect adversely the volume or character of the traffic using the System; (b) it will establish and enforce reasonable rules and regulations governing the use and operation of the System, (c) all compensation, salaries, fees and wages paid by it in connection with the maintenance, repair and operation of the System will be reasonable, (d) no more persons will be employed by it than are necessary, (e) it will maintain and operate the System in an efficient and economical manner, (f) from the revenues of the System it will at all times maintain the System in good repair and in sound operating condition and will make all necessary repairs, renewals, improvements and replacements, and (g) it will comply with all valid applicable acts, rules, regulations, orders and directions of any legislative, executive, administration or judicial body applicable to the System or the Commission.

The Commission covenants that it will cause the Consulting Engineers to make an inspection of the System at least once each calendar year, and on or before October 1 in that year, submit to the Commission a report setting forth (a) their findings whether the System has been maintained in good repair, working order and condition, (b) their advice and recommendations as to the proper maintenance, repair and operation of the System during the ensuing Fiscal Year and an estimate of the amount of money necessary for those purposes and (c) their advice and recommendations as to the insurance to be carried by the Commission.

The Commission covenants that it will (a) observe and comply with all valid requirements of any governmental authority relative to the System or any part of the System, (b) not create or suffer to be created any lien or charge upon the System or any part of it or upon the System Pledged Revenues except the lien and charge of the Bonds, and (c) from the System Pledged Revenues or other available moneys, it will pay or cause to be discharged, or will make adequate provision to satisfy and discharge, within 60 days after the same shall accrue, all lawful claims and demands for labor, materials, supplies or other objects which, if unpaid, might by law become a lien upon the System or any part of System Pledged Revenues or other revenue from the System. However, the Commission is not required to pay or cause to be discharged, or make provision for, any such lien or charge so long as the validity thereof is contested in good faith and by appropriate legal proceedings.

The Commission will cause an audit of financial statements as of December 31 of each year, prepared in accordance with GAAP, to be made of its books and accounts relating to the System and the Debt Service Fund by an independent certified public accountant approved by the Auditor of the State. Reports of each such audit shall be filed by July 1 following the date of the financial statements with the Commission and the Trustee, and copies shall be mailed by the Commission to the Consulting Engineers. Each audit report shall set forth such matters as are required by GAAP.

The Commission covenants that it will cause written notice to be given to the Rating Agencies at least thirty (30) days prior to the making of any multi-year pledge or assignment of any revenues received by the Commission and not pledged or assigned pursuant to the Trust Agreement.

Addition of Non-System Projects to the System

A Non-System Project owned and controlled by the Commission may, by resolution of the Commission, be designated and become part of the System for purposes of the Trust Agreement if there shall first have been obtained and filed with the Commission a certificate of an Independent Consultant to the effect that for any period of twelve (12) consecutive calendar months out of the fifteen (15) consecutive calendar months immediately preceding such designation, the revenues received by the Commission with respect to such Non-System Project (that is, those payments received by the Commission with respect to such Non-System Project that would have constituted Gross Revenues had such Non-System Project been part of the System) equaled or exceeded the aggregate for such period of (i) the Non-System Project Operating Expenses of such Non-System Project (plus any additional Cost of Operation, Maintenance and Administration that would have been incurred by the Commission had such Non-System Project been part of the System, as estimated by such Independent Consultant) and (ii) a reasonable renewal and replacement reserve deposit with respect to such Non-System Project, as determined by such Independent Consultant.

Events of Default and Remedies

The following events constitute Events of Default under the Trust Agreement:

(a) Default in the payment of any interest on any Bond when and as the same shall have become due and payable;

(b) Default in the payment of the principal of or any redemption premium on any Bond when and as the same becomes due and payable, whether at stated maturity or by mandatory redemption or mandatory purchase;

(c) Any other default, and the continuance thereof for a period of 60 days after written notice thereof to the Commission given by the Trustee or the Holders of not less than 25 percent in aggregate amount of affected Bonds then Outstanding.

The term "default" as used in the Trust Agreement shall mean default by the Commission in the performance or observance of any of the covenants, agreements or conditions on its part contained in the Trust Agreement or in the Bonds, exclusive of any period of grace required to constitute a default an Event of Default as provided above.

Except as modified or supplemented by a Supplemental Trust Agreement with respect to a particular series of Bonds, the Trustee is not required to take notice, and shall not be deemed to have notice or knowledge, of any default or Event of Default under the Trust Agreement, except Events of Default described in clauses (a) and (b) above, unless the Trustee shall be notified specifically of the default or Event of Default in a written instrument delivered to it by the Commission or by the Holders of not less than 10 percent in aggregate principal amount of Bonds then Outstanding or a Financial Institution. In the absence of delivery of a notice satisfying those requirements, the Trustee may assume conclusively that there is no default or Events of Default, except as to Events of Default described in clauses (a) and (b) above.

Upon the occurrence of any Event of Default as described in clauses (a) or (b) above, the Trustee must, and upon the occurrence of any Event of Default as described in clause (c) above, the Trustee may and upon the written request of the Holders of not less than 25 percent in aggregate principal amount of the affected Bonds then Outstanding or a Financial Institution providing a letter of credit in connection with the affected Bonds must (subject to the Trustee's right to be indemnified for its expenses) proceed in its own name to protect and enforce its rights and the rights of the Holders under the Trust Agreement by such of the remedies described in subparagraphs (a) through (d) below as the Trustee, being advised by counsel, considers most effective to protect and enforce those rights:

(a) By mandamus or other suit, action or proceeding at law or in equity enforce all the rights of Holders, including the compelling of the performance of all duties of the Commission or State agencies under the Bond Proceedings and the enforcement of the payment of the Annual Debt Service Requirement on the Bonds then Outstanding.

(b) Bring suit upon the Bonds.

(c) Enjoin unlawful activities or activities in violation of the rights of the Holders or Financial Institutions under the Trust Agreement.

(d) In the event of the occurrence of an Event of Default as described in clauses (a) or (b) of the preceding paragraph:

(i) Apply to a court having jurisdiction of the cause to appoint a receiver, who may be the Trustee, to receive and administer the System Pledged Revenues with full power to pay and to provide for payment of the Annual Debt Service Requirement, and with such powers, subject to the discretion of the court, as are accorded receivers in general equity cases, excluding any power to pledge additional revenues or receipts or other income or moneys of the Commission or the State or State agencies to the payment of the Annual Debt Service Requirement, and excluding the power to take possession of, mortgage or cause the sale or otherwise dispose of any Project, or

(ii) By notice in writing delivered to the Commission and to each member of the Commission, declare the principal of all Bonds then Outstanding and the interest accrued on those Bonds immediately due and payable and thereupon that principal and interest shall become and be immediately due and payable. If at any time after that declaration and prior to the entry of judgment in a court of law or equity for enforcement or the appointment of a receiver hereunder, all sums payable under the Trust Agreement (except the principal and interest on Bonds which have not reached their stated maturity dates and which are due and payable solely by reason of that declaration of acceleration), plus interest (to the extent permitted by law) on any overdue installments of interest at the rate borne by the Bonds in respect of which such Event of Default shall have occurred, shall have been duly paid or provided for by deposit with the Trustee or Paying Agents and all existing defaults shall have been made good, then and in every such case the Trustee must waive that Event of Default and its consequences and must rescind and annul that declaration, but no such waiver and rescission shall extend to or affect or impair any rights consequent on any subsequent Event of Default.

Holders of not less than a majority in aggregate principal amount of Bonds then Outstanding have the right with the consent of each Financial Institution not then in default on its obligations with respect to the Bonds, at any time, by instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of the Trust Agreement, or for the appointment of a receiver or any other proceedings under the Trust Agreement; provided that (a) such direction shall not be otherwise than in accordance with the provisions of law and of the Trust Agreement, (b) the Trustee shall be indemnified as provided in the Trust Agreement, (c) a Financial Institution will have no rights with respect to the enforcement of remedies against itself.

After payment of the costs and expenses of the proceedings resulting in the collection of such moneys and of the fees, expenses, liabilities and advances incurred or made by the Trustee or receiver, all moneys received by the Commission, Trustee or receiver pursuant to any right given or action taken under the provisions of the Trust Agreement shall be applied as described in subparagraphs (a) through (c) below.

(a) Unless the principal of all the Bonds has become or has been declared due and payable pursuant to the Trust Agreement, all such moneys shall be applied as follows:

First: To the payment, to the persons entitled thereto, of all installments of interest then due on the Bonds (or reimbursement of Financial Institutions for interest payments made pursuant to a Bond Credit Facility), in the order of the dates of maturity of the installments of that interest and beginning with the earliest such date, and if the amount available is not sufficient to pay in full any particular installment, then to the payment thereof ratably according to the amounts due on that installment, without any discrimination or privilege except as to any difference in the respective rates of interest specified in the Bonds;

Second: To the payment, to the persons entitled thereto, of the unpaid principal of any of the Bonds (or reimbursement of Financial Institutions for principal payments made pursuant to a Bond Credit Facility) which has become due (other than Bonds previously called for redemption for the payment of which moneys are held pursuant to the provisions of the Trust Agreement), whether at stated maturity, by redemption or pursuant to any mandatory sinking fund requirements, in the order of their due dates and beginning with the earliest due date, with interest on those Bonds from the respective dates upon which they become due, and if the amount available shall not be sufficient to pay in full all Bonds (and reimburse in full Financial Institutions for principal payments made pursuant to a Bond Credit Facility) due on any particular date, together with such interest, then to the payment thereof ratably according to the amount of principal due on that date, without discrimination or privilege; and

Third: To the payment of all other obligations of the Commission to Financial Institutions.

(b) If the principal of all the Bonds has become due or has been declared due and payable pursuant to the Trust Agreement, all such moneys will be applied to the payment of the principal and interest then due and unpaid upon the Bonds (and reimbursement of Financial Institutions for principal and interest payments made pursuant to a Bond Credit Facility), without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other Bond, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or privilege except as to any difference in the respective rates of interest specified in the Bonds and then to the payment of all other obligations of the Commission to Financial Institutions.

(c) If the principal of all the Bonds has been declared due and payable pursuant to the Trust Agreement, and if that declaration thereafter has been rescinded and annulled under the provisions of the Trust Agreement, then, subject to the provisions described in clause (b) in the event that the principal of all the Bonds shall later become due and payable, the moneys will be deposited in the Debt Service Fund and applied in accordance with the provisions of the Trust Agreement.

No Holder has any right to institute any suit, action or proceeding for the enforcement of the Trust Agreement or for the execution of any trust thereof or for the appointment of a receiver or any other remedy hereunder unless (a) an Event of Default has occurred and is continuing, (b) that Holder shall previously have given to the Trustee written notice of that Event of Default, (c) the Holders of at least 25 percent in aggregate principal amount of Bonds then Outstanding made written request to the Trustee and afforded the Trustee reasonable opportunity either to proceed to exercise the powers granted herein or to institute such action, suit or proceeding in its own name and shall have also offered to the Trustee indemnity as provided in the Trust Agreement and (d) the Trustee thereafter fails or refuses to exercise the powers granted in the Trust Agreement or to institute such action, suit or proceeding in its own name.

The Trustee may at any time in its discretion, but only with the consent of any Financial Institution providing a Bond Credit Facility in connection with affected Bonds and not then in default of its obligations with reference to such Bonds, waive any Event of Default and its consequences, and rescind any declaration of maturity of principal, and must do so, with the consent of any Financial Institution providing a Bond Credit Facility in connection with affected Bonds, upon the written request of the Holders of not less than a majority in aggregate principal amount of all the Bonds then Outstanding in respect of which the Event of Default exists. However, there shall not be so waived any Event of Default described in clauses (a) or (b) of the first paragraph under the caption "EXHIBIT A-1 - GLOSSARY OF TERMS AND SUMMARY OF THE SENIOR LIEN TRUST AGREEMENT - Events of Default and Remedies," or such declaration in connection therewith rescinded, unless at the time of that waiver or rescission payments of all sums payable under the Trust Agreement (except the principal and interest on Bonds which have not reached their stated maturity dates and which are due and payable solely by reason of that declaration of acceleration), plus interest, to the extent permitted by law, on any overdue installments of interest at the rate borne by the Bonds in respect of which such Event of Default shall have occurred, have been made or provided for. In case of any such waiver or rescission, or in case any proceeding taken by the Trustee on account of any such Event of Default is discontinued or abandoned or determined adversely, then and in every such case the Commission, the Trustee, any Financial Institution and the Holders shall be restored to their respective positions and rights hereunder. No such waiver or rescission will extend to any subsequent or other default or Event of Default, or impair any right consequent thereon.

<u>Supplemental Trust Agreements</u>

The Commission and the Trustee, without the consent of or notice to any of the Holders, may enter into agreements supplemental to the Trust Agreement for any one or more of the following purposes: (a) to cure any ambiguity, inconsistency or formal defect or omission in the Trust Agreement; (b) to grant to or confer upon the Trustee for the benefit of the Holders or any Financial Institution any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Holders or any Financial Institution (to the extent not contrary to the interests of Holders) or the Trustee; (c) to subject additional revenues or receipts to the pledge of the Trust Agreement; (d) to add to the covenants and agreements of the Commission contained in the Trust Agreement other covenants and agreements thereafter to be observed for the protection of the Holders or Financial Institutions (to the extent not contrary to the interests of Holders), or to surrender or limit any right, power or authority reserved to or conferred upon the Commission in the Trust Agreement, including without limitation the limitation of rights of redemption so that in certain instances Bonds of different series will be redeemed in some prescribed relation to one another; (e) to evidence any succession to the Commission and the assumption by that successor of the covenants and agreements of the Commission contained in the Trust Agreement and the Bonds; (f) in connection with the issuance of a Series of Bonds in forms other than fully registered Bonds and for amendments of the Trust Agreement relating to Bonds and the rights of the Holders of Bonds issued in those forms not inconsistent with the provisions of the Trust Agreement applying to the rights of owners of fully registered Bonds and Financial Institutions, if in the opinion of bond counsel selected by the Commission those provisions would not result in the interest on any of the Bonds Outstanding becoming subject to federal income taxation; (g) to permit the exchange of Bonds, at the option of the Holder, for coupon Bonds of the same series payable to bearer, in an aggregate principal amount not exceeding the unmatured and unredeemed principal amount of the predecessor Bonds, bearing interest at the same rate or rates (or determined in the same manner) and maturing on the same date or dates, with coupons attached representing all unpaid interest due or to become due thereon if, in the opinion of bond counsel selected by the Commission, that exchange would not result in the interest on any of the Bonds Outstanding becoming subject to federal income taxation; (h) to permit the use of a book entry system to identify the owner of an interest in a Bond, whether that Bond was formerly, or could be, evidenced by a physical security; (i) to permit the Trustee to comply with any obligations imposed upon it by law; (j) to specify further the duties and responsibilities of, and to define further the relationship among, the Trustee, the Registrar and any Authenticating Agents or Paying Agents; (k) to achieve compliance of the Trust Agreement with any applicable federal securities or tax law; (l) to permit any other amendment which, in the judgment of the Trustee, is not to the prejudice of the Trustee or the Holders; and (m) to authorize the issuance of a Series of Bonds in accordance with the provisions of the Master Trust Agreement.

The Holders of not less than a majority in aggregate principal amount of the Bonds then Outstanding (exclusive of Bonds then held or owned by the Commission) to be affected thereby have the right, from time to time, to consent to and approve the execution by the Commission and the Trustee of such other Supplemental Trust Agreements for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained in the Trust Agreement, but only with the prior written consent of the providers of any Bond Insurance Policies insuring Outstanding Bonds. However, the Trust Agreement does not permit: (a) without the consent of the Holder of each Bond so affected, an extension of the maturity of the principal of or the interest on any Bond, or a reduction in the principal amount of any Bond or the rate of interest or redemption premium thereon, or a reduction in the amount or extension of the time of any payment required by any mandatory sinking fund requirements or mandatory redemption requirements, or (b) without the consent of the Holders of all of the Bonds then Outstanding, a reduction in the aggregate principal amount of the Bonds required for consent to that Supplemental Trust Agreement.

Where consent of the Holders is required, the Trust Agreement contains procedures for notice to the Holders and for the execution and filing of the requisite consents. Any consent is to be binding upon the Holders of the Bonds giving that consent and upon any subsequent Holders of those Bonds and of any Bonds issued in exchange therefor (whether or not the subsequent Holders have notice thereof). However, the consent may be revoked by the Holder of such Bonds who gave consent or by subsequent Holders thereof by filing with the Trustee, prior to the execution by the Trustee of the Supplemental Trust Agreement, a written revocation. If the Holders of the required percentage in aggregate principal amount of the Bonds Outstanding have consented to and approved the execution thereof, no Holder of any Bond shall have any right to object to the execution of that Supplemental Trust Agreement or to any of the terms and provisions contained in or to the operation of that Supplemental Trust Agreement, or in any manner to question the propriety of the execution of, or to enjoin or restrain the Trustee or the Commission from executing, or from taking any action pursuant to the provisions of, that Supplemental Trust Agreement.

The terms of the Trust Agreement or any Supplemental Trust Agreement may be modified or altered in any respect with the consent of the Commission, any Financial Institutions and the Holders of all the Outstanding Bonds.

Defeasance

If the Commission pays or causes to be paid to the Holders of the Outstanding Bonds all principal, premium, if any, and interest due or to become due thereon and all obligations of the Commission to Financial Institutions, and provision is made for paying all other sums payable under the Trust Agreement by the Commission, then and in that event the Trust Agreement will cease, determine and become null and void, and the covenants, agreements and other obligations of the Commission under the Trust Agreement will be discharged, released and satisfied.

Bonds will be deemed to have been paid or caused to be paid if the Trustee holds, in trust for and irrevocably committed thereto, sufficient moneys, or moneys and Defeasance Obligations certified by a Verification Agent to be of such maturities and interest payment dates and to bear such interest as will, without further investment or reinvestment of either the principal amount thereof or the interest earnings therefrom, be sufficient for the payment, at their maturity or redemption date, of all principal, premium, if any, and interest thereon to the date of maturity or redemption, as the case may be; provided that if any Bonds are to be redeemed prior to their maturity, notice of that redemption must be duly given or provision satisfactory to the Trustee must be duly made for the giving of that notice.

Trustee

The Trustee, The Huntington National Bank, Columbus, Ohio, is a national banking association organized and existing under the laws of the United States of America and is authorized to exercise corporate trust power in the State. The Trustee has undertaking to perform such duties as are specifically set forth in the Trust Agreement. The Trustee has agreed to exercise the rights and powers vested in it by the Trust Agreement and use the same degree of care and skill in their exercise as would an ordinarily prudent corporate trustee under a trust agreement securing securities of a public agency. The Trustee is not required to take any action under the Trust Agreement (except with respect to giving certain notices of the occurrence of an Event of Default) until it has received a satisfactory indemnity bond for its expenses and to protect it against liability, other than liability resulting from its negligence or willful misconduct. The permissive rights of the Trustee to do things under the Trust Agreement will not be construed as a duty.

The Huntington National Bank is among the banks that serve as depositories for Commission and State monies.

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EXHIBIT A-2

GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT

The following terms shall have the following meanings in this Official Statement unless the context otherwise requires:

"Act" shall mean Chapter 5537 of the Ohio Revised Code, as amended and supplemented from time to time.

"Annual Budget" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Authenticating Agent" shall mean the Trustee and the Registrar for the Series of Junior Lien Bonds and any bank, trust company or other entity designated as an Authenticating Agent for such Series of Junior Lien Bonds by or in accordance with the Junior Lien Trust Agreement, each of which shall be a transfer agent registered in accordance with Section 17(c) of the Securities Exchange Act of 1934, as amended.

"Authorized Officer of the Commission" shall mean the Executive Director, the Chairman, the Vice Chairman, the Secretary-Treasurer, or any other officer or employee of the Commission, authorized by resolution duly adopted by the Commission to perform specific acts or duties.

"Bond Counsel" means any attorney at law or firm of attorneys of nationally recognized standing in matters pertaining to the federal tax exemption of interest on obligations issued by states and political subdivisions, duly admitted to practice law before the highest court of any state of the United States of America or the District of Columbia, and designated by the Commission.

"Bond Register" shall mean the books kept by the Registrar for the registration of the Junior Lien Bonds.

"Code" shall mean the Internal Revenue Code of 1986, as amended, and applicable temporary, proposed or permanent regulations promulgated thereunder.

"Commission" shall mean the Ohio Turnpike and Infrastructure Commission as created and established by the Act.

"Composite Annual Debt Service Requirement" shall mean in each Fiscal Year the sum of the Junior Lien Annual Debt Service Requirement and the Senior Lien Annual Debt Service Requirement.

"Consulting Engineer" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Conversion Date" shall mean, with respect to any particular Junior Lien Convertible Capital Appreciation Bond, the date specified as such in the Junior Lien Supplemental Trust Agreement providing for the issuance of such Junior Lien Convertible Capital Appreciation Bonds (which date must be prior to the maturity date for such Junior Lien Convertible Capital Appreciation Bonds) after which interest accruing on such Junior Lien Convertible Capital Appreciation Bonds shall be payable periodically, with the first such payment date being the applicable Interest Payment Date immediately succeeding such Conversion Date.

"Conversion Value" shall mean the Compounded Amount of Junior Lien Convertible Capital Appreciation Bonds on the applicable Conversion Date.

"Cost of Operation, Maintenance and Administration" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Cost of Issuance" shall mean all charges, costs and expenses of the Commission incurred in connection with the authorization, issuance, sale and delivery of the Junior Lien Bonds including, but not limited to, legal fees, accounting fees, Municipal Advisory fees, Junior Lien Credit Facility premiums, fiscal or escrow agent fees, printing fees, travel expenses, consulting fees, advertising expenses, feasibility studies and Rating Agency fees.

"Counsel for the Commission" shall mean the general counsel of the Commission or such counsel as the Commission may from time to time designate to perform any of the legal duties or functions required by the Junior Lien Trust Agreement and not otherwise provided for.

"Credit Provider" shall mean any provider of a Junior Lien Credit Facility in connection with a series of Junior Lien Bonds then Outstanding.

"Defeasance Obligation" shall mean to the extent permitted by law:

(1) Direct obligations of or obligations which are unconditionally guaranteed by the United States of America, including obligations issued or held in book entry form on the books of the Department of the Treasury of the United States of America and including advance refunded tax-exempt bonds secured by direct obligations of the United States of America or obligations unconditionally guaranteed by the United States of America which are rated in the highest rating category by a Rating Agency currently rating the Junior Lien Bonds (without regard to gradations such as (+) or (-) or other similar notation);

(2) Evidences of indebtedness issued by the Bank for Cooperatives, Federal Home Loan Banks, Federal Home Loan Mortgage Corporation (including participation certificates), Federal Land Banks, Federal Financing Banks, or any other agency or instrumentality of the United States of America created by an act of Congress which is substantially similar to the foregoing in its legal relationship to the United States of America; provided that the obligations of such agency or instrumentality are unconditionally guaranteed by the United States of America;

(3) Evidences of ownership of proportionate interests in future interest and principal payments on specified obligations described in paragraph (1) above held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor on the underlying obligations described in paragraph (1) above, such as CATS, TIGRS, and STRIPS, and which underlying obligations are not available to satisfy any claim of the custodian or any person claiming through the custodian or to whom the custodian may be obligated; or

(4) stripped interest obligations of the Resolution Funding Corporation.

All obligations shall be non-callable prior to their stated maturity or redemption date.

"Department" shall mean the Department of Transportation of the State.

"Event of Default" shall have the meaning ascribed thereto under the caption "THE JUNIOR LIEN TRUST AGREEMENT - Events of Default and Remedies."

"Expense Fund" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Expense Reserve Account" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Fiscal Year" shall mean the period commencing with January 1 of each year and ending with December 31 of that same year or such other twelve (12) consecutive month period designated by the Commission.

"General Reserve Fund" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Gross Revenues" shall mean (1) all Tolls, (2) investment income received on any amounts held in the Revenue Fund, the General Reserve Fund, the System Projects Fund, the Expense Fund and the Renewal and Replacement Fund, (3) the proceeds of any use and occupancy insurance on any portion of the System, (4) moneys received from the Department and designated by the Commission for use as System Pledged Revenues and (5) all concession revenues derived from the operation of the service plazas (other than funds contractually committed to the Service Plaza Capital Improvements Reserve and other than any allocation of the State fuel tax revenues) and all revenues derived from leases, licenses, royalties, advertising and miscellaneous sales, fees and charges together with all investment earnings thereon. "Gross Revenues" shall not include Supplemental Payments, Series Payments, Additional System Payments, revenues derived from the operation of Non-System Projects, amounts received pursuant to a Junior Lien Credit Facility, amounts received pursuant to a Qualified Swap Agreement, or the proceeds of any gifts, grants, or other payments to the Commission from the United States of America, any state or any public or private instrumentality, individual or entity that are restricted so as not to be permitted to be included in Gross Revenues.

"Holder of Junior Lien Bonds" or "Junior Lien Bondholder" or "Holders" or any similar term shall mean any person who shall be the owner of any Junior Lien Bond or Junior Lien Bonds as shown on the Bond Register.

"Independent Consultant" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Infrastructure Project" shall mean any project evaluated and approved by the Commission for funding in whole or in part pursuant to Section 5537.18 of the Act.

"Infrastructure Project Cost" with respect to any Infrastructure Project, shall mean (1) the costs incurred or to be incurred by the Department or the Infrastructure Project Owner in connection with or incidental to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such Infrastructure Project, including legal, administrative, engineering, planning, design studies, insurance costs and financing costs of such Infrastructure Project (except to the extent such costs are funded from the proceeds of any indebtedness of the Commission, the payment of which is included as an Infrastructure Project Cost under clause (3) below), (2) amounts, if any, required by the Junior Lien Trust Agreement to be paid into any fund or account upon the issuance of any Series of Junior Lien Bonds for the purpose of financing Infrastructure Projects, (3) payments when due (whether at the maturity of principal or the due date of interest or upon redemption) on Junior Lien Notes issued to finance Infrastructure Projects, (4) costs of equipment, supplies and reserves required by the Department or the Infrastructure Project Owner for the commencement of operation of such Infrastructure Project, (5) costs of acquisition by the Department or the Infrastructure Project Owner of real or personal property or any interest therein, including land and improvements required for relocation and relocation costs and land required for right of way, environmental mitigation or other Infrastructure Project purposes, (6) any other costs properly attributable to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such Infrastructure Project as permitted by the Act, and (7) interest on Junior Lien Bonds issued to finance Infrastructure Projects during the estimated period of construction and for a reasonable period thereafter.

"Infrastructure Project Owner" shall mean the public entity for whom an Infrastructure Project is funded, in whole or in part, by the Commission under the Act.

"Infrastructure Projects Fund" shall mean the Fund of that name created in the Junior Lien Trust Agreement.

"Interest Payment Date" shall mean for each Series of Junior Lien Bonds such dates of each Fiscal Year on which interest on Outstanding Junior Lien Bonds of such Series is payable, as set forth in the Junior Lien Supplemental Trust Agreement providing for the issuance of such Series of Junior Lien Bonds.

"Junior Lien Annual Debt Service" shall mean the regularly scheduled Junior Lien Debt Service Charges coming due on the Junior Lien Bonds Outstanding in each Fiscal Year, whether at maturity or pursuant to mandatory sinking fund redemption, provided, however, that amounts due on January 1 of any year shall be included in the Junior Lien Annual Debt Service for the preceding Fiscal Year. The assumptions set forth in paragraphs (4), (5), (6), (7) and (8) of the definition of Junior Lien Annual Debt Service Requirement shall be applied in calculating Junior Lien Annual Debt Service.

"Junior Lien Annual Debt Service Requirement" shall mean:

(1) at any time, the sum of the amounts required to be deposited in the applicable Fiscal Year into the:

(a) Junior Lien Interest Account,

(b) Junior Lien Principal Account, and

(c) Junior Lien Redemption Account,

in accordance with the Junior Lien Trust Agreement to pay Junior Lien Annual Debt Service;

(2) in determining the amount of such required deposits, a credit shall be allowed for amounts already on deposit in any of the foregoing accounts, including, without limitation, amounts resulting from,

(a) interest earnings on the:

(i) Junior Lien Interest Account,

(ii) Junior Lien Principal Account,

(iii) Junior Lien Redemption Account, Junior Lien Debt Service Reserve Fund, and

(iv) Infrastructure Projects Fund;

(b) capitalized interest; and

(c) deposits of Junior Lien Series Payments, but only with respect to debt service payments for the Series of Junior Lien Bonds secured by Junior Lien Series Payments, such credit not to exceed the total amounts at any time required to be deposited into the accounts set forth in paragraph (1) above, after taking into consideration the credits provided for in paragraph (2) (a) and (b) above;

(3) for purposes of calculating the requirements for the collection of Tolls (see "EXHIBIT A-2 - GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT - Tolls" herein), and the requirements for the issuance of Junior Lien Bonds (see "EXHIBIT A-2 - GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT - Issuance of Bonds" herein):

(a) the amount of interest earnings on the accounts as provided in paragraph 2(a) above for the applicable Fiscal Year shall be calculated using the lower of (i) the current interest rate in effect for such investments, or (ii) the average interest rate in effect for such investments during any 12 consecutive calendar months of the 15 consecutive calendar months immediately preceding the date of calculation; and

(b) the amount of credit allowed in paragraph (2)(c) above for Junior Lien Series Payments for the applicable Fiscal Year for each Series of Junior Lien Bonds secured by Junior Lien Series Payments shall not exceed 100% of the Junior Lien Series Payments expected to be available for deposit into the accounts set forth in paragraph (1) above, as determined by the Supplemental Junior Lien Trust Agreement providing for the payment of such Junior Lien Series Payments, or to the extent the Series Payments are not determined by the Junior Lien Supplemental Trust Agreement, the amount that would have been available for such deposits, as estimated by an Independent Consultant, had such Junior Lien Series Payments been in effect for the immediately preceding Fiscal Year;

(4) except for purposes of calculating the requirements for the issuance of Junior Lien Bonds, unless the interest rate for a Series of Variable Rate Junior Lien Bonds is fixed for the duration of the applicable Fiscal Year(s), in which case the actual rate shall be used, the interest rate on such Series of Variable Rate Junior Lien Bonds Outstanding shall be assumed to be a rate equal to 100% of the Revenue Bond Index, and with respect to a Series of Variable Rate Junior Lien Bonds which are Taxable Bonds, the interest rate shall be assumed to be a rate equal to 115% of the Revenue Bond Index;

(5) for purposes of calculating the requirements for the issuance of Junior Lien Bonds, the Junior Lien Annual Debt Service Requirement shall be calculated with respect to a Series of Variable Rate Junior Lien Bonds assuming the interest rate equals the maximum rate payable thereon in accordance with the applicable Supplemental Junior Lien Trust Agreement;

(6) for purposes of calculating the requirements for the issuance of Junior Lien Bonds, the Junior Lien Annual Debt Service Requirement with respect to a Series of Junior Lien Notes shall be calculated assuming that the interest rate equals 100% of the Revenue Bond Index and assuming substantially level debt service payments in each year over the maximum number of years (not exceeding 30 years) over which the principal of the Junior Lien Notes may be paid as determined by the Commission;

(7) if a Series of Variable Rate Junior Lien Bonds is subject to purchase by the Commission pursuant to a mandatory or optional tender by the owner thereof, the "tender" date or dates shall be ignored and the stated maturity dates thereof shall be used for purposes of calculating the Junior Lien Annual Debt Service Requirement with respect to such Junior Lien Bonds. If, with respect to any Series of Junior Lien Bonds, the Commission enters into a Qualified Swap Agreement, providing for payments to the Commission which are associated with the payment of interest on such Junior Lien Bonds, in an amount equal to interest on a notional amount equal to the aggregate principal amount of such Junior Lien Bonds Outstanding, based upon a fixed rate, or a variable index or formula different from that used to calculate interest on such Junior Lien Bonds, and if payments under such

Qualified Swap Agreement will continue until the final maturity of such Junior Lien Bonds, then the effective rate of interest to the Commission with respect to such Junior Lien Bonds taking into account (a) the actual interest rate borne by such Junior Lien Bonds, (b) payments to be received by the Commission pursuant to such agreement and (c) payment obligations of the Commission to such counterparty pursuant to such agreement, all based upon interest on such notional amount as determined by reference to a fixed rate or variable index or formula, shall be used for purposes of calculating the Junior Lien Annual Debt Service Requirement with respect to such Junior Lien Bonds; and

(8) if two Series of Variable Rate Junior Lien Bonds, or one or more maturities within a Series, of equal par amounts, are issued simultaneously with inverse floating interest rates providing a composite fixed interest rate for such Junior Lien Bonds taken as a whole, such composite fixed rate shall be used in determining the Junior Lien Annual Debt Service Requirement with respect to such Junior Lien Bonds.

"Junior Lien Bond" or "Junior Lien Bonds" shall mean the bonds or notes issued under the provisions and within the limitations of the Junior Lien Trust Agreement, payable from the System Pledged Revenues, which Junior Lien Bonds shall be pari passu with all Junior Lien Bonds issued pursuant to the Junior Lien Trust Agreement.

"Junior Lien Credit Facility" means a letter of credit, line of credit, stand-by, contingent, or firm securities purchase agreement, insurance, surety arrangement, guarantee, and other arrangement that provides for direct or contingent payment of Junior Lien Debt Service or payment of obligations to Credit Providers, or for security in the event of nonpayment of Junior Lien Debt Service or such obligations, or upon certain conditions occurring under put or similar arrangements, or for otherwise supporting the credit or liquidity of Junior Lien Bonds or such obligations, and includes credit, reimbursement, marketing, remarketing, indexing, carrying and subrogation agreements, and other agreements and arrangements for payment and reimbursement of Credit Providers.

"Junior Lien Bonds" shall mean Junior Lien Bonds the interest on which shall be payable on a periodic basis.

"Junior Lien Debt Service Charges" shall mean required payments of principal of and interest (including payments of any Compounded Amount) and any redemption premium on Junior Lien Bonds, whether at maturity or upon redemption or acceleration prior to maturity.

"Junior Lien Debt Service Fund" shall mean the fund of that name created in the Junior Lien Trust Agreement.

"Junior Lien Debt Service Reserve Fund" shall mean the fund of that name created in the Junior Lien Trust Agreement.

"Junior Lien Debt Service Reserve Fund Bonds" shall mean Junior Lien Bonds designated in any Junior Lien Supplemental Trust Agreement as being secured by the Junior Lien Debt Service Reserve Fund.

"Junior Lien Debt Service Reserve Requirement" shall mean 100% of the average Junior Lien Annual Debt Service on all Outstanding Junior Lien Debt Service Reserve Fund Bonds, without credit for Junior Lien Series Payments otherwise permitted by paragraphs (2)(c) and (3)(b) of the definition of Junior Lien Annual Debt Service Requirement, calculated as of the date of original issue of each Series of Junior Lien Debt Service Reserve Fund Bonds and set forth in the Supplemental Trust Agreement authorizing each Series of Junior Lien Debt Service Reserve Fund Bonds, provided that the amount of the Junior Lien Debt Service Reserve

Requirement shall not exceed the maximum amount permitted by the Code to be held without yield restrictions in a reasonably required debt service reserve fund for the Junior Lien Bonds.

"Junior Lien Interest Account" shall mean the account of that name in the Junior Lien Debt Service Fund created in the Junior Lien Trust Agreement.

"Junior Lien Master Trust Agreement" shall mean the Junior Lien Master Trust Agreement dated as of August 1, 2013 between the Trustee and the Commission.

"Junior Lien Notes" shall mean notes issued by the Commission in anticipation of the issuance of Junior Lien Bonds pursuant to the Act, or to pay costs of refunding or retiring Junior Lien Notes or Junior Lien Bonds previously issued pursuant to the Act, which Junior Lien Notes shall be on a parity with the Junior Lien Bonds.

"Junior Lien Principal Account" shall mean the account of that name in the Junior Lien Debt Service Fund created in the Junior Lien Trust Agreement.

"Junior Lien Rebate Account" shall mean the account in the Junior Lien Rebate Fund created in the Junior Lien Trust Agreement and established for a Series of Junior Lien Bonds into which the funds constituting the Rebate Amount shall be deposited as required by the Junior Lien Trust Agreement; each such account shall be termed the "[Series of Junior Lien Bonds] Rebate Account."

"Junior Lien Rebate Fund" shall mean the fund of that name created in the Junior Lien Trust Agreement.

"Junior Lien Redemption Account" shall mean the account of that name in the Junior Lien Debt Service Fund created in the Junior Lien Trust Agreement.

"Junior Lien Series Payments" shall mean

(1) payments which are:

(a) payable to the Commission pursuant to any agreement between the Commission and any private, nongovernmental corporation, organization, association, individual or other entity, which payments by their terms automatically recur without approval that is discretionary to the entity providing such payments for so long as any Junior Lien Bonds secured thereby are Outstanding or until such earlier time as all conditions for the release of such payments, if any, provided in the applicable Junior Lien Supplemental Trust Agreement are met, or

(b) payable to the Commission pursuant to any agreement between the Commission and the United States of America, any state, county, municipality, political subdivision, public body or other governmental entity, or under any law, statute, ordinance, resolution or other authorizing instrument of such an entity, providing such payments for so long as any Junior Lien Bonds secured thereby are Outstanding or until such earlier time as all conditions for the release of such payments, if any, provided in the applicable Junior Lien Supplemental Trust Agreement are met; and

in each case above, available and expressly pledged by the Commission for the payment of debt service on one or more, but less than all, Series of Junior Lien Bonds issued and Outstanding under the Junior Lien Trust Agreement;

(2) Junior Lien Series Payments shall not include Junior Lien Supplemental Payments or payments pursuant to a Junior Lien Credit Facility or a Qualified Swap Agreement;

(3) payments described in paragraph (1) above shall not constitute Junior Lien Series Payments in any Fiscal Year unless:

(a) the source of such payments are a sales tax, gas or fuel tax, franchise fee, ad valorem tax, real estate tax, utility or other public service tax, excise tax, income tax or use tax; or

(b) amounts derived from sources described in paragraph (1) above together with the Additional System Payments (other than those described in paragraph (3)(a) of the definition of Additional System Payments) allocable to such Series of Junior Lien Bonds pro rata on the basis of the Junior Lien Annual Debt Service Requirement for such Fiscal Year do not constitute in excess of twenty percent (20%) of such Junior Lien Annual Debt Service Requirement.

"Junior Lien Series Payments Fund" shall mean the fund of that name created in the Junior Lien Trust Agreement.

"Junior Lien Special Funds" means the Junior Lien Debt Service Fund, the Junior Lien Debt Service Reserve Fund (with respect to Junior Lien Debt Service Reserve Fund Bonds) and any other accounts or funds identified as a Junior Lien Special Fund in the Junior Lien Master Trust Agreement and any Junior Lien Supplemental Trust Agreement supplemental thereto.

"Junior Lien Supplemental Payments" shall mean:

(1) payments payable to the Commission pursuant to any agreement between the Commission and any private or governmental entity, or under any law, statute, ordinance, resolution or other authorizing instrument of such an entity, which payments are available and expressly pledged by the Commission for the payment of debt service with respect to one or more Series, or all Series, of Junior Lien Bonds Outstanding under the Junior Lien Trust Agreement, but which are restricted to use only in the event System Pledged Revenues or, if applicable, Junior Lien Series Payments, are insufficient to make payments required hereunder with respect to such Series of Junior Lien Bonds. Such payments must:

(a) by their terms automatically recur without appropriation, approval or similar action that is discretionary to the entity providing such payments for so long as any Junior Lien Bonds secured thereby are Outstanding or until such earlier time as all conditions for the release of such payments, if any, provided in the applicable Junior Lien Supplemental Trust Agreement are met; and

(b) be available and expressly pledged by the Commission for the payment of debt service on one or more Series of Junior Lien Bonds issued and Outstanding under the Junior Lien Trust Agreement.

(2) Junior Lien Supplemental Payments shall not include Junior Lien Series Payments or payments pursuant to a Junior Lien Credit Facility or a Qualified Swap Agreement.

"Junior Lien Supplemental Payments Fund" shall mean the fund of that name created in the Junior Lien Trust Agreement.

"Junior Lien Supplemental Trust Agreement" shall mean one or more Junior Lien Supplemental Trust Agreements, as the same may be amended and supplemented from time to time, authorized by Supplemental Authorizing Resolutions.

"Junior Lien Trust Agreement" shall mean collectively the Junior Lien Master Trust Agreement and all Junior Lien Supplemental Trust Agreements supplemental thereto.

"Maximum Composite Annual Debt Service Requirement" shall mean, at any time, the highest Composite Annual Debt Service Requirement occurring in the current or any succeeding Fiscal Year.

"Net Revenues" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Non-System Projects" shall have the meaning assigned in the Senior Lien Trust Agreement.

"Option Rights" shall mean, with respect to any Series of Junior Lien Bonds, any rights to call such Junior Lien Bonds for mandatory purchase or tender pursuant to the Junior Lien Supplemental Trust Agreement authorizing the issuance of such Junior Lien Bonds.

"Outstanding" or "outstanding" when used with reference to Senior Lien Bonds, shall have the meaning assigned in the Senior Lien Trust Agreement, and when used with reference to the Junior Lien Bonds, shall mean, as of any date of determination, all Junior Lien Bonds theretofore authenticated and delivered except:

(1) Junior Lien Bonds theretofore cancelled by the Registrar or delivered to the Registrar for cancellation;

(2) Junior Lien Bonds which are deemed paid in accordance with Article IX of the Junior Lien Trust Agreement;

(3) Junior Lien Bonds in lieu of which other Junior Lien Bonds have been issued pursuant to the provisions of the Junior Lien Trust Agreement relating to Junior Lien Bonds destroyed, stolen or lost, unless evidence satisfactory to the Registrar has been received that any such Junior Lien Bond is held by a bona fide purchaser; and

(4) for purposes of any consent or other action to be taken under the Junior Lien Trust Agreement by the Holders of a specified percentage of principal amount of Junior Lien Bonds, Junior Lien Bonds held by or for the account of the Commission.

"Paying Agent" shall mean the Trustee or, with respect to any Series of Junior Lien Bonds, the paying agent designated by the Junior Lien Supplemental Trust Agreement authorizing the issuance of such Series of Junior Lien Bonds, or any successor thereto.

"Permitted Investments", unless varied by the terms of a Junior Lien Supplemental Trust Agreement as to a particular Series of Junior Lien Bonds, (i) shall mean any investments in which the Commission is authorized to invest pursuant to the laws of the State, and (ii) with respect to moneys held by the Trustee, shall mean any of the following securities:

(1) Defeasance Obligations;

(2) obligations issued by any agency of the United States of America, including, without limitation, the Government National Mortgage Association, or by any instrumentality of the United

States of America, including, without limitation, the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation;

(3) general obligations of any state of the United States of America, including the State, or any political subdivision of a state; provided that such general obligations carry one of the two highest ratings of one of the Rating Agencies;

(4) certificates of deposit or banker's acceptances, whether negotiable or nonnegotiable, issued by a bank, trust company or savings association organized under the laws of any state of the United States of America or any national banking association (including the Trustee), which institution has a combined capital and surplus of at least $100,000,000 in dollars of the United States of America, provided, that such certificates of deposit or banker's acceptances do not exceed in the aggregate ten percent (10%) of the combined capital, surplus and undivided profits of the institution issuing the same and provided further that such certificates of deposit or banker's acceptances shall be in the possession of the Trustee or its agents and shall be either (A) continuously and fully insured by the Federal Deposit Insurance Corporation, or (B) continuously and fully secured by such securities as are described in paragraphs (1) through (3), inclusive, above ("Pledged Securities") which shall have a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such certificates of deposit or banker's acceptances, and that the institution issuing each such certificate of deposit or banker's acceptance required to be so secured shall furnish the Trustee with a covenant satisfactory to it that the aggregate market value of all such obligations securing each such certificate of deposit or banker's acceptance will at all times be an amount at least equal to the principal amount of each such certificate of deposit or banker's acceptance and that the Trustee shall be entitled to rely on each such covenant;

(5) any repurchase agreement with an institution described in paragraph (4) above, which repurchase agreement is fully collateralized at all times by Pledged Securities based upon the market value of such obligations;

(6) any money market fund invested solely in obligations described in paragraphs (1), (2) or (3) above or invested in repurchase agreements fully collateralized by obligations described in paragraphs (1) or (2) above;

(7) the investment pool created and administered by the Treasurer of the State of Ohio under Section 135.45 of the Ohio Revised Code; and

(8) investment agreements with institutions whose long-term unsecured debt is rated in one of the two highest rating categories of one of the Rating Agencies;

provided that for purposes of paragraphs (d) and (e) above the respective Pledged Securities shall be in the possession of the Trustee or its agent and shall be free and clear of all liens or rights of any third party, and in which obligations the Trustee shall have a first perfected security interest.

"Project" shall mean any Infrastructure Project or System Project.

"Project Cost" shall mean any Infrastructure Project Cost or System Project Cost, as the case may be.

"Qualified Swap Agreement" shall mean an agreement between the Commission and a counterparty creating Qualified Swap Payments.

"Qualified Swap Payment" shall mean a payment required to be made pursuant to a Qualified Swap Agreement, such as an interest rate swap, collar, cap or other functionally similar agreement, such payment being equal to interest on a notional amount, based upon a fixed rate or a variable index or formula, provided that the long-term unsecured debt of such counterparty, or the entity that has unconditionally guaranteed such counterparty's obligations is at the time rated in one of the two highest rating categories (without regard to gradations such as pluses (+) or minuses (-) or other similar notations) by each Rating Agency then maintaining a rating on the Series of Junior Lien Bonds to which such agreement pertains; or, the payment obligations of the counterparty, or the entity that has unconditionally guaranteed such counterparty's obligations, are rated in one of the three (3) highest rating categories (without regard to gradations) and are collateralized by direct obligations of, or obligations the principal and interest on which are guaranteed by, the United States of America, that (a) are deposited with the Commission or an agent of the Commission; and (b) maintain a market value of not less than one hundred five percent (105%) of the net market value of the payment agreement to the Commission, as such net market value may be defined and determined from time to time under the terms of the payment agreement.

"Rating Agency" shall mean Moody's Investors Service, or S&P Global Ratings, or Fitch Ratings, and their successors, or any other nationally recognized bond rating agency.

"Rebate Amount" shall mean a rebate amount required to be paid by the Commission to the United States of America pursuant to the Code.

"Record Date" shall mean, with respect to each Series of Junior Lien Bonds, a date prior to each Interest Payment Date, as established by the related Junior Lien Supplemental Trust Agreement, as of which date the Holders entitled to payment of interest on such Interest Payment Date shall be determined.

"Registrar" shall mean, with respect to any Series of Junior Lien Bonds, the Trustee or registrar designated by the Junior Lien Supplemental Trust Agreement with respect to such Series of Junior Lien Bonds, or any successor thereto.

"Renewal and Replacement Fund" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Revenue Bond Index" shall mean the Revenue Bond Index or successor index published in The Bond Buyer, or if The Bond Buyer ceases to publish such an index, then such other publicly available and comparable index selected by the Commission and not disapproved by the Trustee after reasonable notice from the Commission.

"Revenue Fund" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"Senior Lien Annual Debt Service Requirement" shall mean the Annual Debt Service Requirement as defined in the Senior Lien Master Trust Agreement.

"Senior Lien Bonds" shall mean Bonds as defined in the Senior Lien Trust Agreement and any other obligations secured on a parity with the Bonds by the Senior Lien Master Trust Agreement.

"Senior Lien Master Trust Agreement" shall mean the Master Trust Agreement dated as of February 15, 1994, as amended by the First through Seventeenth Supplemental Trust Agreements thereto and as amended and restated by the Amended and Restated Master Trust Agreement (Eighteenth Supplemental Trust Agreement) dated as of April 8, 2013, as further amended from time to time.

"Senior Lien Series Payments" shall mean Series Payments as defined in the Senior Lien Master Trust Agreement.

"Senior Lien Supplemental Payments" shall mean Supplemental Payments as defined in the Senior Lien Master Trust Agreement.

"Senior Lien Supplemental Trust Agreement" shall mean a Supplemental Trust Agreement as defined in the Senior Lien Master Trust Agreement.

"Senior Lien Trust Agreement" shall mean the Senior Lien Master Trust Agreement and all Senior Lien Supplemental Trust Agreements.

"Senior Lien Trustee" shall mean the Trustee at the time serving under the Senior Lien Trust Agreement.

"Series" shall mean such Junior Lien Bonds designated as a separate Series of Junior Lien Bonds in accordance with a Junior Lien Supplemental Trust Agreement.

"Series Payments" shall mean Junior Lien Series Payments and Senior Lien Series Payments.

"State" shall mean the State of Ohio.

"Supplemental Authorizing Resolution" shall mean, as to any Series of Junior Lien Bonds, the resolution or resolutions authorizing and providing for the sale and issuance of such Series of Junior Lien Bonds.

"System" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"System Pledged Revenues" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"System Project" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

"System Project Cost" with respect to any System Project, shall mean (1) the costs incurred or to be incurred by the Commission in connection with or incidental to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such System Project, including legal, administrative, engineering, planning, design studies, insurance costs and financing costs of such System Project (except to the extent such costs are funded from the proceeds of any indebtedness of the Commission, the payment of which is included as a System Project Cost under clause (3) below), (2) amounts, if any, required by the Junior Lien Trust Agreement to be paid into any fund or account upon the issuance of any Series of Junior Lien Bonds issued to finance System Projects, (3) payments when due (whether at the maturity of principal or the due date of interest or upon redemption) on Junior Lien Notes issued to finance System Projects, (4) costs of equipment, supplies and reserves required by the Commission for the commencement of operation of such System Project, (5) costs of acquisition by the Commission of real or personal property or any interest therein, including land and improvements required for relocation and relocation costs and land required for right of way, environmental mitigation or other Commission purposes, (6) any other costs properly attributable to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such System Project as permitted by the Act, and (7) interest on Junior Lien Bonds issued to finance System Projects during the estimated period of construction and for a reasonable period thereafter.

"System Projects Fund" shall have the meaning assigned in the Senior Lien Master Trust Agreement.

“Taxable Bonds” shall mean Junior Lien Bonds issued on the basis that the interest thereon is not, in any manner, exempt from federal income taxation or excludable from gross income for federal income tax purposes.

“Tender Agent” shall mean the bank, trust company or financial institution which the Commission has designated in a Junior Lien Supplemental Trust Agreement.

“Tolls” or “tolls” shall have the meaning assigned in the Senior Lien Master Trust Agreement.

“Trustee” shall mean the Trustee at the time serving under the Junior Lien Trust Agreement, initially The Huntington National Bank, Columbus, Ohio, and any successor Trustee as determined under or pursuant to the Junior Lien Trust Agreement.

“Variable Rate Junior Lien Bonds” shall mean Junior Lien Bonds with a variable, adjustable, convertible or other similar rate which is not fixed in percentage for the entire remaining term thereof.

“Verification Agent” shall mean an independent public accounting firm, or other firm that employs one or more certified public accountants for the purpose, engaged by the Commission to perform the acts and carry out the duties provided for a Verification Agent in the Junior Lien Trust Agreement.

Any reference to the Commission or to its members, officers or to other public officers, boards, commissions, departments, institutions, agencies, bodies or entities shall include those which succeed to its functions, duties or responsibilities by operation of law, and also those who at the time may legally act in its place.

References to the Act, to any act or resolution of the General Assembly, or to a section, chapter, division, paragraph or other provision of the Ohio Revised Code or the Constitution of Ohio, or the laws of Ohio, shall include the Act, that act or resolution, and that section, chapter, division, paragraph or other provision and those laws as from time to time amended, modified, supplemented, revised or superseded, unless expressly stated to the contrary, provided that no such amendment, modification, supplementation, revision or supersession shall alter the obligation to pay the Junior Lien Debt Service Charges on Junior Lien Bonds Outstanding, or on Junior Lien Bonds in anticipation of which Junior Lien Notes are Outstanding, or to pay any obligations of the Commission to Credit Providers relating to any Series of Junior Lien Bonds Outstanding, at the time of any such action, in the amount and manner, at the times and from the sources provided in the Junior Lien Trust Agreement, except as otherwise therein permitted.

SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT

The following, in addition to information contained under the captions “DESCRIPTION OF THE 2020 BONDS” and “SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS” with respect to the 2020 Junior Lien Bonds, summarizes certain provisions of the Junior Lien Trust Agreement, to which document in its entirety reference is made for the detailed provisions thereof.

So long as the 2020 Junior Lien Bonds are immobilized in a Book Entry System with DTC or another depository, that depository or its nominee is for all purposes of the Junior Lien Trust Agreement considered by the Commission and the Trustee to be the Holder of the 2020 Junior Lien Bonds, and Beneficial Owners will not be considered Holders and will have no rights as Holders under the Junior Lien Trust Agreement. See “EXHIBIT E - BOOK ENTRY ONLY SYSTEM.”

Security

The Junior Lien Trust Agreement provides for a pledge of the System Pledged Revenues, together with all moneys and investments, from whatever source, held in the Junior Lien Debt Service Fund, by the Commission to the Trustee for the benefit of the Holders and the Credit Providers. See “SECURITY FOR AND SOURCES OF PAYMENT OF THE 2020 BONDS.” The pledge of and lien on the System Pledged Revenues is on a basis that is junior and subordinate to the Senior Lien Bonds and by a first pledge and lien on the Junior Lien Special Funds.

Funds and Accounts

The funds and accounts created and established pursuant to the Senior Lien Master Trust Agreement are incorporated by reference into the Junior Lien Trust Agreement. In addition to the funds and accounts created and established pursuant to the Senior Lien Master Trust Agreement, the Junior Lien Trust Agreement establishes the following funds and accounts: the Junior Lien Debt Service Fund, and within such fund the Junior Lien Interest Account, the Junior Lien Principal Account and the Junior Lien Redemption Account; the Junior Lien Debt Service Reserve Fund, and, at the request of the Commission, within such fund, a separate Junior Lien Debt Service Reserve Account for any particular Series of Junior Lien Debt Service Reserve Fund Bonds, the Junior Lien Series Payments Fund, and within such fund, to the extent necessary to segregate and separately account for Junior Lien Series Payments, one or more separate accounts; the Junior Lien Supplemental Payments Fund, and within such fund, to the extent necessary to segregate and separately account for Junior Lien Supplemental Payments, one or more separate accounts; the Infrastructure Projects Fund, and within such fund to the extent necessary, one or more separate accounts, and the Junior Lien Rebate Fund, and within such fund a separate Junior Lien Rebate Account for each Series of Junior Lien Bonds, to the extent required by applicable law.

The funds and accounts created by the Junior Lien Trust Agreement constitute trust funds for the purposes provided in the Junior Lien Trust Agreement and are for purposes of accounting kept separate and distinct from all other funds of the Commission and are to be used only for the purposes and in the manner provided in the Junior Lien Trust Agreement.

The Junior Lien Debt Service Fund and the accounts therein (the Junior Lien Interest Account, the Junior Lien Principal Account and the Junior Lien Redemption Account) and the Junior Lien Debt Service Reserve Fund are held by the Trustee. The Infrastructure Projects Fund and the Junior Lien Rebate Fund are required to be established and maintained by the Commission in a bank or trust company which is eligible under the laws of the State to receive deposits of public funds. The Junior Lien Supplemental Payments Fund and the Junior Lien Series Payments Fund and the accounts therein are required to be established and held in compliance with the document or agreement providing for such Junior Lien Supplemental Payments or Junior Lien Series Payments, as the case may be.

Deposits: The Commission covenants in the Senior Lien Master Trust Agreement that Gross Revenues will be collected by the Commission, or its agents, and deposited into the Gross Revenue Account in the Revenue Fund. All Junior Lien Supplemental Payments must be deposited by the Commission into the Junior Lien Supplemental Payments Fund (or if established, the applicable account therein) immediately upon receipt. All Junior Lien Series Payments must be deposited by the Commission into the Junior Lien Series Payments Fund (or if established, the applicable account therein) immediately upon receipt thereof.

Revenue Fund: The provisions of Section 4.08 of the Senior Lien Master Trust Agreement are incorporated in the Junior Lien Trust Agreement as though set forth in full therein. Those incorporated provisions are referred to in the Junior Lien Trust Agreement as the “Section 4.08 Incorporated Provisions”. For application of amounts on deposit in the Revenue Fund under the Junior Lien Trust Agreement, see

"EXHIBIT A-2 - GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT - Application of Moneys in Revenue Fund" herein.

Junior Lien Debt Service Fund: Amounts on deposit in the Junior Lien Principal Account, Junior Lien Redemption Account and Junior Lien Interest Account will be transferred by the Trustee to the Paying Agent at the times as are necessary to make payments of principal and interest on the Junior Lien Bonds or Qualified Swap Payments, as the case may be.

Amounts on deposit in the Junior Lien Redemption Account will be applied solely to the purchase or redemption of Junior Lien Bonds. Moneys in the Junior Lien Redemption Account will first be applied to the payment of the mandatory sinking fund installments coming due on the next semiannual and annual redemption dates, if any, of Junior Lien Bonds subject to mandatory sinking fund redemption. The Commission may at any time purchase any of such Junior Lien Bonds at prices not greater than the applicable redemption price of such Junior Lien Bonds as of such date. If the Junior Lien Bonds are not then redeemable prior to maturity, the Commission may purchase such Junior Lien Bonds at prices not greater than the redemption price of such Junior Lien Bonds on the next ensuing redemption date. The Trustee is required to use all moneys in the Junior Lien Redemption Account for the redemption prior to maturity of such Junior Lien Bonds in such manner and at such times as shall be determined by a Junior Lien Supplemental Trust Agreement; provided, that the Commission will not be obligated to redeem, in advance of the mandatory sinking fund installment next coming due, such Junior Lien Bonds prior to maturity unless and until there are sufficient moneys on deposit in the Junior Lien Redemption Account to provide for the redemption of at least Twenty-Five Thousand Dollars ($25,000) principal amount of Junior Lien Bonds at any one time. If by the application of moneys in the Junior Lien Redemption Account, the Commission purchases or calls for redemption in any year Bonds in excess of the installment requirement for such year, such excess of Junior Lien Bonds so purchased or redeemed will be credited in such manner and at such times over the remaining installment payment dates as the Commission shall determine.

Junior Lien Debt Service Reserve Fund: Moneys in the Junior Lien Debt Service Reserve Fund will be used only for deposit into the Junior Lien Interest Account, the Junior Lien Principal Account or the Junior Lien Redemption Account when the moneys in the Junior Lien Debt Service Fund or any other fund or account held pursuant to the Junior Lien Trust Agreement and available for such purpose are insufficient therefor. In the event that any moneys are withdrawn from the Junior Lien Debt Service Reserve Fund for deposit into the Junior Lien Interest Account, the Junior Lien Principal Account or the Junior Lien Redemption Account, such withdrawals are required to be subsequently restored from the first System Pledged Revenues (and, to the extent available therefor, Junior Lien Series Payments) available to the Commission after all required payments have been made pursuant to subsections (a) through (d) of Section 4.08 of the Senior Lien Master Trust Agreement into the Interest Account, the Principal Account and the Bond Redemption Account, including any deficiencies for prior payments, unless restored by provision or reinstatement of a Junior Lien Credit Facility.

Any moneys in the Junior Lien Debt Service Reserve Fund in excess of the Junior Lien Debt Service Reserve Requirement or, if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in the Junior Lien Debt Service Reserve Fund in accordance with such election, will be transferred by the Trustee to the Junior Lien Debt Service Fund and used as provided in the Junior Lien Trust Agreement.

The Commission may elect, by resolution adopted prior to the issuance of any Series of Junior Lien Debt Service Reserve Fund Bonds, to fully fund the Junior Lien Debt Service Reserve Fund over a period specified in such resolution not to exceed the period during which capitalized debt service in an amount sufficient to pay all principal and interest due on such Series of Junior Lien Debt Service Reserve Fund Bonds has been deposited with the Trustee, during which period the Commission will be required to make substantially equal monthly installments in order that the amounts on deposit therein and available amounts under any Junior Lien Credit Facility at the end of such period will equal the Junior Lien Debt Service Reserve Requirement.

In lieu of the amounts required to be on deposit in the Junior Lien Debt Service Reserve Fund, the Commission may at any time cause to be deposited into the Junior Lien Debt Service Reserve Fund a Junior Lien Credit Facility for the benefit of the Junior Lien bondholders in an amount, which together with other amounts on deposit therein equals the Junior Lien Debt Service Reserve Requirement or, if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in the Junior Lien Debt Service Reserve Fund in accordance with such election, which Junior Lien Credit Facility shall be payable or available to be drawn upon, as the case may be (upon the giving of notice as required thereunder) on any interest or principal payment date on which a deficiency exists in the Junior Lien Interest Account, the Junior Lien Principal Account or the Junior Lien Redemption Account which cannot be cured by moneys in any other fund or account held pursuant to the Junior Lien Trust Agreement and available for such purpose. If a disbursement is made under the Junior Lien Credit Facility, the Commission will be obligated either to reinstate the amount available under such Junior Lien Credit Facility or to deposit into the Junior Lien Debt Service Reserve Fund from the System Pledged Revenues (and, to the extent available therefor, Junior Lien Series Payments), funds in the amount sufficient to cause the amount on deposit in the Junior Lien Debt Service Reserve Fund to equal the Junior Lien Debt Service Reserve Requirement or, if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in the Junior Lien Debt Service Reserve Fund in accordance with such election, or a combination of such alternatives.

The provider of any Junior Lien Credit Facility must be rated at the time of issuance of such Junior Lien Credit Facility in one of the two highest rating categories (without regard to any gradation within a rating category) by at least two Rating Agencies. The Commission will not be required to replace the credit facility with cash or another Junior Lien Credit Facility in the event that the Junior Lien Credit Facility provider's credit rating is downgraded after the facility has been delivered to the Trustee.

See "SECURITY AND SOURCE OF PAYMENT OF THE 2020 BONDS — Debt Service Reserve Requirements – Junior Lien Bond Reserve."

Renewal and Replacement Fund: The moneys in the Renewal and Replacement Fund will be used, when necessary, after any required payments pursuant to Section 4.10 of the Senior Lien Master Trust Agreement for deposit into the Junior Lien Interest Account, Junior Lien Principal Account or Junior Lien Redemption Account when the moneys in the Junior Lien Debt Service Fund or Junior Lien Debt Service Reserve Fund or any other fund or account held pursuant to the Junior Lien Trust Agreement and available for such purpose are insufficient therefor.

System Projects Fund: The moneys in the System Projects Fund will be used, when necessary, after any required payments pursuant to Section 4.11 of the Senior Lien Master Trust Agreement for deposit into the Junior Lien Interest Account, Junior Lien Principal Account or Junior Lien Redemption Account when the moneys in the Junior Lien Debt Service Fund or Junior Lien Debt Service Reserve Fund or any other fund or account held pursuant to the Junior Lien Trust Agreement and available for such purpose are insufficient therefor.

Junior Lien Series Payments Fund: Amounts on deposit in the respective accounts within the Junior Lien Series Payments Fund shall be applied on or before the tenth (10th) day of each month, beginning on the tenth (10th) day of the first calendar month following the first date on which Junior Lien Bonds secured by such amounts thereby are issued and Outstanding under the Junior Lien Trust Agreement, to make the deposits to the Junior Lien Interest Account, Junior Lien Principal Account, Junior Lien Redemption Account and

Junior Lien Debt Service Reserve Fund with respect to the respective Series of Junior Lien Bonds secured thereby to the extent and in the manner provided or permitted in the governing document providing for the payment of such Junior Lien Series Payments, or, if the governing documents shall not so provide, then as directed by the Commission. Funds derived from Junior Lien Series Payments will secure and only be used to make payments with respect to the particular Series of Junior Lien Bonds to which such payments are pledged and such amounts are not available to be used to make payments with respect to any other Series of Junior Lien Bonds.

Junior Lien Supplemental Payments Fund: Whenever on the tenth (10th) day of any month the System Pledged Revenues and Junior Lien Series Payments are not sufficient to make the required deposits into the Junior Lien Interest Account, Junior Lien Principal Account, Junior Lien Redemption Account or Junior Lien Debt Service Reserve Fund, the Trustee must notify, in the manner prescribed by the governing document providing for the payment of Junior Lien Supplemental Payments, the person holding the Junior Lien Supplemental Payments to pay the portion of such deficiency allocable to the Junior Lien Bonds secured by the Junior Lien Supplemental Payments, and upon receipt of Junior Lien Supplemental Payments the Commission or the Trustee will deposit them into the accounts in the Junior Lien Debt Service Fund in the order prescribed above for the application of System Pledged Revenues. Funds derived from Junior Lien Supplemental Payments will secure and only be used to make payments with respect to the Series of Junior Lien Bonds for which such Junior Lien Supplemental Payments are available in accordance with the terms of the governing document providing for such Junior Lien Supplemental Payments and such amount will not be available or used to make payments with respect to other Series of Junior Lien Bonds.

It is expressly declared that it is the intention of the Junior Lien Trust Agreement that, to the extent thereof, all requirements for deposits in the accounts in the Junior Lien Debt Service Fund will be met first by the System Pledged Revenues and Junior Lien Series Payments and that Junior Lien Supplemental Payments will be used only at the times and in the amounts required to meet any deficiencies in such accounts in the Junior Lien Debt Service Fund and in accordance with any restrictions provided in the governing document providing for such Junior Lien Supplemental Payments. Junior Lien Supplemental Payments will not be used by the Commission for other purposes unless otherwise authorized or permitted by the governing document providing for such Junior Lien Supplemental Payments.

Infrastructure Projects Fund: The moneys in the Infrastructure Projects Fund will be used for the purpose of paying Infrastructure Project Costs in accordance with a Junior Lien Supplemental Trust Agreement and the Act.

Rebate Fund: The Commission will deposit or cause to be deposited into the appropriate Junior Lien Rebate Account in the Junior Lien Rebate Fund, from investment earnings or moneys deposited in the other funds and accounts created under the Junior Lien Trust Agreement, or from any other legally available funds of the Commission, an amount equal to the Rebate Amount. The moneys deposited in the Junior Lien Rebate Fund shall be used only for the payment of the Rebate Amount to the United States of America.

To the extent moneys on deposit in the appropriate Junior Lien Rebate Account in the Junior Lien Rebate Fund are insufficient for the purpose of paying the Rebate Amount, and other funds of the Commission are not available to pay the Rebate Amount, then the Rebate Amount is required to be paid first from System Pledged Revenues and, to the extent the System Pledged Revenues are insufficient to pay the Rebate Amount, then from moneys on deposit in any of the funds and accounts created under the Junior Lien Trust Agreement.

After making the required determination or calculation of the Rebate Amount or causing the same to be made, and upon verification of such determination or calculation by the Commission, if required, the Commission may, to the extent permitted by the Code, withdraw funds which may be on deposit in the appropriate Junior Lien Rebate Account in an amount not to exceed an amount which would maintain a balance in such account sufficient to pay the then-current cumulative Rebate Amount, and use such funds for any other purpose authorized by law.

Investment and Valuation of Funds

The Junior Lien Debt Service Fund, the Junior Lien Debt Service Reserve Fund, the Junior Lien Series Payments Fund, including all accounts within such funds, and all other special funds created and established by the Junior Lien Trust Agreement, constitute trust funds under the Junior Lien Trust Agreement. All moneys held in such funds and accounts will be invested at the direction of the Commission in Permitted Investments. Moneys on deposit in the Junior Lien Debt Service Reserve Fund may be invested in any Permitted Investments. Moneys on deposit in the Junior Lien Interest Account, Junior Lien Principal Account and Junior Lien Redemption Account of the Junior Lien Debt Service Fund shall only be invested in Permitted Investments described in paragraphs (1), (2), (6) and (7) of such definition (See "EXHIBIT A-2 - GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT"). Permitted Investments must mature not later than the earliest of (i) the final maturity of the Junior Lien Bonds, (ii) the time such moneys are reasonably required for the purposes set forth for such fund or account in accordance with the Junior Lien Trust Agreement, (iii) the time permitted by the Act and applicable law, and (iv) with respect to Permitted Investments described in paragraphs (1) through (4) of such definition held in the Junior Lien Debt Service Reserve Fund, ten (10) years from the date of investment.

Unless otherwise provided by a Junior Lien Supplemental Trust Agreement, all income and earnings received from the investment and reinvestment of moneys on deposit in the Junior Lien Debt Service Reserve Fund will be transferred as soon as practicable to the Junior Lien Interest Account, the Junior Lien Principal Account or the Junior Lien Redemption Account for use for the next payment due from such accounts. All income and earnings received from the investment and reinvestment of moneys on deposit in the Junior Lien Interest Account, the Junior Lien Principal Account and the Junior Lien Redemption Account will remain in such accounts for use for the next payment due from such account. All income and earnings received by the investment and reinvestment of moneys on deposit in any construction fund created under the Junior Lien Trust Agreement will remain in such fund for use in the expenditures required from such fund. All income and earnings on the Junior Lien Supplemental Payments Fund and the Junior Lien Series Payments Fund will be applied in the manner provided in the document governing such payments. All income and earnings received from the investment of moneys on deposit in the Infrastructure Projects Fund and the Junior Lien Rebate Fund shall be retained in such fund, provided that the Commission may in its sole discretion transfer all or any portion of the earnings and investment income on the Infrastructure Fund to the Junior Lien Interest Account. All income and earnings received from the investment and reinvestment of moneys on deposit in any other fund created by the Junior Lien Trust Agreement will be transferred as soon as practicable to the Revenue Fund. Earnings in all funds and accounts will be available for payments of the Rebate Amount.

In computing the amount in any fund or account created under the Junior Lien Trust Agreement, Permitted Investments will be valued at the "cost" thereof, exclusive of accrued interest. A valuation of amounts on deposit in the Junior Lien Debt Service Reserve Fund must be conducted by the Trustee on March 1 of each Fiscal Year to determine if the amount on deposit therein is equal to the Junior Lien Debt Service Reserve Requirement or, if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in the Junior Lien Debt Service Reserve Fund in accordance with such election. If a deficiency exists, the Commission must make up such deficiency from a deposit of System Pledged Revenues. If a surplus exists, such surplus shall be transferred into the Junior Lien Debt Service Fund.

Application of Moneys in Revenue Fund

After all the deposits are made in subsections (a) through (d) of the Section 4.08 Incorporated Provisions, on or before the tenth (10th) day of each month, beginning with the first calendar month following the first date on which any Junior Lien Bonds are issued, amounts remaining on deposit in the Revenue Fund as of the close of business on the last day of the preceding month will be disposed of in the following manner and priority and in an amount sufficient to make the required payment and deposit and all past due payments and deposits within such priority:

(a) (i) for deposit into the Junior Lien Interest Account such an amount equal to the sum of (1) one-sixth (1/6) of the interest becoming due on the next semiannual interest payment date with respect to Junior Lien Bonds that bear interest payable semiannually, (2) the amount of interest next becoming due or maturing on the Junior Lien Bonds that bear interest payable monthly, (3) the amount of interest accruing in such month on Junior Lien Bonds that bear interest payable on other than a monthly or semiannual basis (other than Junior Lien CABs and, prior to and including the applicable Conversion Date, Junior Lien Convertible Capital Appreciation Bonds), and (4) the amount of any Qualified Swap Payment payable by the Commission accruing in such month;

(ii) for deposit in the Junior Lien Principal Account, an amount equal to the sum of (1) one-sixth (1/6) of the principal amount of the Junior Lien Bonds which mature semiannually and will mature and become due on the next semiannual maturity date in the following twelve (12) calendar month period, (2) one-twelfth (1/12) of the principal amount of the Junior Lien Bonds (other than Junior Lien CABs) which mature annually and which will mature and become due on the next annual maturity date in such Fiscal Year, and (3) one-twelfth (1/12) of the Compounded Amount of Junior Lien CABs that will become due on the next annual maturity date in such following twelve (12) calendar month period; and

(iii) for deposit into the Junior Lien Redemption Account, an amount sufficient to pay one-sixth (1/6) of the principal amount of Junior Lien Bonds subject to semi-annual mandatory sinking fund redemption on the next semiannual redemption date in the following twelve (12) calendar month period and one-twelfth (1/12) of the principal amount of Junior Lien Bonds subject to annual mandatory sinking fund redemption on the next annual redemption date in such following twelve (12) calendar month period;

In making such deposits, the Trustee will reduce the amounts of the required deposits by any investment earnings which have accrued in such accounts during the preceding period;

(b) for deposit into the Junior Lien Debt Service Reserve Fund in an amount which, together with the funds on deposit therein and the available amounts under any Junior Lien Credit Facility as provided below, will be sufficient to make the amounts on deposit therein equal to the Junior Lien Debt Service Reserve Requirement or if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in the Junior Lien Debt Service Reserve Fund in accordance with such election;

(c) thereafter, the balance of any amounts remaining in the Revenue Fund will be deposited as provided in subsections (f) through (i) of the Section 4.08 Incorporated Provisions; provided, that amounts transferred to the General Reserve Fund pursuant to subsection (i) of the Section 4.08 Incorporated Provisions may be applied by the Commission, in such manner, in such priority, and at such times as the Commission determines, in addition to the purposes set forth in that subsection (i) of the Section 4.08 Incorporated Provisions, (1) to the purchase or redemption of Junior Lien Bonds (at redemption prices not exceeding the redemption prices of such Junior Lien Bonds on the next ensuing redemption date), (2) to reimburse the provider of any Junior Lien Supplemental Payments in accordance with the document providing for such Junior Lien Supplemental Payments, or (3) payments by the Commission with respect to any Junior Lien Credit Facility; provided, however, that none of such amounts may be used for the purposes provided in this subsection unless all payments required in subsections (a) to (h) of the Section 4.08 Incorporated Provisions, including any deficiencies for prior payments, have been made in full to the date of such use, and the Commission has fully complied with all covenants and agreements contained in the Senior Lien Trust Agreement and the Junior Lien Trust Agreement.

Calculation of System Pledged Revenues

The provision in the Senior Lien Master Trust Agreement with respect to the calculation of System Pledged Revenues is incorporated in the Junior Lien Master Trust Agreement as if set forth in full therein.

Issuance of Bonds

The Commission may issue Bonds for the purpose of:

(a) financing System Projects, either alone or jointly with other persons, public bodies or private bodies;

(b) financing Infrastructure Projects, either alone or jointly with other persons, public bodies or private bodies;

(c) refunding Outstanding Junior Lien Bonds or Junior Lien Notes issued pursuant to the Junior Lien Trust Agreement;

(d) completing any System Project for which Junior Lien Bonds have been previously issued; or

(e) refunding Senior Lien Bonds or subordinated indebtedness.

Each Series of Junior Lien Bonds (including the 2020 Junior Lien Bonds) must be authorized by a Supplemental Authorizing Resolution adopted by the Commission and must be issued pursuant to a Junior Lien Supplemental Trust Agreement.

No Junior Lien Bonds shall be issued unless all conditions described in paragraphs (a) through (d) below are met.

(a) a certificate of the Chief Financial Officer of the Commission is delivered to the Trustee certifying that the Commission is current in all deposits into the various funds and accounts and all payments theretofore required to have been deposited or made by it under the provisions of the Senior Lien Trust Agreement and the Junior Lien Trust Agreement; and the Commission must be in compliance with the covenants and provisions of the Senior Lien Trust Agreement and the Junior Lien Trust Agreement, unless upon the issuance of such Junior Lien Bonds the Commission will be in compliance with all such covenants; and

(b) if the Junior Lien Bonds are to be issued to finance Projects:

(i) a certificate of the Chief Financial Officer of the Commission is delivered to the Trustee certifying that the amount of the System Pledged Revenues and any Supplemental

Payments during the immediately preceding Fiscal Year or any twelve (12) consecutive calendar months selected by the Commission out of the fifteen (15) consecutive calendar months immediately preceding the issuance of the proposed Junior Lien Bonds, adjusted as hereinafter provided, will have been at least one hundred fifty percent (150%) of the Maximum Composite Annual Debt Service Requirement on the Junior Lien Bonds then Outstanding, the Senior Lien Bonds then Outstanding, the Junior Lien Bonds then proposed to be issued and any Senior Lien Bonds then proposed to be issued. The Commission may adjust the System Pledged Revenues calculated pursuant to this paragraph if, prior to the issuance of the proposed Junior Lien Bonds, the Commission has increased the Tolls for transit over the toll facilities of the System. If the Commission elects to adjust Systems Pledged Revenues, the Net Revenues for the immediately preceding Fiscal Year or the twelve (12) consecutive calendar months will be adjusted, based upon a certificate of an Independent Consultant, to reflect the Net Revenues that would have been derived from the System during such period if such increased Tolls of the System had been in effect during all of such period; or

(ii) a certificate of an Independent Consultant is delivered to the Trustee certifying that, based upon reasonable assumptions, System Pledged Revenues (plus Supplemental Payments, if any, in an amount not to exceed the aggregate Annual Debt Service Requirement for each such Fiscal Year for all Series of Senior Lien Bonds and Junior Lien Bonds to which such Supplemental Payments are pledged) are projected to be at least 150% of the Composite Annual Debt Service Requirement for the current Fiscal Year and each successive Fiscal Year during which the Junior Lien Bonds then Outstanding, the Senior Lien Bonds then Outstanding, the Junior Lien Bonds then proposed to be issued and any Senior Lien Bonds then proposed to be issued will be Outstanding; and

(c) There shall be delivered to the Trustee certain documents, opinions and certificates, including evidence of authorization by the Commission of the issuance and delivery of the Junior Lien Bonds, and a certification of an Authorized Officer of the Commission that it is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Junior Lien Bonds or the Junior Lien Trust Agreement; and

(d) Unless the Junior Lien Supplemental Trust Agreement for any Series of Junior Lien Bonds provides for the funding of the Junior Lien Debt Service Reserve Fund in installments, the Junior Lien Debt Service Reserve Fund must be fully funded immediately upon the issuance of such Series of Junior Lien Bonds.

The Commission need not comply with the provisions described in clause (b) of the preceding paragraph if and to the extent the Junior Lien Bonds to be issued qualify as either "Refunding Bonds" or "Completion Bonds," as described below.

(a) "Refunding Junior Lien Bonds," that is, Junior Lien Bonds delivered in lieu of, or in substitution for, or to provide for the payment of, Junior Lien Bonds or Junior Lien Notes Outstanding under the Junior Lien Trust Agreement, if the Commission causes to be delivered to the Trustee a certificate of a Verification Agent setting forth:

(1) the Junior Lien Annual Debt Service Requirements for the then current and each future Fiscal Year to and including the latest maturity of any Junior Lien Bonds of any Series then Outstanding:

(A) with respect to the Junior Lien Bonds of all Series Outstanding immediately prior to the date of authentication and delivery of such Refunding Junior Lien Bonds, and

(B) with respect to the Junior Lien Bonds of all Series to be Outstanding immediately thereafter, and

(2) that the Junior Lien Annual Debt Service Requirement set forth for each Fiscal Year pursuant to (1)(B) above does not exceed by more than $50,000 the Junior Lien Annual Debt Service Requirement set forth for each such Fiscal Year pursuant to (1)(A) above, or

(b) "Completion Bonds," that is, Junior Lien Bonds delivered to provide for the payment of the cost of a System Project subsequent to the original issuance of Senior Lien Bonds or Junior Lien Bonds for such System Project, provided that the conditions described in subparagraphs (1) and (2) below are met.

(1) The net amount of such Completion Bonds available for deposit into the System Projects Fund will be equal to or less than (A) ten percent (10%) of the original estimated cost of such System Project at the time of the original issuance of such Senior Lien Bonds or Junior Lien Bonds, or (B) such a greater amount, provided that an Independent Consultant certifies that such greater amount is necessary for completion of the System Project and that issuance of such Completion Bonds in such amount will not reduce projected Net Revenues after the payment of the Junior Lien Annual Debt Service Requirement on the on the Junior Lien Bonds for the first full Fiscal Year following completion of the System Project and each future Fiscal Year to and including the latest maturity of any on the Junior Lien Bonds Outstanding assuming the issuance of the Completion Bonds as compared with the projected Net Revenues after the payment of the Junior Lien Annual Debt Service Requirement for the same periods assuming that the Completion Bonds were not issued; and

(2) The Commission causes to be delivered to the Trustee a certificate of the Consulting Engineer stating:

(A) the cost of completing such System Project, and

(B) that other funds available or reasonably expected to become available for such cost, together with the proceeds of such Completion Bonds, will be sufficient to pay such cost. The authentication of Junior Lien Bonds will be conclusive evidence that the conditions stated above have been met for purposes of the validity and binding effect of those Junior Lien Bonds and the right of the Holders thereof to share in the System Pledged Revenues, as provided in the Junior Lien Trust Agreement.

Tolls

The Commission will at all times charge and collect or cause to be charged and collected Tolls for the use of the System at rates not less than those set forth in the schedule of such Tolls then in effect and as shall be required in order to satisfy the requirements described in subparagraphs (a), (b) and (c) below.

(a) Gross Revenues in each Fiscal Year will equal at least one hundred percent (100%) of the aggregate of:

(ii) the Cost of Operation, Maintenance and Administration for such Fiscal Year as provided in the Annual Budget; and

(iii) any amounts required to be deposited into the Expense Reserve Account in such Fiscal Year.

(b) System Pledged Revenues in each Fiscal Year will equal at least one hundred percent (100%) of the aggregate in such Fiscal Year of (i) the Composite Annual Debt Service Requirement, (2) required deposits to the Junior Lien Debt Service Reserve Fund, (3) deposits and payments required pursuant to the Senior Lien Master Trust Agreement, (4) deposits and payments required pursuant to any resolution, indenture or other authorizing instrument under which any obligations of the Commission secured by a pledge of the System Pledged Revenues junior and subordinate to Junior Lien Bonds are issued, and (5) the Renewal and Replacement Requirement.

(c) System Pledged Revenues (plus Supplemental Payments, if any, in an amount not to exceed the aggregate Composite Annual Debt Service Requirement for such Fiscal Year for all Series of Senior Lien Bonds and Junior Lien Bonds to which such Supplemental Payments are pledged in each Fiscal Year) shall equal at least one hundred twenty percent (120%) of the Composite Annual Debt Service Requirement in such Fiscal Year.

The collection of System Pledged Revenues in any Fiscal Year in an amount in excess of the amounts required as described above for any Fiscal Year will not be taken into account as a credit against the requirements described above for any subsequent Fiscal Year.

On or before July 31 in each year, the Commission is required to complete a review of the financial condition of the Commission for the purpose of estimating whether the Gross Revenues for such Fiscal Year will be sufficient to provide, together with Series Payments, Additional System Payments and Supplemental Payments, the amounts described in clauses (a), (b) and (c) above and shall by resolution make a determination with respect thereto. Copies of such resolution properly certified by the Commission, together with a certificate of an Authorized Officer of the Commission setting forth a reasonably detailed statement of the actual and estimated Gross Revenues, Supplemental Payments, Additional System Payments, Series Payments and other pertinent information for the year upon which such determination was made, will be delivered to the Trustee and made available upon request to any interested party. If the Commission determines that such amounts may not be sufficient to comply with clauses (a), (b) and (c) above for the then-current Fiscal Year, it will forthwith cause the Independent Consultant to make a study for the purpose of recommending a schedule of Tolls which, in the opinion of the Independent Consultant, will cause amounts to be received in the following Fiscal Year equal to the amounts necessary to satisfy the requirements of clauses (a), (b) and (c) above for such Fiscal Year. No later than February 1 of the following year, the Commission will establish and place in effect a schedule of Tolls which will cause amounts to be received in such following and each subsequent Fiscal Year to be sufficient to restore the amount of any deficiency at the earliest practicable time. If, in any Fiscal Year, the amounts received are not sufficient to satisfy the requirement of clauses (a), (b) and (c), the Commission will (i) cause the Independent Consultant to make a study for the purpose stated in the immediately preceding sentence unless it has already obtained a revenue study and recommendation in compliance with such sentence, and (ii) as promptly as practicable and in any case no later than the next July 1, establish and place in effect a schedule of Tolls as recommended by the Independent Consultant.

Except as specifically permitted in the Junior Lien Trust Agreement, the Commission will not effect any reduction in any rate of Toll fixed for transit over the System or eliminate any Toll charged for use of the System unless it first provides thirty (30) days' notice to the Trustee and then only if, accompanying said notice, all of the documents described in subparagraphs (a), (b) and (c) below are filed with the Trustee:

(d) A certificate of an Independent Consultant setting forth estimates of the Gross Revenues, System Pledged Revenues, Supplemental Payments and Series Payments for the then current and each future Fiscal Year during which any Junior Lien Bonds are scheduled to be Outstanding, which may take into consideration, among other things, the additional use of the System projected to result from such reduction in the rate of Toll, and a favorable recommendation from the Independent Consultant that such proposed reduction be placed in effect.

(e) A certificate of the Commission setting forth for the Fiscal Years set forth in the certificate of the Independent Consultant and based on the same assumptions as used in the certificate described in paragraph (a) above, estimates of the Cost of Operation, Maintenance and Administration and deposits to the Expense Reserve Account for the System prepared in accordance with the Junior Lien Trust Agreement.

(f) a certificate of an Authorized Officer of the Commission:

(i) setting forth the Composite Annual Debt Service Requirement for the then current and each future Fiscal Year during which any Junior Lien Bonds are scheduled to be Outstanding;

(ii) certifying that the estimated System Pledged Revenues and Supplemental Payments (as derived from the certificates pursuant to paragraphs (a) and (b) above) for the then-current and each future Fiscal Year during which any Junior Lien Bonds are scheduled to be Outstanding are not less than 1.50 times the Composite Annual Debt Service Requirement for such respective current or future Fiscal Year;

(iii) certifying that the Commission is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Senior Lien Master Trust Agreement or the Junior Lien Trust Agreement; and

(iv) certifying that immediately prior to such proposed reduction the amount on deposit in the Junior Lien Debt Service Reserve Fund was equal to the Junior Lien Debt Service Reserve Requirement or if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in the Junior Lien Debt Service Reserve Fund in accordance with such election.

Except as specifically provided in the Junior Lien Trust Agreement, the Commission will not construct any System Project for which a Toll is not charged unless there is filed with the Trustee:

(a) a certificate of an Independent Consultant setting forth estimates of the Gross Revenues, System Pledged Revenues, Supplemental Payments and Series Payments for the then current and each future Fiscal Year during which any Junior Lien Bonds are scheduled to be Outstanding;

(b) a certificate of the Commission setting forth for the Fiscal Years set forth in the certificate of the Independent Consultant and based on the same assumptions as used in the certificate required by paragraph (a) above, estimates of the Cost of Operation, Maintenance and Administration and deposits to the Expense Reserve Account prepared in accordance with the Junior Lien Trust Agreement;

(c) a certificate of an Authorized Officer of the Commission:

(i) setting forth the Composite Annual Debt Service Requirement for the then current and each future Fiscal Year during which any Junior Lien Bonds are scheduled to be Outstanding;

(ii) certifying that the estimated System Pledged Revenues and Supplemental Payments (as derived from the certificates pursuant to paragraph (a) above) for the then current and each future Fiscal Year during which any Junior Lien Bonds are scheduled to be Outstanding are not less than 1.20 times the Composite Annual Debt Service Requirement for such respective current or future Fiscal Year;

(iii) certifying that the Commission is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Senior Lien Master Trust Agreement or the Junior Lien Trust Agreement; and

(iv) certifying that immediately prior to such proposed reduction the amount on deposit in the Junior Lien Debt Service Reserve Fund was equal to the Junior Lien Debt Service Reserve Requirement or if the Commission has exercised its option to fund the Junior Lien Debt Service Reserve Fund in installments, the amount then required to be on deposit in the Junior Lien Debt Service Reserve Fund in accordance with such election.

With respect to each System Project, The Commission is required to classify Tolls for the use of that System Project in a reasonable way to cover all traffic, so that the those Tolls will be uniform in application to all traffic on that System Project falling within any reasonable class regardless of the status or character of any person, firm or corporation participating in the traffic, except by reason of privileges based upon frequency, volume, type of vehicle, time of such traffic, distance traveled, weight or method of payment.

The Commission may increase Tolls from time to time. The Commission may make any other adjustment or reclassification of Tolls or establish special Tolls, introductory Tolls or temporary Tolls, provided such action will not cause the Commission to fail to fail to comply with subsection (b) above.

The failure in any Fiscal Year to comply with the covenant in subsection (b) above will not constitute an Event of Default if the Commission complies with subsection (c) above; provided that if the Independent Consultant is of the opinion, as shown by its certificate filed with the Commission, that a schedule of Tolls and other rates and charges for the System which would provide funds to meet the requirements specified in subsection (a) above is impracticable at that time, and the Commission therefore cannot comply with subsection (b) above, then the Commission is obligated to fix and establish such schedule of Tolls as is recommended by the Independent Consultant to comply as nearly as practicable with the covenants in subsection (a) above, and in such event the failure of the Commission to comply with subsections (a) and (b) above will not constitute an Event of Default under the provisions of the Junior Lien Trust Agreement.

Free Passage

The Commission covenants that it will not allow or permit any free use of the toll facilities of the System except to officials, employees, agents, vendors or contractors of the Commission while engaged in official business of the Commission or law enforcement officers or emergency vehicles while in the discharge of their official duties, or in the event of an emergency in which temporary free passage is required in order to assure the safety and security of patrons on the System.

Covenants Incorporated from the Senior Lien Trust Agreement

The covenants of the Commission contained in the Senior Lien Trust Agreement with respect to the Annual Budget, insurance requirements, disposition of property and other related covenants are incorporated by reference in the Junior Lien Trust Agreement as is set forth in full in the Junior Lien Trust Agreement.

Other Covenants

The Commission covenants that (a) it will operate and maintain the System in conformity with all applicable legal requirements; it will not make any modifications or alterations of the System which substantially increase the cost of operating the System or substantially affect adversely the volume or character of the traffic using the System, (b) it will establish and enforce reasonable rules and regulations governing the use and operation of the System, (c) all compensation, salaries, fees and wages paid by it in connection with the maintenance, repair and operation of the System will be reasonable, (d) no more persons will be employed by it than are necessary, (e) it will maintain and operate the System in an efficient and economical manner, (f) from the revenues of the System it will at all times maintain the System in good repair and in sound operating condition and will make all necessary repairs, renewals, improvements and replacements, and (g) it will comply with all valid applicable acts, rules, regulations, orders and directions of any legislative, executive, administrative or judicial body applicable to the System or the Commission.

The Commission will cause an audit of financial statements as of December 31 of each year, prepared in accordance with GAAP, to be made of its books and accounts relating to the System and the Junior Lien Special Funds by an independent certified public accountant approved by the Auditor of the State. Reports of each such audit shall be filed by July 1 following the date of the financial statements with the Commission and the Trustee, and copies shall be mailed by the Commission to the Consulting Engineers. Each audit report shall set forth such matters as are required by GAAP.

The Commission covenants that it will cause written notice to be given to the Rating Agencies at least thirty (30) days prior to the making of any multi-year pledge or assignment of any revenues received by the Commission and not pledged or assigned pursuant to the Junior Lien Trust Agreement.

Events of Default and Remedies

The following events constitute Events of Default under the Junior Lien Trust Agreement:

(a) Default in the payment of any interest on any Junior Lien Bond when and as the same shall have become due and payable;

(b) Default in the payment of the principal of or any redemption premium on any Junior Lien Bond when and as the same becomes due and payable, whether at stated maturity or by mandatory redemption or mandatory purchase;

(c) Any other default, and the continuance thereof for a period of 60 days after written notice thereof to the Commission given by the Trustee or the Holders of not less than 25 percent in aggregate amount of affected Junior Lien Bonds then Outstanding.

The term “default” as used in the Junior Lien Trust Agreement shall mean default by the Commission in the performance or observance of any of the covenants, agreements or conditions on its part contained in the Junior Lien Trust Agreement or in the Junior Lien Bonds, exclusive of any period of grace required to constitute a default an Event of Default as provided above.

Except as modified or supplemented by a Supplemental Trust Agreement with respect to a particular Series of Junior Lien Bonds, the Trustee is not required to take notice, and shall not be deemed to have notice or knowledge, of any default or Event of Default under the Trust Agreement, except Events of Default described in clauses (a) and (b) above, unless the Trustee shall be notified specifically of the default or Event of Default in a written instrument delivered to it by the Commission or by the Holders of not less than 10 percent in aggregate principal amount of Junior Lien Bonds then Outstanding or a Credit Provider. In the absence of delivery of a notice satisfying those requirements, the Trustee may assume conclusively that there is no default or Events of Default, except as to Events of Default described in clauses (a) and (b) above.

Upon the occurrence of any Event of Default as described in clauses (a) or (b) above, the Trustee must, and upon the occurrence of any Event of Default as described in clause (c) above, the Trustee may and upon the written request of the Holders of not less than 25 percent in aggregate principal amount of the affected Junior Lien Bonds then Outstanding or a Financial Institution providing a letter of credit in connection with the affected Junior Lien Bonds must (subject to the Trustee's right to be indemnified for its expenses) proceed in its own name to protect and enforce its rights and the rights of the Holders under the Junior Lien Trust Agreement by such of the remedies described in subparagraphs (a) through (d) below as the Trustee, being advised by counsel, considers most effective to protect and enforce those rights:

(a) By mandamus or other suit, action or proceeding at law or in equity enforce all the rights of Holders, including the compelling of the performance of all duties of the Commission or State agencies under the Junior Lien Bond Proceedings and the enforcement of the payment of the Junior Lien Debt Service Charges on the Junior Lien Bonds then Outstanding.

(b) Bring suit upon the Junior Lien Bonds.

(c) Enjoin unlawful activities or activities in violation of the rights of the Holders or Credit Providers under the Junior Lien Trust Agreement.

(d) In the event of the occurrence of an Event of Default as described in clauses (a) or (b) of the preceding paragraph:

(i) Provided that no Senior Lien Bonds are Outstanding under the Senior Lien Trust Agreement, apply to a court having jurisdiction of the cause to appoint a receiver, who may be the Trustee, to receive and administer the System Pledged Revenues with full power to pay and to provide for payment of the Junior Lien Debt Service Charges, and with such powers, subject to the discretion of the court, as are accorded receivers in general equity cases, excluding any power to pledge additional revenues or receipts or other income or moneys of the Commission or the State or State agencies to the payment of the Junior Lien Debt Service Charges, and excluding the power to take possession of, mortgage or cause the sale or otherwise dispose of any Project, or

(ii) Provided that the Senior Lien Trustee has declared acceleration of maturity of the Outstanding Senior Lien Bonds as a result of an event of default under the Senior Lien Trust Agreement, by notice in writing delivered to the Commission and to each member of the Commission, declare the principal of all Junior Lien Bonds then Outstanding and the interest accrued on those Junior Lien Bonds immediately due and payable and thereupon that principal and interest shall become and be immediately due and payable. If at any time after that declaration and prior to the entry of judgment in a court of law or equity for enforcement or the appointment of a receiver hereunder, all sums payable under the Junior Lien Trust Agreement (except the principal and interest on Junior Lien Bonds which have not reached their stated maturity dates and which are due and payable solely by reason of that declaration of acceleration), plus interest (to the extent permitted by law) on any overdue installments of interest at the rate borne by the Junior Lien Bonds in respect of which such Event of Default shall have occurred, shall have been duly paid or provided for by deposit with the Trustee or Paying Agents and all existing defaults shall have been made good, then and in every such case the Trustee must waive that Event of Default and its consequences and must rescind and annul that declaration, but no such waiver and rescission shall extend to or affect or impair any rights consequent on any subsequent Event of Default. The Trustee must rescind and annul any declaration of acceleration of maturity of the Junior Lien Bonds upon the rescission by the Senior Lien Trustee of any declaration of acceleration of the Senior Lien Bonds under the Senior Lien Trust Agreement.

Holders of not less than a majority in aggregate principal amount of Junior Lien Bonds then Outstanding have the right with the consent of each Credit Provider not then in default on its obligations with respect to the Junior Lien Bonds, at any time, by instruments in writing executed and delivered to the Trustee, to direct the method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of the Junior Lien Trust Agreement, or for the appointment of a receiver or any other proceedings under the Junior Lien Trust Agreement; provided that (a) such direction will not be otherwise than in accordance with the provisions of law and of the Junior Lien Trust Agreement, (b) the Trustee will be indemnified as provided in the Junior Lien Trust Agreement, and (c) a Credit Provider will have no rights with respect to the enforcement of remedies against itself.

After payment of the costs and expenses of the proceedings resulting in the collection of such moneys and of the fees, expenses, liabilities and advances incurred or made by the Trustee or receiver, all moneys received by the Commission, Trustee or receiver pursuant to any right given or action taken under the provisions of the Junior Lien Trust Agreement shall be applied as described in subparagraphs (a) through (c) below.

(a) Unless the principal of all the Junior Lien Bonds has become or has been declared due and payable pursuant to the Junior Lien Trust Agreement, all such moneys shall be applied as follows:

First: To the payment, to the persons entitled thereto, of all installments of interest then due on the Junior Lien Bonds (or reimbursement of Credit Providers for interest payments made pursuant to Junior Lien Credit Facilities), in the order of the dates of maturity of the installments of that interest and beginning with the earliest such date, and if the amount available is not sufficient to pay in full any particular installment, then to the payment thereof ratably according to the amounts due on that installment, without any discrimination or privilege except as to any difference in the respective rates of interest specified in the Junior Lien Bonds;

Second: To the payment, to the persons entitled thereto, of the unpaid principal of any of the Junior Lien Bonds (or reimbursement of Credit Providers for principal payments made pursuant to Junior Lien Credit Facilities) which has become due (other than Bonds previously called for redemption for the payment of which moneys are held pursuant to the provisions of the Junior Lien Trust Agreement), whether at stated maturity, by redemption or pursuant to any mandatory sinking fund requirements, in the order of their due dates and beginning with the earliest due date, with interest on those Junior Lien Bonds from the respective dates upon which they become due, and if the amount available shall not be sufficient to pay in full all Junior Lien Bonds (and reimburse in full Credit Providers for principal payments made pursuant to a Junior Lien Credit Facility) due on any particular date, together with such interest, then to the payment thereof ratably according to the amount of principal due on that date, without discrimination or privilege; and

Third: To the payment of all other obligations of the Commission to Credit Providers.

(b) If the principal of all the Junior Lien Bonds has become due or has been declared due and payable pursuant to the Junior Lien Trust Agreement, all such moneys will be applied to the payment of the principal and interest then due and unpaid upon the Junior Lien Bonds (and reimbursement of Credit Providers for principal and interest payments made pursuant to Junior Lien Credit Facilities), without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Junior Lien Bond over any other Junior Lien Bond, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or privilege except as to any difference in the respective rates of interest specified in the Junior Lien Bonds and then to the payment of all other obligations of the Commission to Credit Providers.

(c) If the principal of all the Junior Lien Bonds has been declared due and payable pursuant to the Junior Lien Trust Agreement, and if that declaration thereafter has been rescinded and annulled under the provisions of the Junior Lien Trust Agreement, then, subject to the provisions described in clause (b) in the event that the principal of all the Junior Lien Bonds shall later become due and payable, the moneys will be deposited in the Junior Lien Debt Service Fund and applied in accordance with the provisions of the Junior Lien Trust Agreement.

Whenever all Junior Lien Bonds and interest thereon and all obligations of the Commission to Credit Providers have been paid under the provisions of the Junior Lien Trust Agreement, and all expenses and charges of the Trustee, Registrars, Authenticating Agents, Tender Agents, Paying Agents and other agents appointed pursuant to the Junior Lien Trust Agreement and all expenses payable from the Operation, Maintenance and Administrative Expenses Account have been paid, any balance remaining in the Junior Lien Debt Service Fund will be paid as the Commission directs or provides, and otherwise to the general revenue fund of the State.

Whenever all Senior Lien Bonds and interest thereon and all obligations of the Commission and other expenses have been paid under the provisions of the Senior Lien Master Trust Agreement, the Commission will direct or provide for any balance remaining in the Senior Lien Debt Service Fund be paid to the Trustee for application in accordance with the Junior Lien Trust Agreement.

No Holder has any right to institute any suit, action or proceeding for the enforcement of the Junior Lien Trust Agreement or for the execution of any trust thereof or for the appointment of a receiver or any other remedy hereunder unless (a) an Event of Default has occurred and is continuing, (b) that Holder shall previously have given to the Trustee written notice of that Event of Default, (c) the Holders of at least 25 percent in aggregate principal amount of Junior Lien Bonds then Outstanding have made a written request to the Trustee and afforded the Trustee reasonable opportunity either to proceed to exercise the powers granted in the Junior Lien Trust Agreement or to institute such action, suit or proceeding in its own name and have also offered to the Trustee indemnity as provided in the Junior Lien Trust Agreement and (d) the Trustee thereafter fails or refuses to exercise the powers granted in the Junior Lien Trust Agreement or to institute such action, suit or proceeding in its own name.

The Trustee may at any time in its discretion, but only with the consent of any Credit Providers providing a Junior Lien Credit Facility in connection with affected Junior Lien Bonds and not then in default of its obligations with reference to such Junior Lien Bonds, waive any Event of Default and its consequences, and rescind any declaration of maturity of principal, and must do so, with the consent of any Credit Providers providing a Junior Lien Credit Facility in connection with affected Junior Lien Bonds, upon the written request of the Holders of not less than a majority in aggregate principal amount of all the Junior Lien Bonds then Outstanding in respect of which the Event of Default exists. However, there shall not be so waived any Event of Default described in clauses (a) or (b) of the first paragraph under the caption "EXHIBIT A-2 - GLOSSARY OF TERMS AND SUMMARY OF THE JUNIOR LIEN TRUST AGREEMENT - Events of Default and Remedies," or such declaration in connection therewith rescinded, unless at the time of that waiver or rescission payments of all sums payable under the Junior Lien Trust Agreement (except the principal and interest on Junior Lien Bonds which have not reached their stated maturity dates and which are due and payable solely by reason of that declaration of acceleration), plus interest, to the extent permitted by law, on any overdue installments of interest at the rate borne by the Junior Lien Bonds in respect of which such Event of Default shall have occurred, have been made or provided for. In case of any such waiver or rescission, or in case any proceeding taken by the Trustee on account of any such Event of Default is discontinued or abandoned or determined adversely, then and in every such case the Commission, the Trustee, any Financial Institution and the Holders must be restored to their respective positions and rights under the Junior Lien Trust Agreement. No such waiver or rescission will extend to any subsequent or other default or Event of Default, or impair any right consequent thereon.

All rights, powers and remedies provided in the Junior Lien Trust Agreement may be exercised only to the extent that such exercise does not conflict with the Senior Lien Trust Agreement or impair the rights of the holders of the Senior Lien Bonds.

Junior Lien Supplemental Trust Agreements

The Commission and the Trustee, without the consent of or notice to any of the Holders, may enter into agreements supplemental to the Junior Lien Trust Agreement for any one or more of the following purposes: (a) to cure any ambiguity, inconsistency or formal defect or omission in the Junior Lien Trust Agreement; (b) to grant to or confer upon the Trustee for the benefit of the Holders or any Credit Provider any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Holders or any Credit Provider (to the extent not contrary to the interests of Holders) or the Trustee; (c) to subject additional revenues or receipts to the pledge of the Junior Lien Trust Agreement; (d) to add to the covenants and agreements of the Commission contained in the Junior Lien Trust Agreement other covenants and agreements thereafter to be observed for the protection of the Holders or Credit Providers (to the extent not contrary to the interests of Holders), or to surrender or limit any right, power or authority reserved to or conferred upon the Commission in the Junior Lien Trust Agreement, including without limitation the limitation of rights of redemption so that in certain instances Junior Lien Bonds of different series will be redeemed in some prescribed relation to one another; (e) to evidence any succession to the Commission and the assumption by that successor of the covenants and agreements of the Commission contained in the Junior Lien Trust Agreement and the Junior Lien Bonds; (f) in connection with the issuance of a Series of Junior Lien Bonds in forms other than fully registered Junior Lien Bonds and for amendments of the Junior Lien Trust Agreement relating to Junior Lien Bonds and the rights of the Holders of Junior Lien Bonds issued in those forms not inconsistent with the provisions of the Junior Lien Trust Agreement applying to the rights of owners of fully registered Junior Lien Bonds and Credit Providers, if in the opinion of Bond Counsel those provisions would not result in the interest on any of the Junior Lien Bonds Outstanding becoming subject to federal income taxation; (g) to permit the exchange of Junior Lien Bonds, at the option of the Holder, for coupon Junior Lien Bonds of the same series payable to bearer, in an aggregate principal amount not exceeding the unmatured and unredeemed principal amount of the predecessor Junior Lien Bonds, bearing interest at the same rate or rates (or determined in the same manner) and maturing on the same date or dates, with coupons attached representing all unpaid interest due or to become due thereon if, in the opinion of Bond Counsel, that exchange would not result in the interest on any of the Junior Lien Bonds Outstanding becoming subject to federal income taxation; (h) to permit the use of a book entry system to identify the owner of an interest in a Junior Lien Bond, whether that Junior Lien Bond was formerly, or could be, evidenced by a physical security;

(i) to permit the Trustee to comply with any obligations imposed upon it by law; (j) to specify further the duties and responsibilities of, and to define further the relationship among, the Trustee, the Registrar and any Authenticating Agents or Paying Agents; (k) to achieve compliance of the Junior Lien Trust Agreement with any applicable federal securities or tax law; (l) to permit any other amendment which, in the judgment of the Trustee, is not to the prejudice of the Trustee or the Holders; and (m) to authorize the issuance of a Series of Junior Lien Bonds in accordance with the provisions of the Junior Lien Trust Agreement.

The Holders of not less than a majority in aggregate principal amount of the Junior Lien Bonds then Outstanding (exclusive of Junior Lien Bonds then held or owned by the Commission) to be affected thereby have the right, from time to time, to consent to and approve the execution by the Commission and the Trustee of such other Junior Lien Supplemental Trust Agreements for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained in the Junior Lien Trust Agreement. However, the Junior Lien Trust Agreement does not permit: (a) without the consent of the Holder of each Junior Lien Bond so affected, an extension of the maturity of the principal of or the interest on any Junior Lien Bond, or a reduction in the principal amount of any Junior Lien Bond or the rate of interest or redemption premium thereon, or a reduction in the amount or extension of the time of any payment required by any mandatory sinking fund requirements or mandatory redemption requirements, or (b) without the consent of the Holders of all of the Junior Lien Bonds then Outstanding, a reduction in the aggregate principal amount of the Junior Lien Bonds required for consent to that Junior Lien Supplemental Trust Agreement.

Where consent of the Holders is required, the Junior Lien Trust Agreement contains procedures for notice to the Holders and for the execution and filing of the requisite consents. Any consent is to be binding upon the Holders of the Junior Lien Bonds giving that consent and upon any subsequent Holders of those Junior Lien Bonds and of any Junior Lien Bonds issued in exchange therefor (whether or not the subsequent Holders have notice thereof). However, the consent may be revoked by the Holder of such Junior Lien Bonds who gave consent or by subsequent Holders thereof by filing with the Trustee, prior to the execution by the Trustee of the Junior Lien Supplemental Trust Agreement, a written revocation. If the Holders of the required percentage in aggregate principal amount of the Junior Lien Bonds Outstanding have consented to and approved the execution thereof, no Holder of any Junior Lien Bond has any right to object to the execution of that Junior Lien Supplemental Trust Agreement or to any of the terms and provisions contained in or to the operation of that Junior Lien Supplemental Trust Agreement, or in any manner to question the propriety of the execution of, or to enjoin or restrain the Trustee or the Commission from executing, or from taking any action pursuant to the provisions of, that Junior Lien Supplemental Trust Agreement.

The terms of the Junior Lien Trust Agreement or any Junior Lien Supplemental Trust Agreement may be modified or altered in any respect with the consent of the Commission, any Credit Providers and the Holders of all the Outstanding Junior Lien Bonds.

Senior Lien Supplemental Trust Agreements

The Commission covenants in the Junior Lien Trust Agreement that so long as any Junior Lien Bonds remain Outstanding it will not execute any Senior Lien Supplemental Trust Agreement that would (i) modify or amend Section 2.03 of the Senior Lien Master Trust Agreement except in a manner that, in the sole reasonable judgment of the Junior Lien Trustee, would not materially and adversely affect the rights of the Holders of the Junior Lien Bonds, or (ii) modify or amend the Senior Lien Master Trust Agreement in a manner that would conflict with Section 4.17 of the Junior Lien Trust Agreement or would otherwise create a new payment or deposit obligation (including an amendment or modification that would increase an existing payment or deposit obligation) of the Commission on a parity with or prior to the payments required under paragraphs (a) through (e) of Section 4.08 of the Senior Lien Master Trust Agreement. The foregoing does not prevent the Commission from issuing additional Senior Lien Bonds in compliance with Article II of the Senior Lien Master Trust Agreement as in effect at the time of such issuance.

Defeasance

If the Commission pays or causes to be paid to the Holders of the Outstanding Junior Lien Bonds all principal, premium, if any, and interest due or to become due thereon and all obligations of the Commission to Credit Providers, and provision is made for paying all other sums payable under the Junior Lien Trust Agreement by the Commission, then and in that event the Junior Lien Trust Agreement will cease, determine and become null and void, and the covenants, agreements and other obligations of the Commission under the Junior Lien Trust Agreement will be discharged, released and satisfied.

Junior Lien Bonds will be deemed to have been paid or caused to be paid if the Trustee holds, in trust for and irrevocably committed thereto, sufficient moneys, or moneys and Defeasance Obligations certified by a Verification Agent to be of such maturities and interest payment dates and to bear such interest as will, without further investment or reinvestment of either the principal amount thereof or the interest earnings therefrom, be sufficient for the payment, at their maturity or redemption date, of all principal, premium, if any, and interest thereon to the date of maturity or redemption, as the case may be; provided that if any Junior Lien Bonds are to be redeemed prior to their maturity, notice of that redemption must be duly given or provision satisfactory to the Trustee must be duly made for the giving of that notice.

Trustee

The Trustee, The Huntington National Bank, Columbus, Ohio, is a national banking association organized and existing under the laws of the United States of America and is authorized to exercise corporate trust power in the State. The Trustee has undertaken to perform such duties as are specifically set forth in the Junior Lien Trust Agreement. The Trustee has agreed to exercise the rights and powers vested in it by the Trust Agreement and use the same degree of care and skill in their exercise as would an ordinarily prudent corporate trustee under a trust agreement securing securities of a public agency. The Trustee is not required to take any action under the Junior Lien Trust Agreement (except with respect to giving certain notices of the occurrence of an Event of Default) until it has received a satisfactory indemnity bond for its expenses and to protect it against liability, other than liability resulting from its negligence or willful misconduct. The permissive rights of the Trustee to do things under the Junior Lien Trust Agreement will not be construed as a duty.

The Huntington National Bank is among the banks that serve as depositories for Commission and State moneys, and also serves as the Senior Lien Trustee under the Senior Lien Trust Agreement.

EXHIBIT B-1

FORM OF BOND COUNSEL OPINION FOR 2020 SENIOR LIEN BONDS

February 13, 2020

To: Ohio Turnpike and Infrastructure Commission
Berea, Ohio

Citigroup Global Markets Inc.
New York, New York,
as Representative of the Underwriters named
in the Bond Purchase Agreement dated January 29, 2020
with the Ohio Turnpike and Infrastructure Commission

We have served as bond counsel to our client the Ohio Turnpike and Infrastructure Commission (the "Commission") in connection with the issuance by the Commission of $81,465,000 State of Ohio Turnpike Revenue Refunding Bonds, 2020 Series A (Federally Taxable) (the "2020 Series A Bonds"), dated the date of this letter.

The 2020 Series A Bonds are issued pursuant to Chapter 5537 of the Ohio Revised Code and the Amended and Restated Master Trust Agreement (Eighteenth Supplemental Trust Agreement) dated as of April 8, 2013, between the Commission and The Huntington National Bank, as Trustee, as amended and supplemented by various supplemental trust agreements, including the Twenty-Third Supplemental Trust Agreement dated as of February 1, 2020 (collectively, the "Trust Agreement"). Capitalized terms not otherwise defined in this letter are used as defined in the Trust Agreement.

In our capacity as bond counsel, we have examined the transcript of proceedings relating to the issuance of the 2020 Series A Bonds, a copy of the signed and authenticated 2020 Series A Bond of the first maturity, the Trust Agreement and such other documents, matters and law as we deem necessary to render the opinions set forth in this letter.

Based on that examination and subject to the limitations stated below, we are of the opinion that under existing law:

1. The Trust Agreement is a valid and binding obligation of the Commission, enforceable in accordance with its terms, and the 2020 Series A Bonds are valid and binding obligations of the State of Ohio (the "State"), enforceable in accordance with their terms.

2. The 2020 Series A Bonds constitute special obligations of the State, and the principal of and interest on (collectively, "debt service") the 2020 Series A Bonds, together with debt service on any other obligations issued and outstanding on a parity with the 2020 Series A Bonds as provided in the Trust Agreement, are payable solely from and secured by the System Pledged Revenues and certain funds established under the Trust Agreement, as provided in the Trust Agreement. The payment of debt service on the 2020 Series A Bonds is not secured by an obligation or pledge of any money raised by taxation, and the 2020 Series A Bonds do not represent or constitute a general obligation or a pledge of the faith and credit of the Commission, the State or any of its political subdivisions.

3. Interest on the 2020 Series A Bonds is not excluded from gross income for federal income tax purposes. Interest on, and any profit made on the sale, exchange or other disposition of, the 2020 Series A Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. We express no opinion as to any other tax consequences regarding the 2020 Series A Bonds.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions, we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined and (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the Commission.

We express no opinion herein regarding the priority of the lien on System Pledged Revenues or other funds created by the Trust Agreement.

The rights of the owners of the 2020 Series A Bonds and the enforceability of the 2020 Series A Bonds and the Trust Agreement are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally; to the application of equitable principles, whether considered in a proceeding at law or in equity; to the exercise of judicial discretion; and to limitations on legal remedies against public entities.

No opinions other than those expressly stated herein are implied or shall be inferred as a result of anything contained in or omitted from this letter. The opinions expressed in this letter are stated only as of the time of its delivery and we disclaim any obligation to revise or supplement this letter thereafter. Our engagement as bond counsel in connection with the original issuance and delivery of the 2020 Series A Bonds is concluded upon delivery of this letter.

Respectfully submitted,

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EXHIBIT B-2

FORM OF BOND COUNSEL OPINION FOR 2020 JUNIOR LIEN BONDS

February 13, 2020

To: Ohio Turnpike and Infrastructure Commission
Berea, Ohio

Citigroup Global Markets Inc.
New York, New York,
as Representative of the Underwriters named
in the Bond Purchase Agreement dated January 29, 2020
with the Ohio Turnpike and Infrastructure Commission

We have served as bond counsel to our client the Ohio Turnpike and Infrastructure Commission (the "Commission") in connection with the issuance by the Commission of $376,850,000 State of Ohio Turnpike Junior Lien Revenue Refunding Bonds, 2020 Series A (Infrastructure Projects) (Federally Taxable) (the "2020 Series A Bonds"), dated the date of this letter.

The 2020 Series A Bonds are issued pursuant to Chapter 5537 of the Ohio Revised Code and the Junior Lien Master Trust Agreement dated as of August 1, 2013 between the Commission and The Huntington National Bank, as Trustee, as supplemented by various supplemental trust agreements, including the Third Supplemental Junior Lien Trust Agreement dated as of February 1, 2020 (collectively, the "Junior Lien Trust Agreement"). Capitalized terms not otherwise defined in this letter are used as defined in the Junior Lien Trust Agreement.

In our capacity as bond counsel, we have examined the transcript of proceedings relating to the issuance of the 2020 Series A Bonds, a copy of the signed and authenticated 2020 Series A Bond of the first maturity, the Junior Lien Trust Agreement and such other documents, matters and law as we deem necessary to render the opinions set forth in this letter.

Based on that examination and subject to the limitations stated below, we are of the opinion that under existing law:

1. The Junior Lien Trust Agreement is a valid and binding obligation of the Commission, enforceable in accordance with its terms, and the 2020 Series A Bonds are valid and binding obligations of the State of Ohio (the "State"), enforceable in accordance with their terms.

2. The 2020 Series A Bonds constitute special obligations of the State, and the principal of and interest on (collectively, "debt service") the 2020 Series A Bonds, together with debt service on any other obligations issued and outstanding on a parity with the 2020 Series A Bonds as provided in the Junior Lien Trust Agreement, are payable solely from and secured by the System Pledged Revenues and Junior Lien Special Funds. The pledge of and lien on the System Pledged Revenues created by the Trust Agreement is subordinate to the pledge of and lien on the System Pledged Revenues created by the Senior Lien Trust Agreement securing Senior Lien Bonds, all as defined in the Junior Lien Trust Agreement. The

payment of debt service on the 2020 Series A Bonds is not secured by an obligation or pledge of any money raised by taxation, and the 2020 Series A Bonds do not represent or constitute a general obligation or a pledge of the faith and credit of the Commission, the State or any of its political subdivisions.

3. Interest on the 2020 Series A Bonds is not excluded from gross income for federal income tax purposes. Interest on, and any profit made on the sale, exchange or other disposition of, the 2020 Series A Bonds are exempt from all Ohio state and local taxation, except the estate tax, the domestic insurance company tax, the dealers in intangibles tax, the tax levied on the basis of the total equity capital of financial institutions, and the net worth base of the corporate franchise tax. We express no opinion as to any other tax consequences regarding the 2020 Series A Bonds.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions, we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined and (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the Commission.

We express no opinion herein regarding the priority of the lien on System Pledged Revenues or Junior Lien Special Funds.

The rights of the owners of the 2020 Series A Bonds and the enforceability of the 2020 Series A Bonds and the Junior Lien Trust Agreement are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally; to the application of equitable principles, whether considered in a proceeding at law or in equity; to the exercise of judicial discretion; and to limitations on legal remedies against public entities.

No opinions other than those expressly stated herein are implied or shall be inferred as a result of anything contained in or omitted from this letter. The opinions expressed in this letter are stated only as of the time of its delivery and we disclaim any obligation to revise or supplement this letter thereafter. Our engagement as bond counsel in connection with the original issuance and delivery of the 2020 Series A Bonds is concluded upon delivery of this letter.

Respectfully submitted,

EXHIBIT C

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION BASIC FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2018 AND INDEPENDENT AUDITORS' REPORT FOR PLANTE & MORAN, PLLC

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Independent Auditor's Report

To the Commission Members
Ohio Turnpike and Infrastructure Commission

Report on the Financial Statements

We have audited the accompanying basic financial statements of the Ohio Turnpike and Infrastructure Commission (the "Commission"), a component unit of the State of Ohio, as of and for the years ended December 31, 2018 and 2017 and the related notes to the financial statements, which collectively comprise the Commission'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 an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit 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 opinion.

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the financial position of the Ohio Turnpike and Infrastructure Commission as of December 31, 2018 and 2017 and the changes in its financial position and its cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1 to the basic financial statements, the Commission adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, as of January 1, 2018. Our opinion is not modified with respect to this matter.

To the Commission Members
Ohio Turnpike and Infrastructure Commission

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedule of net pension/OPEB liability, and the schedule of employer contributions, as outlined in the table of contents, 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, which 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.

Plante & Moran, PLLC

April 30, 2019

Management's Discussion and Analysis

This section of the annual financial report presents the Commission's unaudited discussion and analysis of its financial position and the results of operations for the year ended December 31, 2018 and 2017. Please read it in conjunction with the Chairman's Letter, Executive Director's Year in Review, Letter of Transmittal, and History and General Information at the front of this report, and the Commission's financial statements and notes, which follow this section.

Financial Highlights

2018

- The total number of vehicles that traveled the Ohio Turnpike in 2018 decreased 1.6 percent and vehicle miles traveled decreased 0.1 percent from the levels reached in 2017. Commercial vehicle miles traveled increased while passenger car vehicle miles traveled decreased in 2018. This caused the percentage of commercial vehicle miles traveled to total vehicle miles traveled to increase from 33.6 percent in 2017 to 35.1 percent in 2018. The increase in commercial vehicle miles traveled, combined with a 2.7 percent toll rate increase implemented on January 1, 2018, resulted in an increase in toll revenue of approximately $10.2 million or 3.5 percent.
- Operating expenses increased by $300,000 or 0.1 percent from 2017. Excluding non-cash GASB 68 pension expense and GASB 75 other post-employment benefit expense, operating expenses increased by $5.1 million or 2.6 percent from 2017.
- The Commission incurred $48.1 million in Infrastructure Project reimbursement expenses in 2018 for previously approved Infrastructure Project costs that were expended by the Ohio Department of Transportation ("ODOT").
- In 2018, the Commission made capital improvements totaling approximately $112.9 million.

2017

- The total number of vehicles that traveled the Ohio Turnpike in 2017 increased 0.6 percent and vehicle miles traveled increased less than 0.1 percent from the levels reached in 2016. The slight increase in vehicle miles traveled, along with a 2.7 percent toll rate increase implemented on January 1, 2017, resulted in an increase in toll revenue of approximately $7.4 million or 2.6 percent.
- Operating expenses increased by $15.1 million or 7.8 percent from 2016. Excluding non-cash GASB 68 pension expense, operating expenses increased by $5.2 million or 2.8 percent from 2016.
- The Commission incurred $106.4 million in Infrastructure Project reimbursement expenses in 2017 for previously approved Infrastructure Project costs that were expended by the Ohio Department of Transportation ("ODOT").
- In 2017, the Commission made capital improvements totaling approximately $97.7 million.

Condensed Statement of Net Position Information *(Dollars in Thousands)*

	12/31/18	12/31/17	12/31/16
Assets and Deferred Outflows of Resources			
Cash and Investments	$ 977,094	$ 439,493	$ 536,837
Other Noncapital Assets	28,121	25,260	25,724
Capital Assets, Net	1,511,324	1,479,446	1,461,604
Total Assets	**2,516,539**	**1,944,199**	**2,024,165**
Deferred Outflows of Resources	33,560	53,540	42,584
Total Assets and Deferred Outflows of Resources	**$ 2,550,099**	**$ 1,997,739**	**$ 2,066,749**
Liabilities, Deferred Inflows of Resources, and Net Position			
Liabilities			
Current Liabilities	$ 157,042	$ 111,569	$ 122,762
Long-Term Liabilities	2,199,200	1,673,089	1,663,121
Total Liabilities	**2,356,242**	**1,784,658**	**1,785,883**
Deferred Inflows of Resources	19,720	896	1,885
Total Liabilities and Deferred Inflows of Resources	**2,375,962**	**1,785,554**	**1,787,768**
Net Position			
Net Investment in Capital Assets	965,814	981,297	930,174
Restricted	218,803	172,358	170,287
Unrestricted	(1,010,480)	(941,470)	(821,480)
Total Net Position	**174,137**	**212,185**	**278,981**
Total Liabilities, Deferred Inflows of Resources and Net Position	**$ 2,550,099**	**$ 1,997,739**	**$ 2,066,749**

Assets

The condensed statements of net position information on the previous page show that cash and investments increased by $537.6 million in 2018. This increase was primarily due to the receipt of $566.6 million in bond proceeds from the issuance of Junior and Senior Lien bonds offset by $48.1 million in payments to ODOT for reimbursement of funds spent on Infrastructure Projects. See Note 10 of the financial statements for more detailed information on Infrastructure Project payments. The $2.9 million increase in other noncapital assets was due to a $2.0 million increase in receivables, a $0.6 million increase in inventories, and a $0.3 million increase in net pension asset. The increase in accounts receivable was primarily due to an increase in investment income receivable due to an increase in cash and investments. Inventories of ice melting materials increased due to mild winter weather in December 2018.

Cash and investments decreased by $97.3 million in 2017. This decrease was primarily the result of $106.4 million in payments to ODOT for reimbursement of funds spent on Infrastructure Projects. See Note 10 of the financial statements for more detailed information on Infrastructure Project payments. The $0.4 million decrease in other noncapital assets was due to a $1.2 million increase in receivables, a $1.3 million decrease in inventories, and a $0.3 million decrease in prepaid expenses. The increase in accounts receivable was primarily due to an increase in tolls receivable due to an increase in *E-ZPass®* use. Inventories of ice melting materials decreased due to a decrease in the cost of salt from high prices in 2015 and the beginning of 2016 which were due to the unusually severe winter weather in 2014.

Capital assets increased by $31.9 million in 2018 as the result of capital improvements of approximately $112.9 million, property disposals of $0.4 million and depreciation expense of $80.6 million. The 2018 capital improvements were primarily for the resurfacing of 151.0 lane miles of roadway, the full depth replacement of 22.9 lane miles and the rehabilitation of 4 bridges. Capital assets increased by $17.8 million in 2017 as the result of capital improvements of approximately $97.7 million, property disposals of $3.7 million and depreciation expense of $76.1 million. The 2017 capital improvements were primarily for the resurfacing of 102.9 lane miles of roadway, the full depth replacement of 31.8 lane miles and the rehabilitation of 16 bridges. See Note 4 of the financial statements for more detailed information on the Commission's capital assets.

Deferred outflows of resources decreased by $20.0 million in 2018 as a result of a $2.0 million decrease in unamortized refunding gains / losses, a $3.0 million increase in deferred OPEB outflows of resources and a $21.0 million decrease in deferred pension outflows of resources. Deferred outflows of resources increased by $10.0 million in 2017 as a result of a $1.1 million increase in unamortized refunding gains / losses and a $9.9 million increase in deferred pension outflows of resources. The increase in the unamortized refunding gains / losses is due to the 2017 advance refunding of certain 2009 Series A and 2010 Series A Turnpike revenue bonds.

Liabilities

Current liabilities increased by $45.5 million in 2018 primarily as a result of a $39.7 million increase in bond interest and principal payable, a $2.1 million increase in contamination remediation costs payable, a $1.3 million increase in unearned revenue, a $1.1 million increase in contractor retainage payable, a $0.7 million increase in accounts payable, and a $0.5 million increase in amounts payable to other toll agencies. The increase in bond interest and principal payable includes $20.7 million in 2009A Senior Lien bonds that will be redeemed on February 15, 2019. Current liabilities decreased by $11.2 million in 2017 primarily as a result of a $13.8 million decrease in infrastructure funds payable to ODOT and a $1.4 million decrease in contractor retainage payable. These decreases were partially offset by a $1.4 million increase in unearned revenue, a $0.9 million increase in accounts payable, a $0.6 million increase in bond interest and principal payable, and a $0.4 million increase in amounts payable to other toll agencies.

An increase in long-term liabilities of $526.1 million in 2018 was primarily the result of an increase in bond principal of $456.5 million, an increase in unamortized bond premiums of $61.0 million, and the recording of the net OPEB liability of $41.1 million offset by a $32.0 million decrease in net pension liability and a $0.5 million decrease in other non-current liabilities. The increase in bond principal was due to the issuance of $499.8 million principal amount of 2018 Series A Turnpike revenue bonds and an increase in principal on capital appreciation bonds of $22.4 million offset by principal payments on the existing bonds. See Note 6, Long-term Obligations, for more information on the bonds. An increase in long-term liabilities of $10.0 million in 2017 was primarily the result of a $23.7 million increase in net pension liability, an increase in principal on capital appreciation bonds of $21.1 million, and an increase of $11.9 million in unamortized bond premiums offset by principal payments on outstanding bonds of $32.5 million and a decrease in bond principal of $12.0 million due to the advance refunding of certain 2009 Series A and 2010 Series A Turnpike revenue bonds. See Note 6, Long-term Obligations, for more information on the advance refunding.

As described in Note 7 of the financial statements, the Commission has commitments for capital projects and major repairs and replacements of $93.8 million as of December 31, 2018. It is anticipated that these commitments will be financed from the Commission's cash balances. However, at the discretion of the Commission, additional bonds may be issued in the future to finance a portion of these costs.

The Ohio Turnpike and Infrastructure Commission's credit rating is among the highest of all the toll roads in the world. The agency ratings as of December 31, 2018 are as follows:

Agency	Senior Lien Bond Rating	Junior Lien Bond Rating
Standard & Poor's	AA-	A+
Fitch Ratings	AA	A+
Moody's Investors Service	Aa2	Aa3

Net Position

Net investment in capital assets decreased by $15.5 million during 2018 as a result of an increase in debt related to capital assets of $82.2 million less $34.8 million of bond principal payments combined with the $31.9 million increase in capital assets. The net position restricted for debt service of $210.0 million is restricted for debt service in accordance with provisions of the Commission's Master Trust Agreement. The $37.7 million increase in net position restricted for debt service during 2018 is the result of an additional $31.2 million deposited into the debt service reserve fund accounts in conjunction with the 2018 bond issuance and additional amounts required to be deposited into the debt service accounts for future debt service payments. The $8.7 million in net position restricted for capital projects represents the remaining amount of senior lien bond proceeds which are required to be spent on Turnpike capital projects. Unrestricted net position decreased $69.0 million from 2017, of which $37.7 million of the decrease was the result of a cumulative effect restatement of beginning net position due to the implementation of GASB Statement No. 75. Please refer to Note 1, Summary of Significant Accounting Policies, for additional information regarding the GASB Statement No. 75 implementation and the impact on the financial statements. The remaining decrease in unrestricted net position is due to a $0.4 million decrease in net position as a result of 2018 expenses that exceeded revenues, combined with the transfer of unrestricted net position to net investment in capital assets and restricted net position. It is anticipated that expenses will continue to exceed revenues for the next few years as the Commission funds the remaining state infrastructure projects. See Note 9 for a description of State Infrastructure Payments.

Net investment in capital assets increased by $51.1 million during 2017 as a result of $32.5 million of bond principal payments combined with the $17.8 million increase in capital assets. The restricted net position of $172.4 million is restricted for debt service in accordance with provisions of the Commission's Master Trust Agreement. The $2.1 million increase in restricted net position during 2017 is the result of an additional $2.1 million restricted for debt service. The $120.0 million decrease in unrestricted net position is due to a $66.8 million decrease in net position as a result of 2017 expenses that exceeded revenues combined with the transfer of unrestricted net position to net investment in capital assets and restricted net position. Expenses exceeded revenues in 2017, primarily due to the $106.4 million in expense incurred for Ohio Department of Transportation projects. See Note 9 for a description of State Infrastructure Payments. It is anticipated that expenses will continue to exceed revenues for the next few years as the Commission funds the remaining state infrastructure projects.

Changes in Net Position Information *(Dollars in Thousands)*

	Years Ended		
	12/31/18	**12/31/17**	**12/31/16**
Revenues:			
Operating Revenues:			
Tolls	$ 306,040	$ 295,799	$ 288,439
Special Toll Permits	3,529	3,423	3,427
Concessions	17,314	17,104	16,325
Other	6,166	5,581	4,976
Nonoperating Revenues:			
State Fuel Tax Allocation	3,459	3,023	2,834
Investment Earnings	16,709	4,657	4,617
Total Revenues	**353,217**	**329,587**	**320,618**
Expenses:			
Operating Expenses:			
Administration and Insurance	12,462	12,596	11,484
Maintenance of Roadway and Structures	42,791	43,872	39,596
Services and Toll Operations	58,451	61,433	55,383
Traffic Control, Safety, Patrol, and Communications	13,634	13,718	14,487
Depreciation	80,650	76,095	71,663
Nonoperating Expenses:			
Payments to the Ohio Department of Transportation	48,074	106,408	279,368
Interest Expense	97,675	78,848	79,108
Loss (Gain) on Disposals / Write-Offs of Capital Assets	(123)	3,413	(127)
Total Expenses	**353,614**	**396,383**	**550,962**
Change in Net Position	**(397)**	**(66,796)**	**(230,344)**
Net Position - Beginning of Year	212,185	278,981	509,325
Cumulative effect of change in accounting principle	(37,651)	–	–
Net position at beginning of year, as restated	**174,534**	**278,981**	**509,325**
Net Position - End of Year	**$ 174,137**	**$ 212,185**	**$ 278,981**

Toll revenues are the major source of funding for the Ohio Turnpike and Infrastructure Commission. Passenger car traffic volume decreased by 2.9 percent and commercial traffic volume increased by 3.2 percent during 2018. Passenger car traffic volume increased by 0.3 percent and commercial traffic volume increased by 1.7 percent during 2017.

Traffic Volume (vehicles in thousands):	2018	2017	2016
Passenger Cars	42,322	43,598	43,472
Commercial Vehicles	11,987	11,615	11,425
Total	**54,309**	**55,213**	**54,897**

The number of miles traveled by passenger cars decreased by 2.3 percent while the miles traveled by commercial vehicles increased by 4.3 percent during 2018. Toll rates were increased for all classes of vehicles by 2.7 percent on January 1, 2018. The toll rate increase was offset by the decrease in passenger car vehicle miles traveled and the effect of increased *E-ZPass* use, which resulted in a decrease in toll revenue from passenger cars of approximately $1.2 million or 0.9 percent. Revenues from commercial vehicles increased $11.4million or 6.8 percent in 2018 as a result of the toll rate increase and the increase in commercial vehicle miles traveled.

The number of miles traveled by passenger cars decreased by 0.6 percent while the miles traveled by commercial vehicles increased by 1.3 percent during 2017. Toll rates were increased for all classes of vehicles by 2.7 percent on January 1, 2017. The toll rate increase was partially offset by the decrease in passenger car vehicle miles traveled and the effect of increased *E-ZPass* use, which resulted in an increase in toll revenue from passenger cars of approximately $1.5 million or 1.2 percent. Revenues from commercial vehicles increased $5.9 million or 3.6 percent in 2017 as a result of the toll rate increase and the increase in commercial vehicle miles traveled.

Toll Revenues (dollars in thousands):	2018	2017	2016
Passenger Cars	$ 126,365	$ 127,537	$ 126,063
Commercial Vehicles	179,675	168,262	162,376
Total	**$ 306,040**	**$ 295,799**	**$ 288,439**

Total expenses decreased by $42.8 million or 10.8 percent in 2018 compared to the prior year. Fringe benefit expenses, which are allocated to each area based on wages, decreased $6.7million from 2017 due primarily to a $8.3 million decrease in pension expenses and a $1.3 million decrease in employee health benefit costs offset by a $3.4 million increase in OPEB expense. See Note 8, Pension and Other Postemployment Benefits (OPEB) Plans, for more information on pension and OPEB costs. The 1.1 percent decrease in Administration and Insurance expense was primarily due to the decrease in fringe benefit costs. The 2.5 percent decrease in Maintenance of Roadway and Structures expense is the result of lower fringe benefit costs and lower salt costs due to a decrease in the price of salt partially offset by higher contamination remediation costs. The 4.9 percent decrease in Services and Toll Operations expense is due primarily to the decrease in fringe benefit costs, lower wages due to a reduction in personnel and lower utility costs partially offset by higher credit card fees. The Commission made $48.1 million in payments to ODOT in 2018 to pay for Infrastructure Projects, a decrease of $58.3 million from 2017. See Note 9, Payments for State Infrastructure Projects, for more information on these payments. Interest expense increased $18.8 million in 2018 primarily due to the issuance of the 2018 Series A bonds. See Note 6, Long-Term Obligations for more information on the outstanding debt.

Total expenses decreased by $154.6 million or 28.1 percent in 2017 compared to the prior year. Fringe benefit expenses, which are allocated to each area based on wages, increased $10.9 million from 2016 due primarily to a $9.9 million increase in pension expenses and a $0.7 million increase in employee health benefit costs. See Note 8, Pension and Other Postemployment Benefits (OPEB) Plans, for more information on pension costs. The 9.7 percent increase in Administration and Insurance expense was primarily due to the increase in fringe benefit costs. The 10.8 percent increase in Maintenance of Roadway and Structures expense is the result of higher fringe benefit costs partially offset by lower contamination remediation costs and lower salt costs due to a decrease in the price of salt from the high levels in 2015. The 10.9 percent increase in Services and Toll Operations expense is due primarily to the increase in fringe benefit costs, higher wage rates and higher credit card fees. The Commission made $106.4 million in payments to ODOT in 2017 to pay for Infrastructure Projects, a decrease of $173.0 million from 2016. See Note 9, Payments for State Infrastructure Projects, for more information on these payments. Interest expense decreased $0.3 million in 2017 primarily due lower interest expense due to a reduction in outstanding debt from 2016 partially offset by a decrease in capitalized interest on construction projects.

Statements of Net Position *(In Thousands)*

	12/31/18	12/31/17
Assets and Deferred Outflows of Resources		
Current Assets:		
Unrestricted Current Assets:		
Cash and Cash Equivalents	$ 44,247	$ 103,631
Investments, at Fair Value	213,801	89,308
Accounts Receivable	18,994	18,547
Inventories	5,082	4,428
Other	1,622	1,628
Total Unrestricted Current Assets	283,746	217,542
Restricted Current Assets:		
Cash and Cash Equivalents	16,621	12,276
Investments, at Fair Value	94,833	57,023
Other	1,955	453
Total Restricted Current Assets	113,409	69,752
Total Current Assets	397,155	287,294
Noncurrent Assets:		
Restricted Investments, at Fair Value	607,592	177,255
Net Pension Asset	468	204
Capital Assets, Net	1,511,324	1,479,446
Total Noncurrent Assets	2,119,384	1,656,905
Total Assets	2,516,539	1,944,199
Deferred Outflows of Resources	33,560	53,540
Total Assets and Deferred Outflows of Resources	$ 2,550,099	$ 1,997,739
Liabilities, Deferred Inflows of Resources, and Net Position		
Current Liabilities:		
Current Liabilities Payable from Unrestricted Assets:		
Accounts Payable	$ 15,553	$ 14,772
Accrued Wages and Benefits	3,783	3,858
Compensated Absences	4,805	4,896
Claims and Judgments	1,390	1,569
Contamination Remediation Costs Payable	2,914	783
Other Liabilities	14,061	12,783
Toll Agency Payable	5,019	4,557
Total Current Liabilities Payable from Unrestricted Assets	47,525	43,218
Current Liabilities Payable from Restricted Assets:		
Contract Retainage Payable	4,122	3,021
Infrastructure Funds Payable to Ohio Department of Transportation	8,721	8,354
Interest Payable	30,974	22,201
Bonds Payable	65,700	34,775
Total Current Liabilities Payable from Restricted Assets	109,517	68,351
Total Current Liabilities	157,042	111,569
Noncurrent Liabilities:		
Net Pension Liability	59,687	91,648
Net OPEB Liability	41,058	–
Compensated Absences	5,786	5,668
Claims and Judgments	468	672
Contamination Remediation Costs Payable	81	442
Bonds Payable	2,092,120	1,574,659
Total Noncurrent Liabilities	2,199,200	1,673,089
Total Liabilities	2,356,242	1,784,658
Deferred Inflows of Resources	19,720	896
Total Liabilities and Deferred Inflows of Resources	2,375,962	1,785,554
Net Position:		
Net Investment in Capital Assets	965,814	981,297
Restricted For Debt Service	210,083	172,358
Restricted For Capital Projects	8,720	–
Unrestricted	(1,010,480)	(941,470)
Total Net Position	174,137	212,185
Total Liabilities, Deferred Inflows of Resources, and Net Position	$ 2,550,099	$ 1,997,739

The accompanying notes are an integral part of these financial statements.

Statements of Revenues, Expenses and Changes in Net Position *(In Thousands)*

	For the Years Ended	
	12/31/18	**12/31/17**
OPERATING REVENUES:		
Pledged as Security for Revenue Bonds:		
Tolls	$ 306,040	$ 295,799
Special Toll Permits	3,529	3,423
Concessions	16,637	16,418
Leases and Licenses	1,282	1,169
Other Revenues	4,879	4,406
Unpledged Revenues:		
Concessions	677	686
Other Revenues	5	6
Total Operating Revenues	333,049	321,907
OPERATING EXPENSES:		
Administration and Insurance	12,462	12,596
Maintenance of Roadway and Structures	42,791	43,872
Services and Toll Operations	58,451	61,433
Traffic Control, Safety, Patrol, and Communications	13,634	13,718
Depreciation	80,650	76,095
Total Operating Expenses	207,988	207,714
Operating Income	125,061	114,193
NONOPERATING REVENUES / (EXPENSES):		
State Fuel Tax Allocation	3,459	3,023
Investment Earnings Pledged as Security for Revenue Bonds	7,924	3,100
Investment Earnings - Unpledged	8,785	1,557
Gain / (Loss) on Disposals of Capital Assets	123	(3,413)
Ohio Department of Transportation Infrastructure Project Expense	(48,074)	(106,408)
Interest Expense	(97,675)	(78,848)
Total Nonoperating Revenues / (Expenses)	(125,458)	(180,989)
Decrease in Net Position	(397)	(66,796)
Net Position -- Beginning of Year	212,185	278,981
Cumulative effect of change in accounting principle	(37,651)	–
Net Position -- Beginning of Year, as Restated	174,534	278,981
Net Position -- End of Year	$ 174,137	$ 212,185

The accompanying notes are an integral part of these financial statements.

Statements of Cash Flows *(In Thousands)*

	For the Years Ended	
	12/31/18	12/31/17
Cash Flows from Operating Activities:		
Cash Received from Customers	$ 326,197	$ 315,221
Cash Received from Other Operating Revenues	7,971	7,156
Cash Payments for Employee Salaries, Wages and Fringe Benefits	(75,472)	(75,871)
Cash Payments for Goods and Services	(42,208)	(39,521)
Net Cash Provided by Operating Activities	216,488	206,985
Cash Flows from Noncapital Financing Activities:		
Payments to the Ohio Department of Transportation	(47,707)	(120,249)
Proceeds from Sale of Bonds - Par Amount	425,965	–
Proceeds from Sale of Bonds - Premium / (Discount)	56,980	–
Bond Issuance Costs	(1,716)	–
State Fuel Tax Allocation	3,459	3,023
Net Cash Provided by / (Used in) Noncapital Financing Activities	436,981	(117,226)
Cash Flows from Capital and Related Financing Activities:		
Proceeds from Sale of Assets	504	331
Proceeds from Sale of Bonds - Par Amount	73,880	114,670
Proceeds from Sale of Bonds - Premium / (Discount)	9,777	22,748
Acquisition and Construction of Capital Assets	(109,001)	(96,517)
Bond Issuance Costs	(319)	(626)
Bond Advanced Refunding - Amount Below / (Above) Par Paid	–	(10,648)
Bond Advanced Refunding - Par Amount Paid	–	(126,660)
Principal Paid on Bonds	(34,775)	(32,520)
Interest Paid on Bonds	(71,127)	(62,664)
Net Cash Used in Capital and Related Financing Activities	(131,061)	(191,886)
Cash Flows from Investing Activities:		
Interest Received on Investments	13,791	4,927
Proceeds from Sale and Maturity of Investments	345,225	287,370
Purchase of Investments	(936,463)	(147,482)
Net Cash Provided by / (Used in) Investing Activities	(577,447)	144,815
Net Increase / (Decrease) in Cash and Cash Equivalents	(55,039)	42,688
Cash and Cash Equivalents -- Beginning of Year	115,907	73,219
Cash and Cash Equivalents -- End of Year	$ 60,868	$ 115,907
Reconciliation of Operating Income to Net Cash Provided by Operating Activities:		
Operating Income	$ 125,061	$ 114,193
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:		
Depreciation	80,650	76,095
Change in Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources:		
Accounts Receivable	(447)	(1,277)
Inventories	(654)	1,343
Other Assets	20	298
Net Pension Asset	(264)	(26)
Deferred Pension and OPEB Outflows of Resources	17,992	(9,819)
Accounts Payable	781	924
Accrued Wages and Benefits	(75)	296
Net Pension Liability	(31,961)	23,692
Net OPEB Liability	3,407	–
Compensated Absences	27	140
Claims and Judgments	(383)	443
Contamination Remediation Costs Payable	1,770	(170)
Other Liabilities	1,740	1,842
Deferred Pension and OPEB Inflows of Resources	18,824	(989)
Net Cash Provided by Operating Activities	$ 216,488	$ 206,985
NONCASH INVESTING AND CAPITAL ACTIVITIES:		
Decrease in Fair Value of Investments	$(317)	$(490)
Disposals / Write-Offs of Capital Assets	(381)	(3,744)
Increase in Capital Assets due to Capitalized Interest Costs	(2,807)	(2,521)
(Increase) / Decrease in Capital Assets due to Change in Contracts Payable	(1,101)	1,356
Gain from Capital Asset Trade-in	–	(3)
Amortization of Bond Premiums and Refunding Losses Classified as Interest Expense	3,818	1,387
Accretion in Capital Appreciation Bonds	22,364	21,085

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements

For the Years ended December 31, 2018 and 2017

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

In accordance with the provisions of Governmental Accounting Standards Board ("GASB") Statements, the accompanying financial statements include only the accounts and transactions of the Ohio Turnpike and Infrastructure Commission ("Commission", "Ohio Turnpike" or "Turnpike"). Under the criteria specified in these GASB Statements, the Commission is considered a component unit of the State of Ohio because the Governor appoints the voting members of the Commission and the State is financially accountable for the Commission since the State has the potential to receive a financial benefit from the Commission. The Commission has no component units.

Basis of Accounting

The accompanying financial statements were prepared in accordance with accounting principles generally accepted in the United States of America, as prescribed by GASB. The statements were prepared using the economic resources measurement focus and the accrual basis of accounting. All transactions are accounted for in a single proprietary (enterprise) fund.

Adoption of New Accounting Pronouncements

The GASB issued GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, which requires governments providing other postemployment benefit (OPEB) plans to recognize their unfunded OPEB obligation as a liability for the first time, and to more comprehensively and comparably measure the annual costs of OPEB benefits. The statement also enhances accountability and transparency through revised note disclosures and required supplementary information (RSI). In accordance with the statements, the Commission has reported a change in accounting principle adjustment to unrestricted net position of $37,651,000, which is the net of the net OPEB liability and related deferred outflows of resources as of January 1, 2018. December 31, 2017 amounts have not been restated to reflect the impact of GASB No. 75 because the information is not available to calculate the impact on OPEB expense for the fiscal year ended December 31, 2017.

In March 2017, GASB issued Statement No. 85, *Omnibus 2017*. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2017. The implementation of this Statement had no major impact on the Commission's financial statements or disclosures.

In May 2017, GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2017. The implementation of this Statement had no impact on the Commission's financial statements or disclosures.

New Accounting Pronouncements

In November 2016, GASB issued Statement No. 83, *Certain Asset Retirement Obligations*. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2018. The Commission has not determined the impact, if any, that this Statement will have on its financial statements or disclosures.

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2018. The Commission has not determined the impact, if any, that this Statement will have on its financial statements or disclosures.

In June 2017, GASB issued Statement No. 87, *Leases*. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2019. The Commission has not determined the impact, if any, that this Statement will have on its financial statements or disclosures.

In March 2018, GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2018. The Commission has not determined the impact, if any, that this Statement will have on its financial statements or disclosures.

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2019. The Commission has not determined the impact, if any, that this Statement will have on its financial statements or disclosures.

In August 2018, GASB issued Statement No. 90, *Majority Equity Interests*. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2018. The Commission has not determined the impact, if any, that this Statement will have on its financial statements or disclosures.

Net Position Classifications

GASB Statement No. 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments*, require the classification of net position into the following three components:

- Net Investment in Capital Assets – consisting of capital assets, net of accumulated depreciation and reduced by the outstanding balance of borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- Restricted – consisting of net position, the use of which is limited by external constraints imposed by creditors (such as through debt covenants), grantors, contributors, laws or regulations of other governments, constitutional provisions or enabling legislation.
- Unrestricted – consisting of net position that does not meet the definition of "net investment in capital assets" or "restricted".

Cash Equivalents
Cash equivalents are defined as highly liquid investments, including overnight repurchase agreements, demand deposits, negotiated order of withdrawal accounts, money market funds and certificates of deposit maturing within 90 days of purchase. Commission investments in overnight repurchase agreements, demand deposits and money market mutual funds, which have remaining maturities of one year or less, are carried at amortized cost, which approximates fair value.

Investments
In the accompanying Statements of Net Position, investments are comprised of certificates of deposit maturing beyond 90 days of purchase, U.S. instrumentality securities and shares in the State Treasury Asset Reserve of Ohio ("STAR Ohio") investment pool. Commission investments in STAR Ohio are carried at amortized cost, which approximates fair value. All other Commission investments are recorded at fair value based on quoted market prices with all related investment income, including the change in the fair value of investments and realized gains and losses, reflected in the Commission's net income.

STAR Ohio is an investment pool created pursuant to Ohio statutes and is managed by the Treasurer of the State of Ohio. The Commission does not own identifiable securities of the pool; rather, it participates as a shareholder of the pool. STAR Ohio is not registered with the Securities and Exchange Commission as an investment company, but does operate in a manner consistent with the provisions of GASB Statement No. 79, *Certain Investment Pools and Pool Participants*. The fair value of the Commission's position in the pool is the same as the value of the pool shares. For the years ended December 31, 2018 and 2017, there were no limitations on any participant withdrawals due to redemption notice periods, liquidity fees, or redemption gates.

Accounts Receivable
Accounts receivable consist of various tolls, charges and amounts due from individuals, commercial companies and other agencies and concession revenues receivable from operators of food and fuel concessions at the Commission's service plazas. Toll accounts receivable from *E-ZPass* post-paid customers are guaranteed by a surety bond. Reserves for uncollectible accounts receivable are established based on specific identification and historical experience.

Inventories
Inventories consist of materials and supplies that are valued at cost (first-in, first-out). The cost of inventory items is recognized as an expense when used.

Property and Depreciation
Property, roadway, and equipment with an original cost of $1,000 or more are capitalized and reported at cost, net of accumulated depreciation. The costs of normal maintenance and repairs are charged to operations as incurred.

Depreciation is computed using the straight-line method over the estimated useful lives of the assets as follows:

Description	Years
Buildings, roadway and structures	40
Bridge painting and guardrail	20
Roadway resurfacing	8-12
Building improvements	10
Machinery, equipment and vehicles	5-10

Depreciation expense is included in the Statements of Revenues, Expenses and Changes in Net Position.

Capitalization of Interest
Capitalized interest is included in the cost of constructed assets and is depreciated on the straight-line basis over the estimated useful lives of such assets. The amount of interest capitalized is based on the cost of assets under construction and the interest cost of eligible borrowings, less investment earnings, if any, on the related bond proceeds. Interest of $2,807,000 and $2,521,000 was capitalized for the years ended December 31, 2018 and 2017, respectively.

Deferred Outflows of Resources
In addition to assets, the statements of net position report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expense/expenditure) until then. The Commission's deferred outflows of resources are related to the net pension liability, net OPEB liability and unamortized refunding gains/losses on debt. See Notes 5 and 8 for more information.

Bond Issuance Costs, Discounts / Premiums, and Advance Debt Refundings
Bond issuance costs are expensed as incurred. Unamortized bond discounts and premiums are netted against long-term debt. Bond discounts and premiums are amortized to interest expense over the lives of the applicable bonds. Unamortized advance debt refunding losses are classified as deferred outflows of resources and are amortized to interest expense over the shorter of the life of the new debt or the defeased debt.

Compensated Absences
Vacation leave accumulates for all full-time employees of the Commission, ranging from 10 to 25 days per year, and any unused amounts are paid upon retirement or termination. The Commission records a liability for all vacation leave earned.

Sick leave accumulates for all full-time employees of the Commission, at the rate of 15 days per year with additional amounts for overtime worked. A portion of unused sick leave may be payable at the request of an employee or upon termination or retirement. The Commission uses the vesting method to calculate its liability for unused sick leave, to the extent that it is probable that benefits will be paid in cash.

Pensions
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 Ohio Public Employees Retirement System (OPERS) Pension Plan, and additions to/deductions from OPERS' fiduciary net position, have been determined on the same basis as they are reported by OPERS. OPERS uses the economic resources measurement focus and the full-accrual basis of accounting. Contribution revenue is recorded as contributions are due, pursuant to legal requirements. Benefit payments

(including refunds of employee contributions) are recognized as an expense when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Other Postemployment Benefit Costs

For purposes of measuring the net other postemployment benefit (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 OPERS pension plan and additions to/deductions from OPERS' fiduciary net position have been determined on the same basis as they are reported by OPERS. OPERS uses the economic resources measurement focus and the full accrual basis of accounting. For this purpose, OPERS recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Deferred Inflows of Resources

In addition to liabilities, the statements of net position report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until that time. The Commission reports deferred inflows of resources for certain pension-related and OPEB-related amounts, such as the difference between projected and actual earnings of the plan's investments. More detailed information can be found in Notes 5 and 8.

Operating / Nonoperating Activities

Operating revenues and expenses, as reported on the Statements of Revenues, Expenses and Changes in Net Position, are those that result from exchange transactions such as payments received for providing services and payments made for goods and services received.

Tolls, the principal source of Commission operating revenues, are recognized as vehicles use the Turnpike. For toll calculation purposes, through September 30, 2009 vehicles were assigned to one of eleven weight-based classifications. Tolls were assessed based on the vehicle classification and the distance traveled. Effective October 1, 2009, the Commission implemented a new toll collection system that includes electronic toll collection in the form of *E-ZPass*, which is interoperable among a network of 38 northeastern U.S. toll agencies. Concurrent with the implementation of the new toll collection system and *E-ZPass*, the Commission converted its weight-based vehicle classification system to a methodology that classifies vehicles based upon the number of axles and the height over the first two axles. Axle-based toll rates were implemented along with *E-ZPass* on October 1, 2009. As an incentive to utilize electronic tolling, toll rates are lower for customers who use *E-ZPass* than for those who pay at the toll booths.

In addition to tolls, the other major source of operating revenue is concessions from the operation of the Commission's service plazas. Concession revenues arise from contracts entered into for the operation of the restaurants and service stations on the Turnpike. The operators pay fees based in part on percentages of gross sales (as defined in the respective contracts). As provided by Ohio law, the Commission also receives nonoperating revenue of five cents in Ohio fuel taxes for each gallon of fuel sold at the Commission's service plazas. The Commission's revenues are recognized when the operators make the sales. All other revenues are recognized when earned.

Operating expenses include the costs of operating and maintaining the Commission's roadway, bridges, toll plazas, maintenance buildings, service plazas and other facilities, as well as administrative expenses and depreciation on capital assets. The Commission's practice is to first apply restricted resources when expenditures are made for purposes for which both unrestricted and restricted resources are available.

Nonoperating revenue includes revenue from activities that have the characteristics of nonexchange transactions, such as the allocation of Ohio fuel tax revenues, investment earnings, payments to the Ohio Department of Transportation ("ODOT"), interest expense and gains/losses on disposals/write-offs of capital assets. The implication is that such activities are derived from more passive efforts related to the acquisition of the revenue, rather than the earning of it.

Use of 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 amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

(2) DEPOSITS AND INVESTMENTS

Deposits

The Commission had $398,000 and $330,000 in undeposited cash on hand at December 31, 2018 and December 31, 2017, respectively. The carrying amount of the Commission's deposits as of December 31, 2018 was $2,950,000 as compared to bank balances of $4,126,000. The carrying amount of the Commission's deposits as of December 31, 2017 was $1,586,000 as compared to bank balances of $3,220,000. All of the bank balances were covered by federal depository insurance or collateralized in the Ohio Pooled Collateral System.

Investments

The Commission categorizes its fair value measurements at fair value within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted market prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

As of December 31, 2018 the Commission's investments had the following recurring fair value measurements (in thousands):

Investment Type	2018	Level 1	Level 2
Federal National Mortgage Association	$ 106,014	$ –	$ 106,014
Farmer Mac	99,726	–	99,726
Federal Home Loan Bank	98,993	–	98,993
Federal Home Loan Mortgage Corporation	81,174	–	81,174
Federal Farm Credit Bureau	78,185	–	78,185
United State Treasury Notes	75,885	–	75,885
United State Treasury Bills	10,828	–	10,828
Total Investments	**$ 550,805**	**$ –**	**$ 550,805**

As of December 31, 2017 the Commission's investments had the following recurring fair value measurements (in thousands):

Investment Type	2017	Level 1	Level 2
Federal National Mortgage Association	$ 109,623	$ –	$ 109,623
Federal Farm Credit Bureau	78,741	–	78,741
Federal Home Loan Mortgage Corporation	39,701	–	39,701
Federal Home Loan Bank	9,752	–	9,752
United State Treasury Notes	7,393	–	7,393
Total Investments	**$ 245,210**	**$ –**	**$ 245,210**

Investments in STAR Ohio of $365,421,000 in 2018 and $78,376,000 in 2017 are valued at amortized cost, which approximates fair value.

The U.S. Instrumentalities of $550,805,000 in 2018 and $245,210,000 in 2017 are valued using a matrix pricing model technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

None of the securities with maturities between one and five years are callable within one year from December 31, 2018. Federal Farm Credit Bureau securities totaling $46,488,000, Federal National Mortgage Association securities totaling $99,640,000, Federal Home Loan Mortgage Corporation securities totaling $1,129,000, and Federal Home Loan Bank securities totaling $17,941,000 with maturities between one and five years, are callable within one year from December 31, 2017.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As a means of limiting exposure to fair value losses arising from rising interest rates, the Commission's Investment Policy provides that selection of investment maturities be consistent with projected cash requirements and the objective of avoiding the forced sale of securities prior to maturity. In addition, the Commission's Investment Policy and Ohio law prescribe that all Commission investments mature within five years of purchase, unless the investment is matched to a specific obligation or debt of the Commission.

As of December 31, 2018, the Commission's investment balances (in thousands) and maturities, excluding call provisions, were as follows:

		Maturities (in Years)	
Investment Type	Fair Value	Less than 1	1-5
STAR Ohio*	$ 365,421	$ 365,421	$ –
Federal National Mortgage Association	106,014	81,334	24,680
Farmer Mac	99,726	49,831	49,895
Federal Home Loan Bank	98,993	50,004	48,989
Federal Home Loan Mortgage Corporation	81,174	31,420	49,754
Federal Farm Credit Bureau	78,185	78,185	–
United States Treasury Notes	75,885	75,885	–
Demand Deposit Accounts*	56,289	56,289	–
United States Treasury Bills	10,828	10,828	–
Money Market Mutual Funds*	1,314	1,314	–
Total Investments	**$ 973,829**	**$ 800,511**	**$ 173,318**

** Valued at amortized cost*

As of December 31, 2017, the Commission's investment balances (in thousands) and maturities, excluding call provisions, were as follows:

Investment Type	Fair Value	Maturities (in Years) Less than 1	1-5
Demand Deposit Accounts*	$ 112,746	$ 112,746	$ –
Federal National Mortgage Association	109,623	9,983	99,640
Federal Farm Credit Bureau	78,741	32,253	46,488
STAR Ohio*	78,376	78,376	–
Federal Home Loan Bank	39,701	21,760	17,941
Federal Home Loan Mortgage Corporation	9,752	8,623	1,129
United States Treasury Notes	7,393	7,393	–
Money Market Mutual Funds*	1,245	1,245	–
Total Investments	**$ 437,577**	**$ 272,379**	**$ 165,198**

** Valued at amortized cost*

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Commission's Investment Policy authorizes investments in obligations of the U.S. Treasury, U.S. agencies and instrumentalities, certificates of deposit, STAR Ohio, money market mutual funds, repurchase agreements and General Obligations of the State of Ohio rated AA or higher by a rating service. As of the Statements of Net Position dates, STAR Ohio, as well as the money market mutual funds in which the Commission had investments, were rated AAAm by Standard & Poor's.

Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of a counterparty to a transaction, the Commission will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Commission's Investment Policy requires that all deposits be secured by collateral held in safekeeping for the benefit of the Commission by a Federal Reserve Bank. The Commission's Investment Policy also requires that, excluding Debt Service Fund investments, all U.S. Treasury Obligations, U.S. Agency Obligations, U.S. Instrumentality Obligations, and General Obligations of the State of Ohio purchased by the Commission be held in third-party safekeeping for the benefit of the Commission at a bank or savings and loan association that is eligible to be a depository of public moneys under Section 135.04 of the Ohio Revised Code and that is also authorized under Ohio law to act as trustee for the safekeeping of securities.

On December 31, 2018, all Commission deposits and investments in demand deposit accounts were secured in the Ohio Pooled Collateral System. On December 31, 2017, all Commission deposits and investments in demand deposit accounts were fully secured by collateral held in joint custody accounts in the name of the Ohio Turnpike and Infrastructure Commission and the pledging financial institution at the Federal Reserve Bank of Boston, Massachusetts. Excluding Debt Service Fund investments, all U.S. Instrumentality Obligations held by the Commission were held in safekeeping for the benefit of the Commission by the Trust Department at Key Bank, Cleveland, Ohio as of December 31, 2018 and the Trust Department at Fifth Third Bank, Cincinnati, Ohio as of December 31, 2017. As of December 31, 2018 and December 31, 2017, Debt Service Fund investments in U.S. instrumentality securities with fair values totaling $238,460,000 and $186,392,000, respectively, were held by The Huntington National Bank ("Trustee") for the payment of interest and principal on the Commission's outstanding bonds as required by the Commission's Master Trust Agreement as amended and supplemented, see Note 6. Assets held by the Trustee as a custodial agent are considered legally separate from the other assets of The Huntington National Bank.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of investment in a single issuer. The Commission's Investment Policy provides that 100 percent of its average monthly portfolio may be invested in U.S. Treasury Obligations, fixed-rate non-callable U.S. Agency or Instrumentality Obligations, or collateralized overnight repurchase agreements. The Investment Policy further provides that a maximum of 50 percent of its average monthly portfolio may be invested in callable U.S. Agency or Instrumentality Obligations, STAR Ohio or certificates of deposit. The Investment Policy also provides that a maximum of 25 percent of its average monthly portfolio may be invested in variable-rate U.S. Agency or Instrumentality Obligations, uncollateralized repurchase agreements, general obligations of the State of Ohio and money market mutual funds. As of December 31, 2018, more than five percent of the Commission's portfolio was invested in demand deposit accounts and STAR Ohio as well as each of the following U.S. instrumentalities: Federal National Mortgage Association, Farmer Mac, Federal Farm Credit Bureau, Federal Home Loan Mortgage Corporation, Federal Home Loan Bank, United States Treasury Notes. As of December 31, 2017, more than five percent of the Commission's portfolio was invested in demand deposit accounts and STAR Ohio as well as each of the following U.S. instrumentalities: Federal National Mortgage Association, Federal Farm Credit Bureau, Federal Home Loan Mortgage Corporation, Federal Home Loan Bank, United States Treasury Notes.

(3) ACCOUNTS RECEIVABLE

The composition of unrestricted accounts receivable (in thousands) as of December 31, is summarized as follows:

	2018	2017
Tolls	$ 16,051	$ 15,433
Concessions	1,603	1,536
Fuel Tax Receivable	571	527
Other	911	1,599
Less: Allowance for Doubtful Accounts	(142)	(548)
Total Accounts Receivable	**$ 18,994**	**$ 18,547**

(4) CAPITAL ASSETS

Capital asset activity (in thousands) for the years ended December 31, 2018 and 2017 was as follows:

	Balance 12/31/17	Increases	Decreases	Balance 12/31/18
Capital Assets Not Being Depreciated:				
Land	$ 38,211	$ –	$ –	$ 38,211
Construction In Progress	23,464	109,542	(102,549)	30,457
Total Capital Assets Not Being Depreciated	61,675	109,542	(102,549)	68,668
Other Capital Assets:				
Roadway and Structures	1,884,643	96,995	(37,338)	1,944,300
Buildings and Improvements	516,982	3,007	(298)	519,691
Machinery and Equipment	91,901	5,917	(4,453)	93,365
Total Other Capital Assets at Historical Cost	2,493,526	105,919	(42,089)	2,557,356
Less Accumulated Depreciation for:				
Roadway and Structures	(799,071)	(57,723)	37,220	(819,574)
Buildings and Improvements	(206,392)	(15,985)	128	(222,249)
Machinery and Equipment	(70,292)	(6,942)	4,357	(72,877)
Total Accumulated Depreciation	(1,075,755)	(80,650)	41,705	(1,114,700)
Other Capital Assets, Net	1,417,771	25,269	(384)	1,442,656
Total Capital Assets, Net	**$ 1,479,446**	**$ 134,811**	**$ (102,933)**	**$ 1,511,324**

	Balance 12/31/16	Increases	Decreases	Balance 12/31/17
Capital Assets Not Being Depreciated:				
Land	$ 38,211	$ –	$ –	$ 38,211
Construction In Progress	18,161	92,328	(87,025)	23,464
Total Capital Assets Not Being Depreciated	56,372	92,328	(87,025)	61,675
Other Capital Assets:				
Roadway and Structures	1,898,768	81,299	(95,424)	1,884,643
Buildings and Improvements	512,137	5,096	(251)	516,982
Machinery and Equipment	88,921	5,986	(3,006)	91,901
Total Other Capital Assets at Historical Cost	2,499,826	92,381	(98,681)	2,493,526
Less Accumulated Depreciation for:				
Roadway and Structures	(838,529)	(52,249)	91,707	(799,071)
Buildings and Improvements	(190,893)	(15,750)	251	(206,392)
Machinery and Equipment	(65,172)	(8,096)	2,976	(70,292)
Total Accumulated Depreciation	(1,094,594)	(76,095)	94,934	(1,075,755)
Other Capital Assets, Net	1,405,232	16,286	(3,747)	1,417,771
Total Capital Assets, Net	**$ 1,461,604**	**$ 108,614**	**$ (90,772)**	**$ 1,479,446**

(5) DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

The composition of deferred outflows of resources (in thousands) as of December 31, is summarized as follows:

	2018	2017
Unamortized Refunding Gains/Losses	$ 15,198	$ 17,186
Deferred Pension Outflows of Resources	15,341	36,354
Deferred OPEB Outflows of Resources	3,021	–
Total Deferred Outflows of Resources	**$ 33,560**	**$ 53,540**

The composition of deferred inflows of resources (in thousands) as of December 31, is summarized as follows:

	2018	2017
Deferred Pension Inflows of Resources	$ 16,661	$ 896
Deferred OPEB Inflows of Resources	3,059	–
Total Deferred Outflows of Resources	**$ 19,720**	**$ 896**

(6) LONG-TERM OBLIGATIONS

In accordance with Ohio law and the Commission's Amended and Restated Master Trust Agreement ("Senior Lien Trust Agreement"), dated April 8, 2013, as amended by the Nineteenth through Twenty-second Supplemental Trust Agreements, and the Junior Lien Master Trust Agreement ("Junior Lien Trust Agreement"), dated August 1, 2013, as amended by the First and Second supplemental Junior Lien Trust Agreements (collectively, the "Trust Agreements") the Commission has issued revenue bonds payable solely from the Commission's System Pledged Revenues, as defined by the Trust Agreements. The bond proceeds have been used to either help fund the purchase or construction of capital assets, to refund other Turnpike revenue bonds or to fund infrastructure projects constructed by ODOT. Gross Pledged Revenues include tolls, special toll permits, certain realized investment earnings, appropriations from ODOT (if any), and revenue derived from leases, licenses, royalties, advertising, miscellaneous sales, fees, charges and certain concession revenues. The Commission's outstanding bonds do not constitute general obligations of the Commission or the State of Ohio. Neither the general credit of the Commission nor the State of Ohio is pledged for the payment of the bonds.

Under the terms of the Trust Agreements, the Commission covenants to charge and collect sufficient tolls in order that annual Gross Pledged Revenues equal at least the sum of the following: 1) annual operating, maintenance and administrative costs paid from Pledged Revenues; 2) required deposits to maintain an expense reserve account equal to one-twelfth of budgeted annual operating, maintenance and administrative costs paid from Pledged Revenues; 3) budgeted annual amounts for renewal and replacement costs; and 4) composite annual debt service on its outstanding bonds.

The Commission also covenants that its System Pledged Revenues (annual Gross Pledged Revenues less annual operating, maintenance and administrative costs paid from Pledged Revenues and the required annual deposit to the expense reserve account) will equal at least 120 percent of the composite annual net debt service on its outstanding bonds. The Commission also covenants that its System Pledged Revenues during the fiscal year immediately preceding the issuance of additional senior lien bonds, or during any 12 consecutive calendar months selected by the Commission out of the 15 consecutive calendar months immediately preceding such issuance, will equal at least 150 percent of the maximum annual debt service on its senior lien bonds then outstanding and the senior lien bonds proposed to be issued. The Commission also covenants that, based on reasonable assumptions, its System Pledged Revenues are projected to be at least 150 percent of composite annual debt service for the then current year and each successive year during which the junior lien bonds then outstanding, the senior lien bonds then outstanding, the junior lien bonds proposed to be issued and any senior lien bonds then proposed to be issued will be outstanding.

The Commission also covenants that prior to reducing any toll rates on other than a temporary basis, it will engage the services of an independent consultant to estimate the Commission's Gross Pledged Revenues for each year during which Commission bonds are scheduled to be outstanding and, based on these estimated revenues, the Commission covenants that its System Pledged Revenues will equal at least 150 percent of its net composite annual debt service for each year during which Commission bonds are scheduled to be outstanding. The Commission has reviewed its bond covenants and determined that it is in compliance for 2018 and 2017.

In addition, the Commission has, by resolution, declared its intention as a matter of policy to use its best efforts to maintain a ratio of System Pledged Revenues to net senior lien debt service of at least 200 percent. Other than in connection with the issuance of additional bonds or the implementation of a toll reduction on other than a temporary basis, the Commission has no obligation to meet such coverage levels or to maintain a policy of doing so, and the Commission may rescind that policy at any time.

The Senior Lien Trust Agreement requires the Commission to establish and maintain a Debt Service Reserve Account ("DSRA") equal to the maximum annual debt service on its outstanding senior lien bonds. The senior lien DSRA may be funded either with cash or one or more Reserve Account Credit Facilities obtained from an issuer that has been assigned one of the two highest ratings by at least two rating agencies. Due to the downgrade in the credit rating of the issuers of the Commission's Reserve Account Credit Facilities, the Commission has fully funded its DSRA with cash. Those funds were invested and are included in Investments, at Fair Value in restricted current assets.

The Junior Lien Trust Agreement requires the Commission to establish and maintain a DSRA equal to the average annual debt service on its outstanding junior lien bonds. The junior lien DSRA may be funded either with cash or one or more Reserve Account Credit Facilities obtained from an issuer that has been assigned one of the two highest ratings by at least two rating agencies. In connection with the issuance of its junior lien bonds, the Commission has deposited $110,294,000 of junior lien bond proceeds into its junior lien DSRA, which is restricted for debt service. Those funds were invested and are included in Investments, at Fair Value in restricted current assets.

On February 15, 2018, the Commission issued $73,880,000 par amount of State of Ohio Turnpike Revenue Bonds, 2018 Series A, pursuant to the Commission's Master Trust Agreement, as amended and supplemented, and the Twenty-Second Supplemental Trust Agreement dated February 15, 2018, for the purpose of funding Turnpike capital projects. On February 15, 2018, the Commission also issued $425,965,000 par amount of State of Ohio Turnpike Junior Lien Revenue Bonds, 2018 Series A, pursuant to the Commission's Junior Lien Master Trust Agreement, as amended and supplemented, and the Second Supplemental Junior Lien Trust Agreement dated February 15, 2018, for the purpose of funding Infrastructure Projects.

On September 28, 2017, the Commission took advantage of favorable interest rates, and issued $114,670,000 State of Ohio Turnpike Revenue Refunding Bonds, 2017 Series A, pursuant to the Commission's Master Trust Agreement, as amended and supplemented, and the Twenty-First Supplemental Trust Agreement dated September 1, 2017. The bonds were issued for the purpose of advance refunding $17,020,000 of the outstanding 2009 Series A Bonds and $109,640,000 of the outstanding 2010 Series A Bonds.

Proceeds of $137,418,420 along with $520,830 of debt service funds were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the refunded bonds. As of September 28, 2017, the refunded 2009 Series A Bonds and the refunded 2010 Series A Bonds are considered defeased and the liability for these bonds has been removed from the Commission's financial statements.

The Commission decreased its total future debt service payments by $18,791,016 as a result of the refunding. The Commission also incurred an economic gain (the difference between the present values of the old and new debt service payments) of $16,202,071.

Changes in long-term obligations (in thousands) for 2018 and 2017 are as follows:

	Balance 12/31/17	Increases	Decreases	Balance 12/31/18	Amounts Due Within One Year
Revenue Bonds Payable:					
Principal Payable	$ 1,558,812	$ 522,209	$ (34,775)	$ 2,046,246	$ 65,700
Unamortized Premiums - Net	50,622	66,757	(5,805)	111,574	–
Total Revenue Bonds Payable	1,609,434	588,966	(40,580)	2,157,820	65,700
Net Pension Liability	91,648	–	(31,961)	59,687	–
Net OPEB Liability	–	41,058	–	41,058	–
Compensated Absences	10,564	5,739	(5,712)	10,591	4,805
Claims and Judgments	2,241	11,641	(12,024)	1,858	1,390
Contamination Remediation	1,225	1,902	(132)	2,995	2,914
Totals	**$ 1,715,112**	**$ 649,306**	**$ (90,409)**	**$ 2,274,009**	**$ 74,809**

	Balance 12/31/16	Increases	Decreases	Balance 12/31/17	Amounts Due Within One Year
Revenue Bonds Payable:					
Principal Payable	$ 1,582,237	$ 135,755	$ (159,180)	$ 1,558,812	$ 34,775
Unamortized Premiums - Net	38,772	22,748	(10,898)	50,622	–
Total Revenue Bonds Payable	1,621,009	158,503	(170,078)	1,609,434	34,775
Net Pension Liability	67,956	23,692	–	91,648	–
Compensated Absences	10,424	5,886	(5,746)	10,564	4,896
Claims and Judgments	1,798	13,571	(13,128)	2,241	1,569
Contamination Remediation	1,395	134	(304)	1,225	783
Totals	**$ 1,702,582**	**$ 201,786**	**$ (189,256)**	**$ 1,715,112**	**$ 42,023**

Revenue bonds, payable (in thousands) as of December 31, 2018, are summarized as follows:

	Original Amount	Average Yield	Bonds Payable
Senior Lien Debt			
1998 Series A:			
Serial Bonds maturing through 2021	$ 168,180		$ 71,640
Term Bonds due 2024 and 2026	130,395		130,395
Total 1998 Series A	298,575	4.86%	202,035
2009 Series A:			
Serial Bonds maturing through 2024	137,205	4.79%	34,135
2010 Series A:			
Serial Bonds maturing 2021	93,920		2,295
Term Bonds due 2031	37,370		19,355
	131,290	4.07%	21,650
2013 Series A:			
Term Bonds due 2048	73,495	4.95%	73,495
2017 Series A:			
Serial Bonds maturing through 2031	114,670	1.85%	114,145
2018 Series A:			
Serial Bonds maturing through 2046	73,880	3.92%	73,880
Total Senior Lien Principal Issued/Outstanding	829,115	3.51%	519,340

	Original Amount	Average Yield	Bonds Payable
Junior Lien Debt			
2013 Series A:			
Serial Bonds maturing 2019 through 2033	256,195		256,195
Term Bonds due 2039	113,075		113,075
Term Bonds due 2048	340,000		340,000
Capital Appreciation Bonds maturing 2036 through 2043	140,543		195,125
Convertible Capital Appreciation Bonds maturing 2034 through 2036	145,000		196,546
	994,813	5.47%	1,100,941
2018 Series A:			
Serial Bonds maturing through 2046	425,965	3.56%	425,965
Total Junior Lien Principal Issued/Outstanding	1,420,778	5.02%	1,526,906
Total Principal Issued/Outstanding	$ 2,249,893	4.84%	$ 2,046,246

Minimum principal and interest payments (in thousands) on revenue bonds payable are as follows:

Year	Principal	Interest	Total
2019	$ 65,700	$ 80,911	$ 146,611
2020	29,750	78,431	108,181
2021	36,675	76,669	113,344
2022	41,545	74,745	116,290
2023	47,655	79,650	127,305
2024 - 2028	272,065	392,758	664,823
2029 - 2033	423,380	308,769	732,149
2034 - 2038	358,167	411,564	769,731
2039 - 2043	297,209	467,355	764,564
2044 - 2048	474,100	58,177	532,277
Totals	**$ 2,046,246**	**$ 2,029,029**	**$ 4,075,275**

Pollution Remediation Obligation

The Commission has recorded a liability for pollution (including contamination) remediation obligations, which are obligations to address current or potential detrimental effects of existing pollution by participating in remediation activities such as site assessments and cleanups. The liability includes estimated contamination remediation costs to collect and dispose of slag leachate as required by the Ohio Environmental Protection Agency estimated at $1,942,000 and $305,000 as of December 31, 2018 and 2017, respectively and estimated contamination remediation costs to remediate soil and underground water contamination from underground petroleum storage tanks as required by the Ohio Bureau of Underground Storage Tank Regulations of $1,053,000 and $920,000 as of December 31, 2018 and 2017, respectively. The liability was estimated using the expected cash flow technique. The pollution remediation obligation is an estimate and is subject to changes resulting from price increases or decreases, technology, or changes in applicable laws or regulations.

(7) COMMITMENTS AND CONTINGENCIES

Commitments

The Commission has commitments as of December 31, 2018 and 2017 of approximately $93,845,000 and $17,514,000, respectively for capital projects as well as major repairs and replacements. It is anticipated that these commitments will be financed from the Commission's cash balances. However, at the discretion of the Commission, additional bonds may be issued in the future to finance a portion of these costs.

In addition, the Commission has issued purchase orders for goods and services not received amounting to approximately $8,364,000 and $5,753,000 as of December 31, 2018 and 2017, respectively.

Litigation

The nature of the Commission's operations sometimes subjects the Commission to litigation, typically from daily operations of vehicles, equipment and from customer incidents. The management and the General Counsel for the Commission are of the opinion that any unfavorable outcome of such claims in excess of insurance coverage will not result in a material adverse effect on the Commission's financial position or results of operations.

Environmental Matters

Due to the nature of operations at the Commission's service plazas and maintenance buildings, which include vehicle fueling facilities, the Commission may encounter underground fuel leaks or spills. The Commission, however, participates in the Petroleum Underground Storage Tank Release Compensation Board, which limits the Commission's financial liability to $55,000 per incident, up to a maximum reimbursement of $1,000,000 per incident or $2,000,000 per calendar year. The Commission is unaware of any incidents that will exceed these limits.

Collective Bargaining

Approximately 429 full-time, nonsupervisory, field employees in the Commission's Toll Operations and Maintenance Departments, approximately 193 part-time, nonsupervisory, field employees in the Toll Operations Department and approximately nine full-time radio operators are represented by the Teamsters Local Union No. 436, affiliated with the International Brotherhood of Teamsters.

In May 2017, the Commission ratified a three-year collective bargaining agreement with the full-time employees that is effective for the period January 1, 2017 through December 31, 2019. The agreement includes annual wage increases of 2 percent effective January 1, 2017, January 14, 2018 and January 13, 2019 for full-time employees. The Commission also has reached an agreement with the part-time employees for the same time period of January 1, 2017 through December 31, 2019 which also includes annual wage increases of 2 percent effective January 1, 2017, January 14, 2018 and January 13, 2019. The Commission also has reached an agreement with the radio operator employees for the same time period of January 1, 2017 through December 31, 2019 which includes annual wage increases of 3 percent effective January 1, 2017, December 17, 2017 and January 13, 2019.

(8) PENSION PLAN AND OTHER POST EMPLOYMENT BENEFITS (OPEB) PLANS

Plan Description

The Commission participates in the Ohio Public Employees Retirement System (OPERS), statewide, cost-sharing, multiple-employer defined benefit public employee retirement system governed by the Ohio Revised Code (ORC) that covers substantially all employees of the Commission. The system provides retirement, survivor, and disability benefits to plan members and their beneficiaries. The system also provides post-employment health care benefits (including Medicare B premiums) to retirees and beneficiaries who elect to receive those benefits.

OPERS administers three separate pension plans as follows:

A) The Traditional Pension Plan ("TP") – a cost-sharing, multiple-employer defined benefit pension plan.

B) The Member-Directed Plan ("MD") – a defined contribution plan in which the member invests both member and employer contributions (employer contributions vest over five years at 20 percent per year). Under the MD Plan, members accumulate retirement assets equal to the value of member and (vested) employer contributions plus any investment earnings.

C) The Combined Plan ("CO") – a cost-sharing, multiple-employer defined benefit pension plan. Under the CO Plan, OPERS invests employer contributions to provide a formula retirement benefit similar in nature to, but less than, the TP Plan benefit. Member contributions, the investment of which are self-directed by the members, accumulate retirement assets in a manner similar to the MD Plan.

The OPERS provides retirement, disability, survivor and death benefits and annual cost-of-living adjustments to members of the TP and CO Plans. Members of the MD Plan do not qualify for ancillary benefits.

Authority to establish and amend benefits is provided in Chapter 145 of the Ohio Revised Code ("ORC"). The OPERS issues a stand-alone financial report. Interested parties may obtain a copy by visiting https://www.opers.org/financial/reports.shtml, making a written request to the OPERS, 277 East Town Street, Columbus, Ohio 43215-4642 or by calling (800) 222-7377.

Pension Benefits

Plan benefits are established under Chapter 145 of the ORC, as amended by Substitute Senate Bill 343 in 2012. In the legislation, members were categorized into three groups with varying provisions of the law applicable to each group. Members eligible to retire under the law in effect prior to Senate Bill 343 or who will be eligible to retire no later than five years after January 7, 2013, comprise Transition Group A. Members with 20 years of service credit prior to January 7, 2013, or who will be eligible to retire no later than 10 years after January 7, 2013, are included in Transition Group B. Those members who are not in Group A or B or were hired after January 7, 2013, are in Transition Group C. The following table provides age and service requirements for retirement and the retirement formula applied to final average salary (FAS) for the three member groups under the traditional plan as per the reduced benefits adopted by Senate Bill 343.

Group A	Group B	Group C
Age and Service Requirements:		
Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	Age 60 with 60 months of service credit or Age 55 with 25 years of service credit	Age 57 with 25 years of service credit or Age 62 with 5 years of service credit
Formula:		
2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30	2.2% of FAS multiplied by years of service for the first 30 years and 2.5% for service years in excess of 30	2.2% of FAS multiplied by years of service for the first 35 years and 2.5% for service years in excess of 35

A plan member who becomes disabled before age 60 or at any age, depending on when the member entered the plan, and has completed 60 contributing months is eligible for a disability benefit.

A death benefit of $500 to $2,500 is determined by the number of years of service credit of the retiree. Benefits may transfer to a beneficiary upon death with 1.5 years of service credits with the plan obtained within the last 2.5 years, except for law enforcement and public safety personnel who are eligible immediately upon employment.

Benefit terms provide for annual cost of living adjustments to each employee's retirement allowance after the employee's retirement date. Retirement benefits for the defined benefit portion of the plan increase three percent annually of the original base amount regardless of changes in the Consumer Price Index, for those who retired prior to January 7, 2013. For those retiring after January 7, 2013, beginning in calendar year 2019, the increase will be based on the average increase in the Consumer Price Index.

OPEB Benefits

OPERS maintains a cost-sharing, multiple-employer defined benefit postemployment health plan, which includes medical, prescription drug program, and Medicare Part B premium reimbursement, for qualifying members of both the traditional pension and the combined plans. Members of the member directed plan do not qualify for ancillary benefits, including postemployment healthcare coverage.

To qualify for postemployment health care coverage, age-and-service retirees under the Traditional and Combined plans must have 20 years of qualifying Ohio service credit with a minimum age of 60, or 30 or more years of qualifying service at any age. Healthcare coverage for disability recipients and qualified survivor benefit recipients is available. The healthcare coverage provided by OPERS meets the definition of an OPEB as described in GASB Statement No. 75.

The Ohio Revised Code permits, but does not mandate, OPERS to provide OPEB benefits to its eligible members and beneficiaries. Authority to establish and amend benefits is provided in Chapter 145 of the Ohio Revised Code.

Contributions

State retirement law requires contributions by covered employees and their employers, and Chapter 3307 of the ORC limits the maximum rate of contributions. The retirement boards of the systems individually set contributions rates within the allowable limits. The adequacy of employer contribution rates is determined annually by actuarial valuation using the entry age normal cost method. Under these provisions, each employer's contribution is expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance a portion of the unfunded accrued liability.

Member contributions are 10 percent of gross wages for all plans, set at the maximums authorized by the ORC. The plans' 2018 and 2017 employer contribution rates on covered payroll are as follows:

	Pension	Post-retirement Health Care	Total
2018	14.00%	–%	14.00%
2017	13.00%	1.00%	14.00%

The Commission's contributions to the OPERS for the traditional and combined plans for the years ended December 31, 2018 and 2017 were $7,300,000 and $6,716,000, respectively, equal to 100 percent of the required contributions for each year. Contributions to the member-directed plan for 2018 were $268,000 made by the Commission and $191,000 made by plan members. The Commission's contributions to OPERS for the OPEB plan for the years ended December 31, 2018, 2017 and 2016 were $0, $537,000, and $1,072,000, respectively, equal to 100 percent of the required contributions for each year. At December 31, 2018, there was $992,000 in amounts due to OPERS for employee and employer contributions included in Accrued Wages and Benefits on the Statement of Net Position.

Net Pension Liability and Pension Expense

The net pension asset/liability was measured as of December 31, 2017. The total pension asset/liability used to calculate the net pension asset/liability was determined by an actuarial valuation as of December 31, 2017. The Commission's proportion of the net asset/liability is based on the Commission's share of contributions to the plan as compared to the total contributions of employers and all non-employer contributing entities.

At December 31, 2018 the Commission reported the following information related to the proportionate share of the net pension liability and pension expense:

	Traditional Plan	Combined Plan
Proportionate Share of the Net Pension Liability	0.380459%	0.334825%
Proportion of the Net Liability (Asset)	$ 59,687,000	$ (468,000)
Pension Expense	$ 11,811,000	$ 76,000

At December 31, 2017 the Commission reported the following information related to the proportionate share of the net pension liability and pension expense:

	Traditional Plan	Combined Plan
Proportionate Share of the Net Pension Liability	0.403586%	0.364018%
Proportion of the Net Liability (Asset)	$ 91,648,000	$ (204,000)
Pension Expense	$ 19,693,000	$ 147,000

Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At December 31, 2018, the Commission reports deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Deferred Outflows of Resources	Traditional Plan	Combined Plan	Total
Difference between Expected and Actual Experience	$ 61,000	$ 24,000	$ 85,000
Change in Assumptions	7,133,000	41,000	7,174,000
Change in Employer's Proportionate Share	498,000	16,000	514,000
Contributions subsequent to the Measurement Date	7,106,000	462,000	7,568,000
Total	**$ 14,798,000**	**$ 543,000**	**$ 15,341,000**

Deferred Inflows of Resources	Traditional Plan	Combined Plan	Total
Difference between Expected and Actual Experience	$ 1,176,000	$ 136,000	$ 1,312,000
Net Difference between Projected and Actual Earnings on Pension Plan Investments	12,814,000	75,000	12,889,000
Change in Employer's Proportionate Share	2,459,000	1,000	2,460,000
	$ 16,449,000	**$ 212,000**	**$ 16,661,000**

At December 31, 2017, the Commission reports deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Deferred Outflows of Resources	Traditional Plan	Combined Plan	Total
Difference between Expected and Actual Experience	$ 125,000	$ –	$ 125,000
Change in Assumptions	14,538,000	49,000	14,587,000
Net Difference between Projected and Actual Earnings on Pension Plan Investments	13,650,000	49,000	13,699,000
Change in Employer's Proportionate Share	956,000	3,000	959,000
Contributions subsequent to the Measurement Date	6,805,000	179,000	6,984,000
Total	**$ 36,074,000**	**$ 280,000**	**$ 36,354,000**

Deferred Inflows of Resources	Traditional Plan	Combined Plan	Total
Difference between Expected and Actual Experience	$ 531,000	$ 104,000	$ 635,000
Change in Employer's Proportionate Share	261,000	–	261,000
	$ 792,000	**$ 104,000**	**$ 896,000**

Deferred Outflows of Resources of $7,568,000 related to pensions resulting from contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2019. 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 December 31:	**Traditional Plan**		**Combined Plan**	
2019	$	4,528,000	$	(18,000)
2020		(2,378,000)		(20,000)
2021		(5,643,000)		(37,000)
2022		(5,265,000)		(35,000)
2023		–		(9,000)
Thereafter		–		(11,000)
	$	**(8,758,000)**	**$**	**(130,000)**

Net OPEB Liability, Deferrals, and OPEB Expense

The net OPEB liability was measured as of December 31, 2017. The total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2016. The Commission's proportion of the net OPEB liability was based on a projection of its long-term share of contributions to the OPEB plan relative to the projected contributions of all participating reporting units, actuarially determined.

At December 31, 2018 the Commission reported the following information related to the proportionate share of the net OPEB liability:

Proportionate Share of the Net OPEB Liability	0.378091%
Net OPEB Liability	$ 41,058,000

For the year ended December 31, 2018, the Commission recognized OPEB expense of $3,444,000. At December 31, 2018, the Commission reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources		**Deferred Inflows of Resources**	
Difference between Expected and Actual Experience	$	32,000	$	–
Change in Assumptions		2,989,000		–
Net Difference between Projected and Actual Earnings on OPEB Plan Investments		–		3,059,000
Total	**$**	**3,021,000**	**$**	**3,059,000**

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended December 31:	**Traditional Plan**	
2019	$	680,000
2020		680,000
2021		(633,000)
2022		(765,000)
2023		–
Thereafter		–
	$	**(38,000)**

Actuarial Assumptions

The total pension liability and OPEB liability is based on the results of an actuarial valuation determined using the following actuarial assumptions for 2017, applied to all periods included in the measurement on December 31, 2018:

	Traditional Plan	Combined Plan
Wage Inflation	3.25%	3.25%
Salary Increases (includes Wage Inflation)	3.25% – 10.75%	3.25% – 8.25%
Investment Rate of Return-Pension	7.50%	7.50%
Investment Rate of Return-OPEB	6.50%	6.50%
COLA	Pre-1/7/2013 Retirees: 3.00% Simple Post-1/7/2013 Retirees: 3.00% Simple through 2018, then 2.15% Simple	Pre-1/7/2013 Retirees: 3.00% Simple Post-1/7/2013 Retirees: 3.00% Simple through 2018, then 2.15% Simple
Health Care Cost Trend Rates	7.50% intial, 3.25% ultimate in 2028	7.50% intial, 3.25% ultimate in 2028
Actuarial Cost Method	Individual Entry Age	Individual Entry Age
Valuation Date – Pension	December 31, 2017	December 31, 2017
Valuation Date – OPEB	December 31, 2016	December 31, 2016

The following are the actuarial assumptions for 2016, applied to all periods included in the measurement on December 31, 2017:

	Traditional Plan	Combined Plan
Wage Inflation	3.25%	3.25%
Salary Increases (includes Wage Inflation)	3.25% – 10.75%	3.25% – 8.25%
Investment Rate of Return	7.50%	7.50%
COLA	3.00%	3.00%
Actuarial Cost Method	Individual Entry Age	Individual Entry Age
Valuation Date	December 31, 2016	December 31, 2016

For both tables, mortality rates are based on the RP-2014 Healthy Annuitant mortality table. For disabled retirees, mortality rates are based on the PR-2014 Disabled mortality table. The Healthy Annuitant Mortality tables were adjusted for mortality improvements back to the observation period base year of 2006, and then established the base year as 2010 for females, and 2015 for males.

The actuarial assumptions used in the December 31, 2017 valuation were based on the results of an actuarial experience study conducted in 2016, for the five-year period 2011 through 2015.

Discount Rate

The discount rates used to measure the total pension liabilities at December 31, 2018 and 2017 were 7.50 percent. The projection 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 will be made at contractually required rates for all plans. Based on those assumptions, each pension plan's fiduciary net position were projected to be available to make all projected future benefit payments for current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The discount rate used to measure the total OPEB liability at December 31, 2018 was 3.85 percent. The projection 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 will be made at contractually required rates for all plans. Based on those assumptions, the OPEB plan's fiduciary net position was projected to become insufficient to make all projected future benefit payments for current active and inactive employees for OPERS. Therefore, a blended rate was used, which consisted of the long-term expected rate of return on OPEB plan investments for the funded benefit payments and a 20-year municipal bond rate applied to the unfunded benefit payment period to determine the total OPEB liability.

Projected Cash Flows

The long term expected rate of return on pension plan and OPEB plan investment assets was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of 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 percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized for the year ended December 31, 2018 in the following table:

	Defined Benefit Portfolio		Health Care Portfolio	
	Target Allocation	Long-term Expected Real Rate of Return	Target Allocation	Long-term Expected Real Rate of Return
Fixed Income	23.00%	2.20%	34.00%	1.88%
Domestic Equity	20.70%	6.37%	21.00%	6.37%
Real Estate	10.00%	5.26%	0.00%	0.00%
Private Equity	10.00%	8.97%	0.00%	0.00%
International Equities	18.30%	7.88%	22.00%	7.88%
REIT's	0.00%	0.00%	6.00%	5.91%
Other Investments	18.00%	5.26%	17.00%	5.39%
Total	**100.00%**	**5.66%**	**100.00%**	**4.98%**

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized for the year ended December 31, 2017 in the following table:

	Defined Benefit Portfolio	
	Target Allocation	Long-term Expected Real Rate of Return
Fixed Income	23.00%	2.75%
Domestic Equity	20.70%	6.34%
Real Estate	10.00%	4.75%
Private Equity	10.00%	8.97%
International Equities	18.30%	7.95%
Other Investments	18.00%	4.92%
Total	**100.00%**	**5.66%**

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Commission, calculated using the discount rate listed below, as well as what the Commission's net pension liability would be if it were calculated using a discount rate that is 1.00 percentage point lower or 1.00 percentage point higher than the current rate:

	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
2018			
Net Pension Liability Traditional	$ 105,988,000	$ 59,687,000	$ 21,085,000
Net Pension Liability (Asset) Combined	$ (255,000)	$ (468,000)	$ (617,000)

	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
2017			
Net Pension Liability Traditional	$ 140,012,000	$ 91,648,000	$ 51,344,000
Net Pension Liability (Asset) Combined	$ 15,000	$ (204,000)	$ (371,000)

Sensitivity of the net OPEB liability to changes in the discount rate

The following presents the net OPEB liability of the Commission for the year ended December 31, 2018, calculated using the discount rate listed below, as well as what the Commission's net OPEB liability would be if it were calculated using a discount rate that is 1.00 percentage point lower or 1.00 percentage point higher than the current rate:

	1% Decrease (2.85%)	Current Discount Rate (3.85%)	1% Increase (4.85%)
Net OPEB Liability	$ 54,547,000	$ 41,058,000	$ 30,145,000

Sensitivity of the net OPEB liability to changes in the health care cost trend rate

The following presents the net OPEB liability of the Commission, calculated using the healthcare cost trend rate listed below, as well as what the Commission's net OPEB liability would be if it were calculated using a health care cost trend rate that is 1.00 percentage point lower or 1.00 percentage point higher than the current rate:

	1% Decrease	Current Trend Rate	1% Increase
Net OPEB Liability	$ 39,284,000	$ 41,058,000	$ 42,891,000

Pension Plan and OPEB Plan Fiduciary Net Position

Detailed information about the plan's fiduciary net position is available in the separately issued OPERS financial report. You may obtain a copy of their report by visiting the OPERS Web site at https://www.opers.org/financial/report.shtml.

(9) PAYMENTS FOR STATE INFRASTRUCTURE PROJECTS

On April 1, 2013, Ohio Governor John Kasich signed Am. Sub. H.B. 51 (H.B. 51) into law, creating a "public-public" partnership between the Commission and the Ohio Department of Transportation ("ODOT"). Effective July 1, 2013, H.B. 51 authorized the Commission to issue Turnpike Revenue Bonds as a means of funding certain transportation infrastructure projects ("Infrastructure Projects") as defined under Chapter 5537 of the Ohio Revised Code. H.B. 51 was enacted by the Ohio General Assembly to implement the Ohio Jobs and Transportation Plan proposed by Governor Kasich to address a significant funding shortfall announced by ODOT in January 2012 that would have required postponement of significant Ohio transportation projects. The plan contemplates the issuance of a total of $1.5 billion of Turnpike revenue bonds for transportation projects between 2013 and 2018. Under H.B. 51, the Director of ODOT can apply to the Commission for funding for Infrastructure Projects provided those projects: 1) have been approved by the Transportation Review Advisory Council ("TRAC") that oversees a project selection process for major new transportation projects and; 2) have a "nexus" to the Turnpike System.

On July 15, 2013, the Commission's Board approved the issuance of the 2013 Junior Lien Bonds in order to fund $930 million in Infrastructure Projects. In August 2013, the Director of ODOT submitted funding requests for Infrastructure Projects to the Commission for consideration and, on September 16, 2013, the Commission's Board approved the funding of a list of Infrastructure Projects totaling $930 million. Through December 31, 2018, ODOT has expended $920,692,000 on Infrastructure Projects and the Commission has reimbursed ODOT $916,485,000 for ODOT's expenditures on these projects. It is anticipated that the entire $930 million in 2013 Junior Lien Bond Proceeds will be paid to ODOT by the end of 2019. The status of the funding (in thousands) of each infrastructure project as of December 31, 2018 is as follows:

County	Project	Approved Amount	Amount Expended by ODOT	Infrastructure Funds Paid to ODOT
Cuyahoga	I-90 Innerbelt Bridge	$ 275,020	$ 273,487	$ 273,471
Cuyahoga	Opportunity Corridor	14,000	13,527	13,527
Erie	US 250 Widening	14,000	14,000	14,000
Hancock/Wood	I-75 Widening	283,280	280,104	279,980
Lorain	SR 57	16,500	16,500	16,500
Lucas	I-75 and I-475 Interchange	122,200	121,342	117,321
Lucas	I-475 and Rt 20 Interchange	27,500	25,478	25,432
Lucas	I-75 Widening	63,000	63,000	63,000
Mahoning/Trumbull	I-80 Widening	65,500	65,500	65,500
Summit	I-271 Widening	49,000	47,754	47,754
		$ 930,000	**$ 920,692**	**$ 916,485**

In late 2017, ODOT submitted funding requests for two additional projects on I-75 in Lucas and Wood Counties, which, on December 18, 2017, the Commission determined have the proper nexus for funding with Infrastructure funds. On February 15, 2018, the Commission issued 2018 Junior Lien Bonds that generated proceeds of $450 million in order to fund these two projects along with the Opportunity Corridor project in Cuyahoga County. The status of the funding (in thousands) of each of these infrastructure projects as of December 31, 2018 is as follows:

County	Project	Approved Amount	Amount Expended by ODOT	Infrastructure Funds Paid to ODOT
Wood/Lucas	I-75 Reconstruction	$ 90,000	$ –	$ –
Lucas	I-75 Reconstruction	160,000	8,524	6,370
Cuyahoga	Opportunity Corridor	200,000	9,684	7,324
		$ 450,000	**$ 18,208**	**$ 13,694**

(10) RISK MANAGEMENT

The Commission is self-insured for workers' compensation and vehicle damage claims. The Commission is also self-insured for employee health claims, up to a maximum of $250,000 per covered person per contract year. Employee health benefits are not subject to any lifetime maximum benefit payments.

Liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. Claim liabilities are based upon the estimated ultimate cost of settling the claims, net of any subrogation recoveries from third parties, including specific incremental claim adjustment expenses.

"Claims and Judgments" as of December 31 of each year in the accompanying Statements of Net Position are comprised of the estimated liability for workers' compensation claims, the estimated liability for employee health claims, and the estimated liability for miscellaneous claims and judgments. The Commission is unaware of any unaccrued vehicle damage or unasserted workers' compensation claims as of December 31, 2018.

Claims and Judgments (in thousands) for the years ended December 31, are as follows:

	2018	2017
Workers' compensation claims	$ 816	$ 1,106
Employee health claims	1,002	1,078
Miscellaneous claims and judgments	40	57
Total	**$ 1,858**	**$ 2,241**

Changes in the liability for estimated workers' compensation claims, employee health claims and miscellaneous claims and judgments (in thousands) for the years ended December 31, were as follows:

	Estimated Claims Payable - Beginning of Year	Current Claims	Claims Payments	Estimated Claims Payable - End of Year
2018	$ 2,241	$ 11,773	$ 12,156	$ 1,858
2017	$ 1,798	$ 13,571	$ 13,128	$ 2,241
2016	$ 1,447	$ 12,695	$ 12,344	$ 1,798

The Commission purchases commercial insurance policies in varying amounts for general liability, vehicle liability, bridges, use and occupancy, damage to capital assets other than vehicles, and public officials and employee liability coverage. Paid claims have not exceeded the limits of the Commission's commercial insurance policies for each of the last three fiscal years. The Commission also pays unemployment claims to the State of Ohio as incurred.

Required Supplementary Information

Schedule of Net Pension Liability *Last Four Fiscal Years**

Ohio Public Employees Retirement System As of the Current Measurement Date (Dollars in Thousands)

	2017	2016	2015	2014
Employer's Proportion of the Collective Net Pension Asset / Liability				
Traditional Plan	0.380459%	0.403586%	0.392329%	0.398393%
Combined Plan	0.334825%	0.364018%	0.365870%	0.373154%
Employer's Proportionate Share of the Collective Net Pension Asset / (Liability)				
Traditional Plan	$ (59,687)	$ (91,648)	$ (67,956)	$ (48,051)
Combined Plan	$ 468	$ 204	$ 178	$ 143
Employer's Covered Payroll				
Traditional Plan	$ 50,288	$ 52,172	$ 48,829	$ 48,843
Combined Plan	$ 1,371	$ 1,417	$ 1,332	$ 1,242
Employer's Proportionate Share of the Collective Net Pension Liability / (Asset) as a percentage of the Employer's Covered Payroll				
Traditional Plan	118.69%	175.67%	139.17%	98.38%
Combined Plan	(34.14)%	(14.40)%	(13.36)%	(11.51)%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability				
Traditional Plan	84.66%	77.25%	81.08%	86.45%
Combined Plan	137.28%	116.55%	116.90%	114.83%

* *The amounts presented for the current calendar year were determined as of the previous calendar year-end. Information prior to 2014 is not available.*

Schedule of Net OPEB Liability *As of the Current Measurement Date**

Ohio Public Employees Retirement System (Dollars in Thousands)

	2017
Employer's Proportion of the Collective Net OPEB Liability	0.378091%
Employer's Proportionate Share of the Collective Net OPEB Liability	$41,058
Employer's Covered Payroll	$51,987
Employer's Proportionate Share of the Collective Net OPEB Liability as a percentage of the Employer's Covered Payroll	78.98%
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	54.14%

* *The amounts presented for the current calendar year were determined as of the previous calendar year-end. Information prior to 2017 is not available.*

Schedule of Employer Pension Contributions *Last Four Fiscal Years**

Ohio Public Employees Retirement System (Dollars in Thousands)

	2018	2017	2016	2015
Statutory Required Employer Contribution	$ 7,278	$ 6,716	$ 6,431	$ 6,019
Actual Employer Contributions Received	7,278	6,716	6,431	6,019
Difference	$ –	$ –	$ –	$ –
Employer's Covered Payroll	$ 51,987	$ 51,659	$ 53,589	$ 50,161
Actual Employer Contributions Received as a Percentage of Covered Payroll	14.00%	13.00%	12.00%	12.00%

* *Information prior to 2015 is not available.*

Schedule of Employer OPEB Contributions *For the Current Fiscal Year**

Ohio Public Employees Retirement System (Dollars in Thousands)

	2018
Statutory Required Employer Contribution	$ –
Actual Employer Contributions Received	–
Difference	$ –
Employer's Covered Payroll	$ 51,987
Actual Employer Contributions Received as a Percentage of Covered Payroll	0.00%

* *Information prior to 2018 is not available.*

Notes to required supplementary information:

Changes of benefit terms.

There were no changes in benefit terms affecting the OPERS plans for the plan years ended December 31, 2017 or December 31, 2016.

Changes of assumptions.

During the plan year ended December 31, 2016, there were changes to several assumptions for OPERS. The wage inflation dropped from 3.75 percent to 3.25 percent. The projected salary increase range changed from 4.25-10.05 percent to 3.25-10.75 percent. The mortality tables used changed from RP-2000 to RP-2014.

EXHIBIT D

TRAFFIC AND REVENUE STUDY
PREPARED BY JACOBS ENGINEERING

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Jacobs

Submitted to:

Ohio Turnpike and Infrastructure Commission

Ohio Turnpike Traffic and Revenue Study

January 17, 2020

Submitted by:

Jacobs Engineering Group Inc.

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Executive Summary

Jacobs Engineering Group, Inc. ("Jacobs") was retained by the Ohio Turnpike and Infrastructure Commission (the "Commission" or "OTIC") to conduct this traffic and revenue study for the Ohio Turnpike (the "Turnpike") in conjunction with the upcoming sale of the Taxable Advance Refunding Bonds, 2020 Series A (the "2020 Senior Lien Bonds") and the Junior Lien. Jacobs analyzed Turnpike historical transactions (traffic), vehicle miles of travel (VMT) and toll revenue data, and researched socioeconomic and demographic data, along with other key factors that have affected recent traffic patterns, and that will likely affect future traffic behavior, to determine historical trends and correlate traffic with key economic indicators. In addition, Jacobs reviewed the historical expenditures for the Turnpike related to operations and maintenance (O&M) as well as other (non-toll) revenues realized by the Turnpike, and then estimated future O&M costs and other revenues.

The traffic and revenue forecasts are based on the current (2019) toll schedule, as described in Chapter 8.0 and take into account the annual toll increases previously approved through 2023. This executive summary presents a summary of the results of these work efforts, including a review of the overall forecasting methodology and a presentation of the final forecasts. The work, analyses, and forecasts for the Turnpike are of investment-grade quality and are suitable for financing. As part of the analysis, a traffic and toll revenue model for the Ohio Turnpike was developed. This model has the capability to adjust projections based on economic parameters and toll adjustments by the type of vehicle and payment method for each toll facility.

Turnpike Infrastructure Assumptions

OTIC previously developed a Strategic Plan to modernize the Ohio Turnpike's Toll Collection System ("TCS") and Customer Service Center ("CSC"), which are nearing their end of service life. The toll system modernization includes the introduction of highway speed E-ZPass® travel lanes, conversion of Eastgate and Westgate to fixed-rate barriers, the compression of the closed ticket system with the construction of new mainline plazas at milepost 49 and milepost 211, the removal of nine toll plazas while maintaining interchange access, the removal of all entry toll lane gates and "E-ZPass Only" exit toll lane gates and the installation of license plate image capture cameras. The Commission will also contract for Unpaid Toll Processing Services to enforce the collection of unpaid tolls. It is estimated that the Commission will begin to operate the new CSC in the second or third quarter of 2020. Operation of the new TCS, as well as commencement of Unpaid Toll Processing Services, is anticipated for deployment in the fourth quarter of 2022.

Other than the plan to modernize the TCS and CSC, there are no other major planned or funded construction projects or improvements on the Turnpike that would positively or negatively affect Turnpike traffic for the extent of the forecast period. There are anticipated to be multiple minor projects that will be completed during the forecast period, including bridge replacements, pavement replacements, repaving, service plaza renovations and other Turnpike maintenance and capital projects. These projects are to be completed during off-peak hours when possible to provide consistent travel lane operations during peak travel times, thus, there would be no significant detrimental impact on traffic levels. Additionally, there will be no improvements to the Turnpike during the extent of the forecast period that will increase capacity, add access points or otherwise change the current infrastructure of the Turnpike, except for toll plaza improvements at Interchange 64 (one new exit lane and conversion of one existing entry lane to a reversible lane) and Interchange 152 (one new exit lane). It is not anticipated that these improvements will draw new traffic to the turnpike but are instead focused on improving toll plaza operations.

Tolling Policy Assumptions

Ohio Turnpike tolling policy consists of the existing toll schedule that is broken down by origin and destination movements for each of the seven vehicle classes and by the two payment classes (cash and E-ZPass). Vehicle class distinction is a function of the number of axles and height of the vehicle over the first two axles (e.g., Class 1 consists of two-axle passenger vehicles). The current toll schedule for the Ohio Turnpike has been in effect since January 1, 2019 with a scheduled toll increase due to go into effect on January 1, 2020.

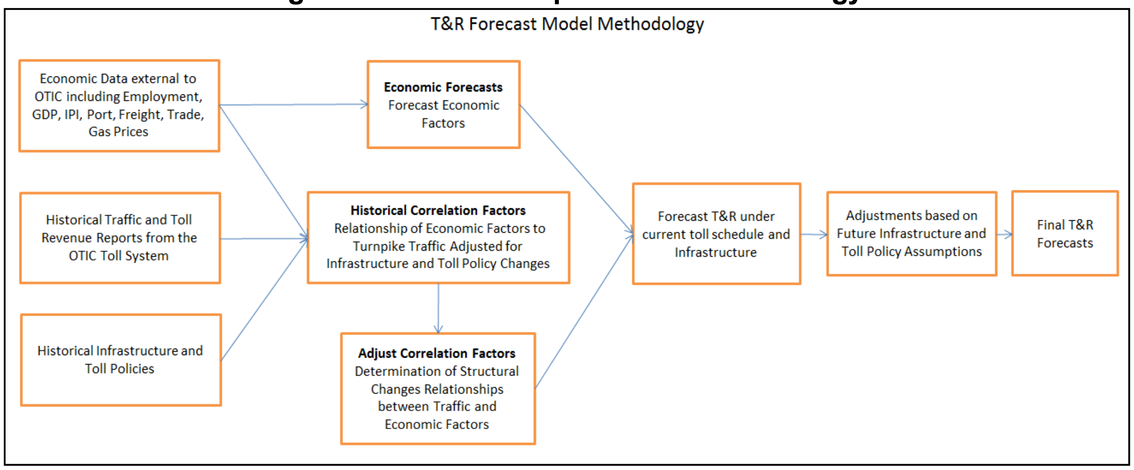
The toll policy assumed for the forecast period includes escalation of toll rates by the rate of inflation, with a floor of 2.7 percent, during a ten-year period (that began January 2014), to be implemented on January 1 of each year. There is however, one exception: the E-ZPass toll rates for Class 1 vehicles making trips under 30 miles on the Turnpike will remain constant for 10 years (from 2014 to 2023). For this analysis, the assumption is that inflation will remain at or below 2.7 percent per year and thus the escalation will remain at 2.7 percent for the first ten years. The increased tolls will be rounded to the nearest quarter with a minimum toll of $0.50.

In 2024 tolls for Class 1 vehicles making trips under 30 miles, and paying by E-ZPass, will experience a one-time increase in order to come back in line with the tolls for other vehicle classes. It is assumed that from 2024 onward tolls will continue to be increased for each vehicle and payment class by 2.7 percent annually and implemented on January 1 of each year, through 2028 (including Class 1 E-ZPass vehicles making trips under 30 miles). From 2029 onwards, it is assumed that tolls will continue to be increased for each vehicle and payment class by 2.0 percent annually, implemented on January 1 of each year, through 2056 (including Class 1 E-ZPass vehicles making trips under 30 miles).

T&R Study Methodology

Figure ES-1 shows the forecast methodology used to make the Traffic and Revenue forecasts. The three primary input variables included socioeconomic and demographic data, historical traffic and toll revenue data, and historical infrastructure and toll policy data.

Figure ES-1: Ohio Turnpike Model Methodology



The economic and demographic factors that were analyzed included the following:

1. Population by region;
2. Employment by region;
3. Real Gross Domestic Product by Region; and
4. Industrial Production Index (IPI);

Traffic growth forecasts were based on a combination of historical trends and economic forecasts.

Forecasted Transactions and Gross Toll Revenues

The estimates of future annual Turnpike transactions and annual gross toll revenue for the Turnpike are presented in Table ES-1 along with two years of actual data. The estimates of gross toll revenue are in nominal dollars and do not include adjustments to account for violations since the violation rate is very low, as all toll lanes are gated.

The Toll Traffic and Revenue forecasts were developed with the aid of a computerized modeling platform created specifically by Jacobs for the Turnpike. The base function of this model is to take current traffic volumes by class and payment type for each Turnpike movement (origin-destination pair) and adjust them in the future years for various factors such as underlying socio-economic/demographic growth in the corridor, both historic and current, as well as customer reactions to anticipated toll adjustments. Over the 40-year forecast period from 2020 through 2059, gross toll revenues total some $24.014 Billion.

Table ES-1: OTIC Toll Transactions and Gross Toll Revenues in millions, 2017 to 2059

Ohio Turnpike Annual Estimates of Traffic and Revenue						
Year	Transactions		VMT		Revenue	
2017*	55.2	0.6%	3,037.9	1.4%	$295.8	2.6%
2018*	54.3	-1.6%	3,034.5	-0.1%	$306.0	3.5%
2019	53.0	-2.4%	2,982.8	-1.7%	$309.7	1.2%
2020	53.0	-0.1%	2,984.5	0.1%	$316.7	2.3%
2021	53.3	0.7%	3,004.7	0.7%	$327.0	3.3%
2022	53.4	0.1%	3,013.5	0.3%	$337.6	3.2%
2023	65.4	22.5%	3,032.2	0.6%	$348.2	3.1%
2024	65.3	-0.1%	3,041.7	0.3%	$360.0	3.4%
2025	65.6	0.4%	3,058.3	0.5%	$373.6	3.8%
2026	65.9	0.5%	3,075.6	0.6%	$386.4	3.4%
2027	66.3	0.6%	3,093.3	0.6%	$399.4	3.4%
2028	66.6	0.6%	3,112.1	0.6%	$412.0	3.2%
2029	67.0	0.6%	3,131.6	0.6%	$423.3	2.7%
2030	67.5	0.6%	3,150.9	0.6%	$436.6	3.1%
2031	67.9	0.6%	3,171.2	0.6%	$448.7	2.8%
2032	68.3	0.7%	3,191.8	0.6%	$460.9	2.7%
2033	68.7	0.6%	3,212.3	0.6%	$473.4	2.7%
2034	68.5	-0.3%	3,228.8	0.5%	$489.1	3.3%
2035	68.9	0.6%	3,249.2	0.6%	$502.3	2.7%
2036	69.3	0.6%	3,270.6	0.7%	$516.3	2.8%
2037	69.7	0.5%	3,290.0	0.6%	$533.6	3.4%
2038	70.2	0.8%	3,313.3	0.7%	$548.1	2.7%
2039	70.7	0.8%	3,336.7	0.7%	$565.0	3.1%
2040	71.3	0.8%	3,359.1	0.7%	$581.5	2.9%
2041	71.9	0.8%	3,383.4	0.7%	$597.5	2.8%
2042	72.4	0.8%	3,408.0	0.7%	$614.5	2.8%
2043	73.0	0.8%	3,432.9	0.7%	$632.4	2.9%
2044	73.6	0.8%	3,457.6	0.7%	$650.3	2.8%
2045	74.2	0.8%	3,482.8	0.7%	$668.5	2.8%
2046	74.8	0.8%	3,507.5	0.7%	$687.4	2.8%
2047	75.4	0.7%	3,532.8	0.7%	$706.3	2.7%
2048	75.9	0.8%	3,557.3	0.7%	$728.0	3.1%
2049	76.6	0.9%	3,583.9	0.7%	$747.6	2.7%
2050	77.2	0.8%	3,610.7	0.7%	$768.7	2.8%
2051	77.9	0.9%	3,638.0	0.8%	$789.9	2.8%
2052	78.5	0.8%	3,664.9	0.7%	$812.3	2.8%
2053	79.1	0.8%	3,692.0	0.7%	$835.3	2.8%
2054	79.7	0.8%	3,719.3	0.7%	$859.1	2.8%
2055	80.3	0.8%	3,746.9	0.7%	$883.5	2.8%
2056	81.0	0.8%	3,774.8	0.7%	$908.6	2.8%
2057	81.6	0.8%	3,803.0	0.7%	$934.5	2.8%
2058	82.3	0.8%	3,831.4	0.7%	$961.1	2.9%
2059	82.9	0.8%	3,860.1	0.7%	$988.6	2.9%

**Actual; New Toll System Fully Implemented in 2023.*
Notes: Toll increases are assumed for each year. Numbers may not add due to rounding.

Forecasted Revenue, O&M Costs and Net Revenues

Jacobs estimates of Toll Revenues, Other Revenues, O&M costs and Net Revenues are presented in Table ES-2. The estimates of gross toll revenue are in nominal dollars (i.e., unadjusted for inflation) and include adjustments to account for violations (due to gate removal as per the Strategic Plan). Over the 40-year forecast period from 2020 through 2059, Toll, Fee and Other revenues total some $26.179 Billion, while O&M costs total roughly $8.715 Billion. Net revenues for the 40-year period are estimated at $17.464 Billion.

Roughly 10 percent of current revenues collected by the Commission are not from tolls. Non-Toll ("Other") Revenues consist mainly of concession revenues, special toll permits, and pledged investment earnings which are generally expected to increase at the rate of inflation along with traffic growth. Jacobs estimated future Operating and Maintenance (O&M) costs by reviewing the Commission's future budget, applying inflation, and incorporating changes such as reductions in certain services, staffing changes, and service plaza openings, and linking certain costs to the traffic and toll revenue forecasts.

Table ES-2: Toll System Revenues, O&M Costs and Net Revenues in millions, 2017 to 2059

Year	Toll Revenues (Collectable)		Fee Revenues		Other Revenues		Total Revenues		O&M		Net Revenues	
2017*	$295.8	2.6%	-		$28.2	8.0%	$324.0	3.0%	$118.8	0.7%	$205.3	4.4%
2018*	$306.0	3.5%	-		$32.0	13.3%	$338.0	4.3%	$119.3	0.5%	$218.7	6.5%
2019	$309.7	1.2%	-		$33.9	6.1%	$343.6	1.6%	$122.3	2.5%	$221.3	1.2%
2020	$316.7	2.3%	-		$33.8	-0.5%	$350.5	2.0%	$124.9	2.2%	$225.5	1.9%
2021	$327.0	3.2%	-		$34.2	1.3%	$361.2	3.1%	$128.4	2.8%	$232.7	3.2%
2022	$334.8	2.4%			$35.0	2.5%	$369.8	2.4%	$132.0	2.7%	$237.9	2.2%
2023	$345.2	3.1%	$2.2		$36.5	4.2%	$381.7	3.2%	$135.4	2.6%	$246.4	3.6%
2024	$356.9	3.4%	$2.1	-1.0%	$38.2	4.6%	$395.1	3.5%	$138.0	1.9%	$257.1	4.4%
2025	$370.4	3.8%	$2.1	-0.3%	$38.9	1.8%	$409.2	3.6%	$141.5	2.5%	$267.8	4.1%
2026	$383.1	3.4%	$2.1	-0.2%	$40.1	3.1%	$423.1	3.4%	$145.1	2.6%	$278.0	3.8%
2027	$395.9	3.4%	$2.1	0.1%	$41.2	2.8%	$437.1	3.3%	$148.9	2.6%	$288.2	3.7%
2028	$408.4	3.1%	$2.1	0.1%	$43.1	4.7%	$451.5	3.3%	$152.8	2.6%	$298.7	3.6%
2029	$419.5	2.7%	$2.1	-0.1%	$44.6	3.4%	$464.1	2.8%	$156.7	2.6%	$307.4	2.9%
2030	$432.6	3.1%	$2.1	0.2%	$45.5	2.2%	$478.2	3.0%	$160.8	2.6%	$317.4	3.3%
2031	$444.6	2.8%	$2.1	0.1%	$46.8	2.8%	$491.5	2.8%	$165.0	2.6%	$326.5	2.9%
2032	$456.6	2.7%	$2.1	0.1%	$48.2	3.0%	$504.9	2.7%	$171.5	4.0%	$333.4	2.1%
2033	$469.0	2.7%	$2.1	0.2%	$49.5	2.7%	$518.5	2.7%	$174.0	1.5%	$344.5	3.3%
2034	$484.6	3.3%	$2.1	-0.4%	$50.9	2.7%	$535.5	3.3%	$178.7	2.7%	$356.8	3.6%
2035	$497.6	2.7%	$2.1	-0.2%	$52.2	2.7%	$549.9	2.7%	$183.7	2.8%	$366.2	2.6%
2036	$511.4	2.8%	$2.1	0.1%	$53.6	2.6%	$565.0	2.8%	$188.6	2.7%	$376.5	2.8%
2037	$528.6	3.4%	$2.1	0.0%	$55.0	2.6%	$583.6	3.3%	$193.6	2.7%	$390.0	3.6%
2038	$542.9	2.7%	$2.1	0.3%	$56.4	2.6%	$599.3	2.7%	$198.7	2.6%	$400.6	2.7%
2039	$559.7	3.1%	$2.2	0.3%	$57.8	2.5%	$617.5	3.0%	$204.0	2.7%	$413.5	3.2%
2040	$575.9	2.9%	$2.2	0.3%	$59.3	2.5%	$635.2	2.9%	$209.6	2.7%	$425.6	2.9%
2041	$591.7	2.7%	$2.2	0.3%	$60.8	2.5%	$652.5	2.7%	$215.4	2.7%	$437.2	2.7%
2042	$608.5	2.8%	$2.2	0.3%	$62.3	2.5%	$670.8	2.8%	$224.0	4.0%	$446.8	2.2%
2043	$626.3	2.9%	$2.2	0.2%	$63.8	2.4%	$690.1	2.9%	$227.3	1.5%	$462.7	3.6%
2044	$643.9	2.8%	$2.2	0.2%	$65.3	2.4%	$709.2	2.8%	$233.6	2.7%	$475.7	2.8%
2045	$661.8	2.8%	$2.2	0.3%	$66.9	2.4%	$728.7	2.7%	$240.0	2.7%	$488.8	2.8%
2046	$680.6	2.8%	$2.2	0.3%	$68.5	2.4%	$749.0	2.8%	$246.5	2.7%	$502.5	2.8%
2047	$699.1	2.7%	$2.2	0.1%	$70.1	2.4%	$769.2	2.7%	$253.2	2.7%	$516.0	2.7%
2048	$720.6	3.1%	$2.2	0.2%	$71.7	2.3%	$792.3	3.0%	$260.2	2.8%	$532.1	3.1%
2049	$739.9	2.7%	$2.2	0.3%	$73.4	2.3%	$813.3	2.7%	$267.3	2.7%	$546.0	2.6%
2050	$760.7	2.8%	$2.2	0.3%	$75.1	2.3%	$835.9	2.8%	$274.7	2.7%	$561.2	2.8%
2051	$781.6	2.7%	$2.2	0.4%	$76.8	2.3%	$858.5	2.7%	$282.2	2.7%	$576.3	2.7%
2052	$803.7	2.8%	$2.2	0.3%	$78.6	2.3%	$882.3	2.8%	$293.5	4.0%	$588.8	2.2%
2053	$826.4	2.8%	$2.2	0.3%	$80.4	2.3%	$906.8	2.8%	$297.9	1.5%	$608.9	3.4%
2054	$849.8	2.8%	$2.2	0.3%	$82.2	2.3%	$932.1	2.8%	$306.1	2.7%	$626.0	2.8%
2055	$873.9	2.8%	$2.3	0.3%	$84.1	2.3%	$958.1	2.8%	$314.5	2.7%	$643.6	2.8%
2056	$898.8	2.8%	$2.3	0.3%	$86.1	2.3%	$984.8	2.8%	$323.1	2.7%	$661.7	2.8%
2057	$924.4	2.8%	$2.3	0.3%	$88.0	2.3%	$1,012.4	2.8%	$332.0	2.7%	$680.4	2.8%
2058	$950.7	2.8%	$2.3	0.3%	$90.1	2.3%	$1,040.7	2.8%	$341.1	2.7%	$699.6	2.8%
2059	$977.7	2.8%	$2.3	0.3%	$92.1	2.3%	$1,069.9	2.8%	$350.5	2.7%	$719.4	2.8%

Actual; New Toll System Fully Implemented in 2023.
Notes: Toll increases are assumed for each year. Numbers may not add due to rounding.

1.0 Introduction

Jacobs Engineering Group, Inc. ("Jacobs") was retained by the Ohio Turnpike and Infrastructure Commission (the "Commission" or "OTIC") to conduct this traffic and revenue study for the James W. Shocknessy Ohio Turnpike (the "Turnpike") in conjunction with the upcoming sale of the Taxable Advance Refunding Bonds, 2020 Series A (the "2020 Junior Lien Bonds"). Jacobs analyzed Turnpike historical transactions (traffic), vehicle miles of travel (VMT) and toll revenue data, and researched socioeconomic and demographic data, along with other key factors that have affected recent traffic patterns, and that will likely affect future traffic behavior, to determine historical trends and correlate traffic with key economic indicators. In addition, Jacobs reviewed the historical expenditures for the Turnpike related to operations and maintenance (O&M) as well as other (non-toll) revenues realized by the Turnpike, and then estimated future O&M costs and other revenues. The analysis included regional and national socioeconomic factors such as gross domestic product (GDP), industrial production, fuel costs, population and employment. The study also examined feeder and competitive roads and their impact on traffic on the Turnpike.

The Commission recently adopted a Strategic Plan (the "Plan") to modernize toll collection on the Turnpike. The current Toll Collection System ("TCS") and Customer Service Center ("CSC"), installed in 2009, are approaching the end of their useful service life. The toll system modernization includes the introduction of highway speed E-ZPass® travel lanes, conversion of Eastgate and Westgate to fixed-rate barriers, the condensing (shortening) of the closed ticket system with the construction of new mainline plazas at milepost 49 and milepost 211, the removal of nine toll plazas while maintaining interchange access, the removal of all entry toll lane gates and "E-ZPass Only" exit toll lane gates and the installation of license plate image capture cameras. The Plan will improve technology and make customer service improvements with limited revenue risk while providing non-stop highway speed travel for full-length trip E-ZPass customers on the Ohio Turnpike. There will also be toll collection staff reductions due to the removal of plazas and gates as well as an anticipated increase in E-ZPass penetration/market share. The toll system modernization is scheduled to be completed in late 2022 and be fully implemented in 2023.

The data noted above, along with analyses of the data, were then used to develop a traffic and revenue model to estimate annual trips, VMT and toll revenue for 2020 through 2059. The study also included the estimation of "Other Revenues", operating and maintenance costs, and net revenues.

During the work effort, a complete set of available traffic and economic data sets were compiled. Historical trips, VMT and toll revenue data were compiled from OTIC for all Turnpike revenue trips by month, detailed by travel movement (i.e., origin and destination), payment type (cash or E-ZPass) and vehicle class. Traffic data were also obtained from neighboring toll authorities to gain the most recent understanding of tolled traffic trends in the region.

For this analysis, Jacobs has continued its extensive research into the most relevant historic and forecasted socioeconomic parameters in order to make a viable estimate of future traffic and toll revenues. As traffic is not simply a function of gross domestic product (GDP) but employment and production levels as well as other factors, a detailed review of certain socioeconomic data was undertaken and described herein.

A detailed traffic and revenue model with resulting toll trips, VMT and toll revenue projections was developed for the Turnpike's tolled facilities, based on detailed traffic and toll revenue data from the full year 2018 and ten months of 2019. The model includes the changes detailed as part of the modernization program adopted by the Commission. As part of the analysis, a static trend line-based traffic and toll revenue model for the Turnpike was developed. This model has the capability to adjust projections based on various economic parameters, and is segmented by the type of vehicle, payment type, and the specific entry-exit movements. Additionally, the model was augmented to provide forecasts based upon adjustments to the toll schedules by entry and exit point. The assumptions of future toll schedules are described in Chapter 8.0. The work, analyses, and results for the Ohio Turnpike are of investment-grade quality and are suitable for financing.

2.0 Description of the Ohio Turnpike System

This section of the report provides a description of the Ohio Turnpike System, along with a historical overview of toll collection on the Turnpike and is followed by a description of the existing (2019) and proposed (2020) toll rate schedule.

2.1 The Ohio Turnpike System

The James W. Shocknessy Ohio Turnpike ("Turnpike") is a 241-mile controlled-access highway facility that runs east to west across the full width of the northern part of the state of Ohio. It connects the principal cities of northern Ohio, including Toledo, Cleveland and Youngstown, as illustrated in Figure 1. The eastern terminus of the Turnpike connects directly to the Pennsylvania Turnpike while the western terminus of the Turnpike connects directly to the Indiana Toll Road, serving both the long-distance, east-west traffic corridor that includes New York City (via Interchange 218), Pittsburgh and Philadelphia on the east, and Chicago on the west, along with more local, intra-Ohio travel movements. Fully open since October 1, 1955, it is dual designated as Interstate Routes 80/90 between the Ohio-Indiana State Line and Interchange 142 in Lorain; Interstate Route 80 between Interchange 142 in Lorain and Interchange 218 in Youngstown; and Interstate Route 76 between Interchange 218 in Youngstown and the Ohio-Pennsylvania State Line. The Turnpike provides three eastbound and westbound highway travel lanes between Interchanges 59 and 218 and two eastbound and westbound highway travel lanes in all other sections.

There are 31 interchanges on the Turnpike, 26 of which provide access to and from various U.S, Ohio and Interstate Routes. The two terminal interchanges connect directly with the Indiana Toll Road (Interstate Route 80/90) on the western end and with the Pennsylvania Turnpike (Interstate Route 76) on the eastern end. Three interchanges connect with county or local roads. In the Youngstown area, the Turnpike connects directly with Interstate Route 80 leading to/from Pennsylvania at Interchange 218, and it also connects directly with Interstate Route 680 at Interchange 234. In the Cleveland area, the Turnpike connects directly with Interstate Routes 71, 77, 480 and 90 (for trips to/from Buffalo, Toronto and Boston) and provides access to Interstate Route 271. In the Toledo area, the Turnpike connects directly with Interstate Routes 75 and 280, and provides access to Interstate Route 475, thus providing access to and from Michigan (including Detroit) to the north, and to and from Dayton and Cincinnati to the south. Along the Turnpike, there are seven pairs (one per direction) of service plazas that provide a variety of services to travelers. The Turnpike does not receive any federal funding and is financed and operated primarily through revenues collected by tolls and service area concessionaire rentals.

Figure 1: Ohio Turnpike System

2.2 Toll Collection Historical Overview

Most of the interchanges on the Turnpike are ‘trumpet’ interchanges, designed so that all traffic entering and exiting the Turnpike at a particular interchange passes through a single physical toll plaza, regardless of travel direction. Tolls are assessed based on the classification of each vehicle, the payment type, and the distance traveled between interchanges along the Turnpike.

From the Turnpike’s inception through September 30, 2009, toll charges were determined based on gross vehicle weight classification and distance traveled on the Turnpike. Vehicles were weighed as they entered the Turnpike by weigh-in-motion (WIM) scales located in the entry lanes at each toll plaza. There were 11 vehicle classifications prior to September 30, 2009. Passenger vehicles weighing less than 7,000 pounds were classified as Class 1 and heavier vehicles were classified, according to their weight, as Classes 2 through 9. Classes 10 and 11 were reserved for triple-trailer combinations and long combination vehicles (LCVs), respectively, which required (and still do require) special permits to travel on the Turnpike.

All customers were issued a ticket from Dual Height Automated Ticket Issuing Machines (DHATIMs), which they surrendered upon exit, and the toll charge was calculated based on the classification of their vehicle, the payment type, and the distance they traveled between interchanges along the Turnpike. Tolls were collected through three payment methods: cash, Ready Toll cards (the Turnpike's pre-paid card program for passenger vehicles) and Commercial Charge cards (the Turnpike's post-paid card program for commercial vehicles). Commercial Charge customers were offered a volume discount of 15 percent if their tolls exceeded $1,000 each month. The Turnpike had also implemented Automated Toll Payment Machines (ATPMs) at two locations, which accepted both cash and credit cards.

Beginning on October 1, 2009, the Turnpike implemented a new toll collection system to replace the previous (old) system that had then reached the end of its useful service life. Following an assessment study of the old toll collection system and by surveying customers and evaluating various alternatives, a Strategic Plan was developed that called for a comprehensive replacement of the toll collection system hardware and software. The new system consisted of:

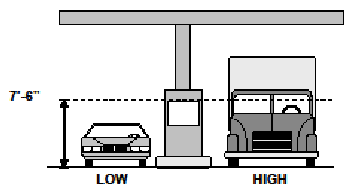
- incorporation of transponder-based electronic toll collection known as E-ZPass;
- the subsequent phasing out of the Ready Toll and Commercial Charge card programs;
- changing the vehicle classification system from gross vehicle weight to the number of axles and the height over the first two axles measured at the time of entry to the Turnpike;
- the implementation of break-away gates in all entry and exit lanes to enforce toll collection;
- the implementation of credit card readers in each staffed exit lane; and
- new ATPMs at low volume locations along the Turnpike to facilitate unstaffed exit lane operation.

All vehicles are still weighed in-motion in all entry lanes to screen for overweight axles and gross overweight vehicles.

The new vehicle classification system condensed the previous 11-class system to seven vehicle classes. The seven-class vehicle classification system is shown in Table 1.

Table 1: Ohio Turnpike Existing Vehicle Classifications

Class	Description	Example
1	Low 2-axle vehicles and all motorcycles (including motorcycles pulling trailers).	
2	Low 3-axle vehicles and high 2-axle vehicles.	
3	Low 4-axle vehicles and high 3-axle vehicles.	
4	Low 5-axle vehicles and high 4-axle vehicles.	
5	Low 6-axle vehicles and high 5-axle vehicles.	
6	High 6-axle vehicles.	
7	All vehicles with 7 or more axles.	



Note: Vehicles under 7'-6" in height as measured over the first two axles are classified as "low"

The toll collection system is still essentially a closed ticket system where each vehicle is classified on entry and their entry transaction details are recorded by either issuing a paper ticket (vehicles without a valid E-ZPass transponder) or creating an entry electronic transaction record (vehicles with a valid E-ZPass transponder). Paper tickets are surrendered at exit, along with payment of the toll, whereas the E-ZPass system creates an exit electronic transaction record that is matched with the corresponding entry record to create an "electronic ticket" and toll payment is deducted from the customer's E-ZPass account. The E-ZPass technology allows customers to travel seamlessly on toll facilities operated by 37 toll agencies in 17 states, including some of the major highways that connect to the Turnpike such as the Pennsylvania Turnpike, the Indiana Toll Road and the New York State Thruway, via Interstate Route 90.

2.3 Historical Toll Rates

Table 2 summarizes the various toll rate and other major changes that have occurred on the Ohio Turnpike since inception.

Table 2: Toll Rate and other Major Changes on the Ohio Turnpike System

Date	Activity
Dec 1, 1954	First 22 miles opened from Interchange 239 (the Pennsylvania Turnpike) to Interchange 218 (Interstate 80, Mahoning County Road 18)
Sept 1, 1955	Implemented Class 1 per mile toll rate of 1.2 cents/mile. Full length Class 1 toll is $3.00
Oct 1, 1955	Remaining 219 miles opened from Interchange 218 to Interchange 2 (the Indiana Toll Road).
May 28, 1957	25% toll rate increase, Class 1 per mile toll rate of 1.5 cents/mile. Full length Class 1 toll is $3.50
Feb 1, 1982	33% toll rate increase, Class 1 per mile toll rate of 2.0 cents/mile. Full length Class 1 toll is $4.90
July 1, 1995	10% toll rate increase, Class 1 per mile toll rate of 2.2 cents/mile. Full length Class 1 toll is $5.40
Jan 1, 1996	15% toll rate increase, Class 1 per mile toll rate of 2.6 cents/mile. Full length Class 1 toll is $6.20
1996	Beginning of construction project to add a third travel lane between Interchange 59 and Interchange 218.
Jan 1, 1997	20% toll rate increase
Jan 1, 1998	10% toll rate increase
Jan 1, 1999	9% toll rate increase
Feb 1, 2004	Class 8 upper weight limit and Class 9 lower weight limit changed from 78,000 pounds to 80,000 pounds.
Sept 8, 2004	Increased truck speed limit from 55 mph to 65 mph
Jan 1, 2005	Temporary toll rate reduction for Classes 4 through 9: Class 4 - 2%, Class 5 - 17%, Class 6 - 11%, Class 7 - 26%, Class 8 - 27% and Class 9 - 57%
Jan 1, 2007	Toll rate increase of 0.5 cents per mile for Class 1-3, toll rate increase of 1 cent per mile over temporary toll rates for Class 4-9
Oct 1, 2009	E-ZPass implemented, classification changed from weight to number of axles and height over first two axles. New toll rate structure implemented where E-ZPass toll rates are discounted from cash toll rates and previous 11 vehicle classes were compressed down to 7 classes. Commercial volume discount program is discontinued. No toll rate change for passenger cars using E-ZPass (4.6 cents per mile or $10.25 for full length trip). Non-E-ZPass passenger car toll rate is adjusted 6.2 cents per mile or $15 for full length trip.
Apr 1, 2011	Increased speed limits for all vehicles from 65 mph to 70 mph
Jan 1, 2012	10% toll rate increase; Class 1 E-ZPass rate is 4.7 cents/mile or $11.25 for full length trip, Class 1 cash rate is 6.8 cents/mile or $16.50 for full length trip.
July 15, 2013	The Commission implemented a toll increase plan that increases rates by an average of 2.7% each year for 10 years beginning January 1, 2014 and continuing through 2023, except for cars with E-ZPass traveling less than 30 miles. Toll rates for these vehicles will be frozen at 2013 rates until January 1, 2024, when they will have a one-time increase equivalent to the 10 years of 2.7% increases, to the same per mile rate as other E-ZPass trips.

2.4 Current Toll Rates

The current (2019) per mile rate for Class 1 vehicles is 5.5 cents for E-ZPass patrons and 8.0 cents for non-E-ZPass patrons. Class 1 consists of two-axle passenger vehicles. Table 3 shows the current toll rates for all vehicle classes and the relationship between vehicle classes and payment types. One can see that for a full-length trip, Class 1 customers receive a discount of approximately 31.2 percent if they pay with E-ZPass instead of cash or credit card, while Class 5 customers using E-ZPass receive a 20.8 percent discount for that same trip.

Table 3: 2019 OTIC Toll Rates

Class	E-ZPass			Cash/Credit Card			
	Full Length Trip	Per Mile Rate	Multiplier over Class 1	Full Length Trip	Per Mile Rate	Multiplier over Class 1	Full Length Trip Discount
1	$13.25	$0.05		$19.25	$0.08		31.2%
2	$23.50	$0.10	1.77	$32.75	$0.14	1.70	28.2%
3	$28.25	$0.12	2.13	$38.75	$0.16	2.01	27.1%
4	$35.25	$0.15	2.66	$45.75	$0.19	2.38	23.0%
5	$41.00	$0.17	3.09	$51.75	$0.21	2.69	20.8%
6	$58.75	$0.24	4.43	$71.50	$0.30	3.71	17.8%
7	$84.50	$0.35	6.38	$97.50	$0.40	5.06	13.3%

There are nuances to the full toll schedule, as all toll rates are rounded to the nearest twenty-five cents (i.e., the nearest quarter) and there is a minimum toll rate of $0.50. This results in the E-ZPass discounts for shorter trips varying significantly from the discounts realized by full-length trips. For very short trips, there is no E-ZPass discount due to the minimum toll restrictions and toll rate rounding.

2.5 Future Toll Rates

Current toll rates are subject to an average increase of 2.7 percent each year (the historical rate of inflation) for the 10-year period that began January 1, 2014 and continuing through January 1, 2023. In addition, the Commission will not apply any toll increases for Class 1 E-ZPass vehicles making local trips of less than 30 miles in length over the same 10-year period. However, in 2024, toll rates for these specific trips will experience a one-time increase calculated by compounding the historical rate of inflation between 2013 and 2023. Our forecast assumes the 2.7 percent annual increase will continue through 2028, and from 2029 onwards tolls will be increased annually by 2.0 percent. As of the date of this report, the Commission has not adopted this modified increase plan. The Commission is authorized to increase rates in accordance with the requirements of their Master Trust Agreements.

Table 4 shows the proposed toll rates in the year 2020 for a full-length trip, as listed on the OTIC website.

Table 4: 2020 OTIC Toll Rates

Class	E-ZPass			Cash/Credit Card			
	Full Length Trip	Per Mile Rate	Multiplier over Class 1	Full Length Trip	Per Mile Rate	Multiplier over Class 1	Full Length Trip Discount
1	$13.50	$0.056		$20.00	$0.083		32.5%
2	$24.00	$0.100	1.78	$33.75	$0.140	1.69	28.9%
3	$29.00	$0.120	2.15	$39.75	$0.165	1.99	27.0%
4	$36.25	$0.150	2.69	$47.00	$0.195	2.35	22.9%
5	$42.25	$0.175	3.13	$53.00	$0.220	2.65	20.3%
6	$60.25	$0.250	4.46	$73.50	$0.305	3.68	18.0%
7	$86.75	$0.360	6.43	$100.00	$0.415	5.00	13.3%

2.6 Reasonableness of Toll Rates/Comparison to Other Facilities

Figure 2 compares the passenger car E-ZPass toll rates in cents per mile on the Turnpike to other various E-ZPass toll rates on toll roads in the Midwest and throughout the northeastern U.S. Standard peak period rates for both in-state and out-of-state (where applicable) E-ZPass holders are shown for each facility[1]. There are thirteen major E-ZPass toll facilities that have higher toll rates per mile than on the Ohio Turnpike. Based on this graph, it can be said that the Ohio Turnpike passenger car toll rates are reasonable compared to rates at other E-ZPass toll facilities.

[1] An in-state passenger car E-ZPass rate for the West Virginia Turnpike is not shown as WV E-ZPass holders are entitled to an unlimited number of trips for an annual fee.

Figure 2: Passenger Car Toll Rates per Mile on Select E-ZPass Toll Facilities as of November 2019

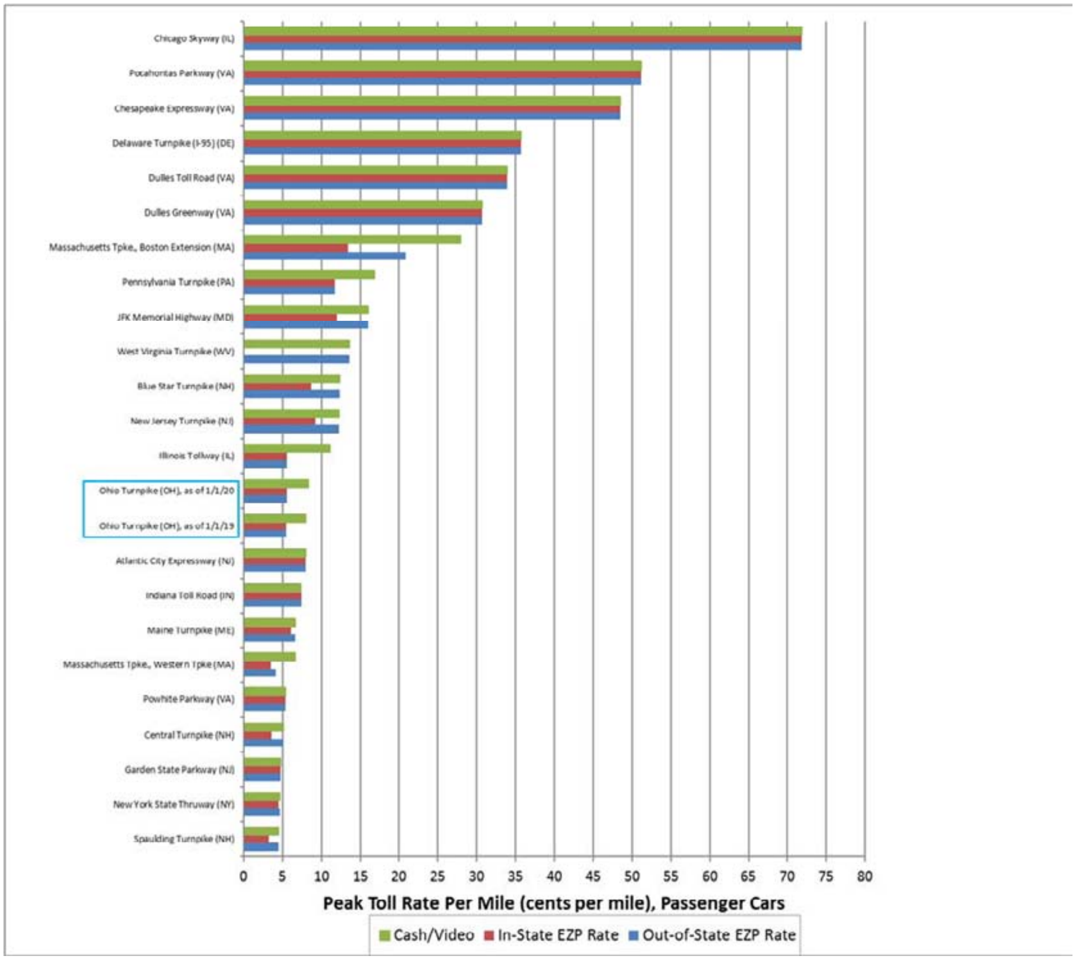
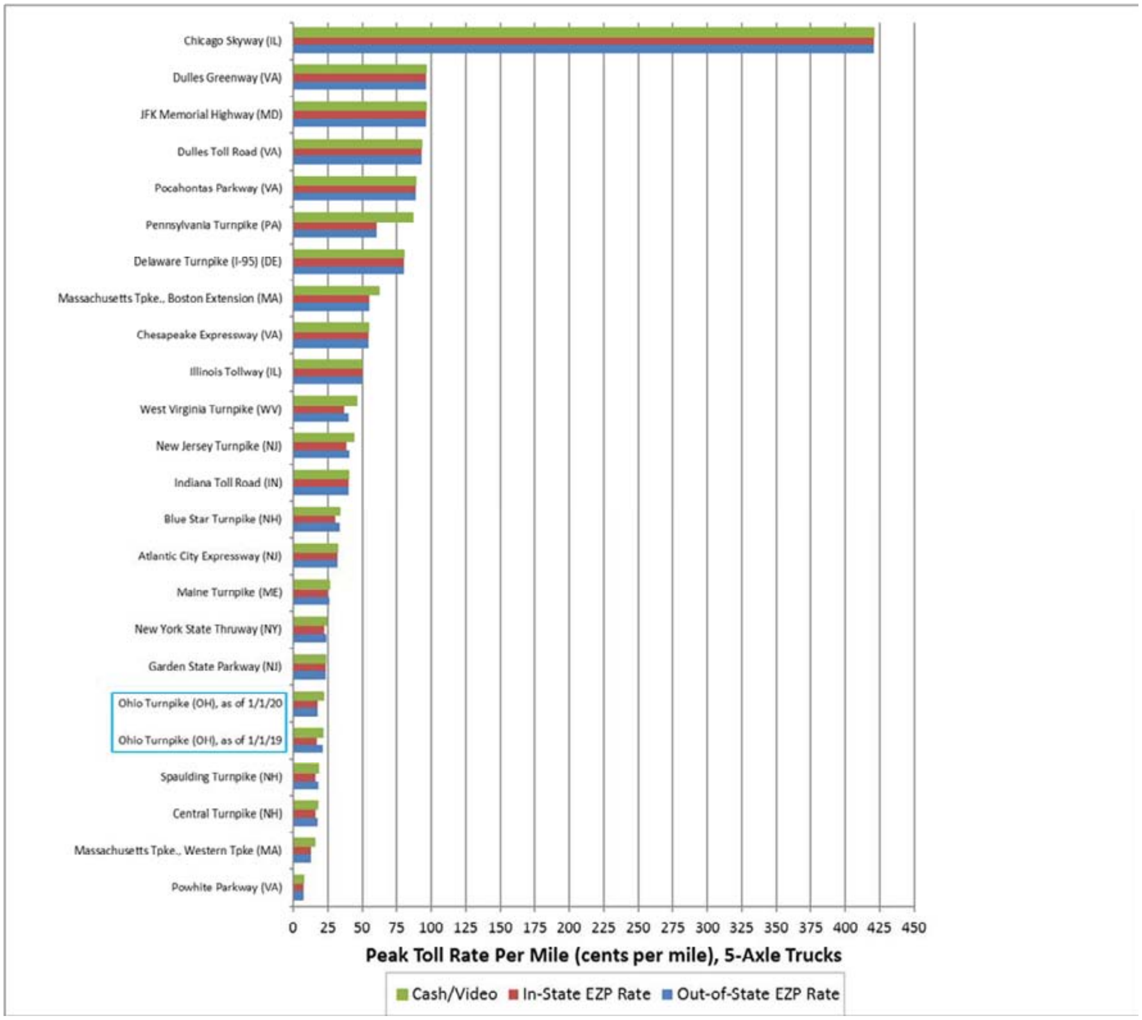


Figure 3 shows a similar comparison for 5-axle vehicles. Eighteen major E-ZPass toll facilities have higher 5-axle truck E-ZPass toll rates per mile than the Ohio Turnpike's current tolls, while only four have lower rates. Based on this graph, it can be said that the Ohio Turnpike commercial vehicle toll rates are reasonable compared to other E-ZPass toll facilities.

Figure 3: Commercial Vehicle Toll Rates on Select E-ZPass Toll Facilities as of November 2019



3.0 Proposed Toll System Modernization

The Turnpike Commission adopted the recommendation by OTIC's Advisory Team to modernize the Ohio Turnpike by replacing the Toll Collection System (TCS) and Customer Service Center (CSC) with new state of the art technology and contracting for Unpaid Toll Processing Services to enforce the collection of unpaid tolls. The plan is to complete the toll system modernization in late 2022 with full operation in 2023.

3.1 Toll Collection System

The current TCS, installed in 2009, is approaching the end of its useful service life. Replacement inventories for installed components are becoming scarce. While the TCS continues to perform as designed, the potential for future equipment failures will lead to lost revenue and will negatively affect OTIC toll collection operations.

To reduce the risk of those future concerns from occurring, the proposed TCS modernization consists of the following elements:

1. Implement highway speed E-ZPass lanes at Eastgate and Westgate and convert them to barrier plazas where flat-rate tolls are assessed for each vehicle class regardless of distance travelled;
2. Convert Eastgate toll collection to one-way only in the westbound direction (i.e., into Ohio and opposite to the Pennsylvania Turnpike's Gateway Plaza which is tolled one-way eastbound into Pennsylvania);
3. Construct two new mainline plazas with highway speed E-ZPass lanes at MP 49 and MP 211 which would become the new termini of a closed ticket system where all movements between MP 49 and MP 211 are tolled by vehicle class and distance travelled between entry and exit tolling points, as is the case today;
4. Remove nine (9) selected Toll Plazas but maintain interchange access to the Ohio Turnpike (Interchanges 13, 25, 34, 39, 215, 216, 218, 232 and 234);
5. Remove all entry toll lane gates as well as exit gates in low speed "E-ZPass Only" lanes within the ticket system;
6. Install new license plate image capture cameras in all gateless "E-ZPass Only" exit lanes;
7. Retain toll lane gates in non- "E-ZPass Only" exit lanes; and
8. Continue to build trips for all Class 1 E-ZPass customers based upon Turnpike entry and exit points and apply rebates for trip lengths under 30 miles through 2023. This includes trips that pass through Eastgate, Westgate, and the new mainline plazas at MP 49 and MP 211.

Figure 4: Modernizing the Ohio Turnpike System

The proposed, modernized TCS, is expected to provide the following benefits and impacts:

1. Technology and customer service improvements with limited revenue risk;
2. Non-stop travel at highway speeds (70 mph) for E-ZPass customers traveling the full length of the Ohio Turnpike;
3. Non-stop travel at low speeds (10-15 mph) for E-ZPass customers at all interchange plazas (Interchanges 52 through 209);
4. Non-tolled (i.e., toll-free) trips for local travelers making trips within the Interchange 13 to Interchange 39 corridor and within the Interchange 216 to Interchange 232 corridor;
5. Full-length trip cash customers would stop three times eastbound (or four times westbound) instead of two times (i.e., at each terminus) as they currently do; and
6. Toll collection staff reductions due to the removal of plazas and gates, increased E-ZPass penetration/market share and faster toll collection rates at Eastgate and Westgate.

OTIC will continue to classify vehicles by the number of axles and height over the first two axles. Vehicle pre-classification as well as automatic height and weight screening will be conducted upon entry to the Turnpike in low speed lanes. While height detection can be performed in highway speed lanes, weight enforcement may have to be conducted in some other manner, such as roving enforcement by Ohio State Highway Patrol personnel or by implementing weigh station operations. The feasibility to determine vehicle weight via highway speed WIM techniques will require further investigation. Full service ATPMs that accept both cash and credit cards will continue to operate across the Turnpike at selected low volume toll plazas. New multiprotocol E-ZPass readers will be installed at all OTIC tolling points to enhance interoperability with tolling agencies outside of the E-ZPass network.

The modernized TCS with highway speed E-ZPass lanes at mainline toll plazas will meet the Project goals of providing OTIC customers with quality service and value and allow OTIC to implement innovative, adaptable and sustainable technology and operational programs while being financially responsible.

In addition to the TCS modernization described above, OTIC is also making toll plaza improvements at Interchange 64 (one new exit lane and conversion of one existing entry lane to a reversible lane) and Interchange 152 (one new exit lane).

3.2 Customer Service Center

There will be a new, state-of-the-art CSC with significant advancements in improved customer experience, communication methods, data availability, and security that will continue to be operated by OTIC staff, to service the customer service needs of the almost 450,000 OTIC E-ZPass customers. E-ZPass usage is currently growing at less than one percent per year and a bump in E-ZPass usage is anticipated when highway speed gateless E-ZPass lanes are implemented as part of the modernization plan.

The new CSC will include a redesigned E-ZPass Ohio website (www.ezpassoh.com). The CSC will only perform functions related to administering and managing the E-ZPass Ohio program. All unpaid toll processing functions that are expected to arise from gateless E-ZPass lane operations will be outsourced to one or more vendors as described below.

A modernized CSC will meet the Project goals of providing OTIC patrons with quality customer service and value and allow the OTIC to implement innovative, adaptable and sustainable technology and operational programs while being financially responsible.

3.3 Unpaid Toll Processing Services

OTIC will contract with one or more vendors to perform license plate image review, unpaid toll transaction processing functions (e.g., registered owner vehicle address lookup, generation and mailing of unpaid toll notices, customer service related to unpaid tolls, etc.) and collection of unpaid tolls. Unpaid Toll Processing will allow the OTIC to be financially responsible while providing low speed and highway speed non-stop travel for its E-ZPass customers.

3.4 Capital Cost Estimates

The Consultant Team previously prepared budgetary estimates of the capital costs of modernizing the Ohio Turnpike. These costs are estimated to be approximately $204 to $232 million in 2019 dollars with some $65 to $72 million for the TCS, CSC and Unpaid Toll Processing capital costs (*this assumes the full replacement of all existing TCS and CSC technology*) and some $139 to $160 million for toll plaza and mainline infrastructure improvements.

3.5 Revenue and Operating Cost Impacts

The Consultant Team previously prepared budgetary estimates of the costs to operate and maintain the modernized Ohio Turnpike. It is estimated that the modernized TCS and CSC will result in approximately $257 million of operating cost savings over 30 years. In the opening year of the modernized TCS, it is estimated that there will be approximately $2.7 million less in operating costs and approximately $2.4 million more net revenue. The net revenue increase is expected to be due to lower toll collection operating costs following the implementation of the modernized TCS and CSC and the continued increase in E-ZPass market shares.

3.6 Proposed Implementation Schedule and Key Milestones

The CSC design, development and testing efforts are currently underway. The CSC implementation will occur in two phases with functional dependencies on the TCS modernization. Phase 1 is estimated to wrap up in the second or third quarter of 2020 followed by phase 2 at the end of 2022. Similar efforts for the TCS modernization are also in progress with an anticipated go-live date at the end of 2022. All remaining elements of the new TCS are estimated to be fully implemented in the first quarter of 2023. Unpaid Toll Processing efforts are currently expected to begin in the fourth quarter of 2020 and to be completed at the end of 2022. Construction of the new and modernized mainline toll facilities is estimated to begin in the fourth quarter of 2020 and conclude at the end of 2022.

It is estimated that the Commission will begin to operate Phase 1 of the new CSC in the second or third quarter of 2020. Operations of the new TCS, as well as commencement of Unpaid Toll Processing Services, are anticipated for deployment at the end of 2022.

4.0 Historical Toll Trips, VMT and Toll Revenue Trends

This section discusses historical toll (revenue) trips, VMT, and toll revenue trends for the Turnpike. Jacobs has compiled and analyzed annual traffic and toll revenue data by exit and entry/exit movement to determine traffic and revenue growth patterns, frequent travel movements, and which exit and entry/exit pairs generate the largest amount of toll revenue.

4.1 Historical Toll Trips and VMT Trends

Table 5 illustrates annual toll trips and VMT growth from 1991 through the first 10 months of 2019. From 1991 through 2000, the Turnpike experienced an average annual growth in vehicle trips of approximately 3.3 percent, with a corresponding average annual growth rate of about 2.5 percent in VMT. From 2001 through 2010, trips grew at slower annual rate of 0.7 percent, with a corresponding annual growth rate of 0.2 percent in vehicle miles traveled. Over the last five years both vehicle trips and vehicle miles traveled increased by an annual average of 1.6 percent and 1.4 percent, respectively. It is important to note that a substantial decline in vehicle trips and vehicle miles traveled occurred between 2007 and 2009 due to the severe economic recession that occurred over this period. From 2009 through 2018, vehicle trips recovered somewhat with an average annual growth in vehicle trips of about 1.4 percent whereas vehicle miles traveled grew by 1.2 percent over this period; suggesting that the trip increases occurred primarily in shorter distance trips. Data for 2019 through the month of October suggests that this trend continues with trips growing at a slower rate of -3.6 percent over 2018, and VMT at -1.8 percent.

Table 5: Historical Toll Trips and VMT, 1991 through 2018, in Millions

Year	Vehicle Trips		VMT	
	Total Trips	Growth	Total VMT	Growth
1991	34.1		2,158.3	
1992	36.4	6.9%	2,234.8	3.5%
1993	38.1	4.7%	2,306.5	3.2%
1994	40.8	6.9%	2,416.9	4.8%
1995*	42.3	3.8%	2,513.2	4.0%
1996*	41.3	-2.3%	2,483.2	-1.2%
1997*	41.0	-0.8%	2,455.6	-1.1%
1998*	43.6	6.2%	2,569.5	4.6%
1999*	45.1	3.4%	2,657.4	3.4%
2000	45.6	1.2%	2,702.3	1.7%
2001	45.9	0.7%	2,717.7	0.6%
2002	47.7	3.9%	2,809.6	3.4%
2003	48.3	1.2%	2,833.8	0.9%
2004	50.2	3.9%	2,911.5	2.7%
2005**	51.1	2.0%	2,990.5	2.7%
2006	51.8	1.2%	3,040.3	1.7%
2007*	51.5	-0.5%	2,978.4	-2.0%
2008	50.0	-2.9%	2,830.9	-5.0%
2009***	48.2	-3.6%	2,734.6	-3.4%
2010	48.9	1.4%	2,778.8	1.6%
2011	49.2	0.8%	2,762.5	-0.6%
2012*	49.8	1.1%	2,777.9	0.6%
2013	50.3	1.0%	2,827.7	1.8%
2014*	51.3	1.9%	2,875.2	1.7%
2015*	53.4	4.2%	3,001.3	4.4%
2016*	55.3	3.6%	3,037.6	1.2%
2017*	55.6	0.5%	3,037.9	0.0%
2018*	54.7	-1.6%	3,034.5	-0.1%

**Toll increase year*
***Truck toll reduction*
****Toll increase and implementation of E-ZPass (October 2009)*
Source: OTIC CAFRs 1991-2018

Table 6 illustrates the relative growth rate in vehicle trips and vehicle miles traveled for the periods 1991 through 2000, 2001 through 2010, 2008 through 2012, 2013 through 2018 and the first 10 months of 2019.

Table 6: Growth in Vehicle Trips and VMT; 1991-2000, 2001-2010, 2008-2012, and 2013-2018

Year	Growth in Vehicle Trips			Growth in VMT		
	Cars	Trucks	Total	Cars	Trucks	Total
1991-2000	33.6%	34.4%	33.7%	22.1%	32.4%	25.2%
2001-2010	5.0%	12.3%	6.4%	-1.5%	11.1%	2.3%
2008-2012	1.0%	-5.4%	-0.4%	1.5%	-8.1%	-1.9%
2013-2018	6.5%	13.4%	7.9%	4.1%	13.8%	7.3%
2019*	-4.1%	-2.0%	-3.6%	-2.2%	-1.0%	-1.8%

**January through October 2019*

Source: OTIC CAFRs 1991-2018

4.2 Historical Toll Revenue Trends

Table 7 illustrates annual toll revenue growth from 1991 through the first 10 months of 2019. From 1991 through 2000, the Turnpike experienced an average annual growth in toll revenue of approximately 9.2 percent. For the ten years 2001 through 2010, toll revenue grew at a slower annual rate of 3.2 percent. From 1995 to 1999, tolls were increased each year, with a total toll rate increase of 68.9 percent for cars and 58.2 percent (on average) for trucks; therefore, this was the period with the most substantial toll revenue growth, with an average annual growth rate of about 14.7 percent, and total revenue growth of 73 percent. From 2000 through 2009, toll revenue increased at an average annual growth rate of about 0.6 percent; it is important to note that there were no toll rate increases between 2000 and 2006 and that a temporary truck toll rate reduction of some two percent to 57 percent (depending on the truck class) was implemented in 2005. With the implementation of electronic tolling (E-ZPass) in October 2009 and toll rate increases for non-E-ZPass customers, toll revenue in 2010 grew substantially at almost 24 percent compared to the prior year. With toll rate increases for both cash and E-ZPass customers in January 2012, toll revenue for 2012 grew at 9.3 percent compared to the prior year. Since 2014, there have been annual toll rate increases, and the Turnpike’s toll revenue increased at an average annual rate of roughly four percent, with a substantial increase of 5.9 percent in 2015 compared to the prior year. Revenues for the year 2019 through October are up 0.4 percent.

Table 7: Historical Toll Revenue, 1991 through 2018

Year	Total Toll Revenue (in millions)	Growth
1991	$80.2	
1992	$83.6	4.3%
1993	$88.4	5.7%
1994	$94.4	6.9%
1995*	$102.0	8.0%
1996*	$118.8	16.5%
1997*	$138.6	16.7%
1998*	$156.2	12.7%
1999*	$176.4	13.0%
2000	$176.8	0.2%
2001	$174.3	-1.4%
2002	$179.2	2.8%
2003	$180.0	0.4%
2004	$189.7	5.4%
2005**	$179.1	-5.6%
2006	$183.9	2.7%
2007*	$198.2	7.7%
2008	$187.5	-5.4%
2009***	$187.3	-0.1%
2010	$232.2	24.0%
2011	$231.0	-0.5%
2012*	$252.5	9.3%
2013	$254.6	0.8%
2014*	$264.6	3.9%
2015*	$280.2	5.9%
2016*	$288.4	3.0%
2017*	$295.8	2.6%
2018*	$306.0	3.5%

**Toll increase year*
***Truck toll reduction*
****Toll increase and implementation of E-ZPass (October 2009)*
Source: OTIC CAFRs 1991-2018

Table 8 illustrates the relative growth in toll revenue for the periods 1991 through 2000, 2001 through 2010, 2008 through 2012, 2013 through 2018 and the first 10 months of 2019, while Figure 5 shows the annual total toll revenue growth from 1991 through 2018. The recent spikes in annual toll revenue growth shown in Figure 5 were due to a toll increase in January 2007, the implementation of E-Zpass and toll increases for cash customers in late 2009, a 10 percent toll increase in January 2012, and annual toll rate increases each January beginning in 2014.

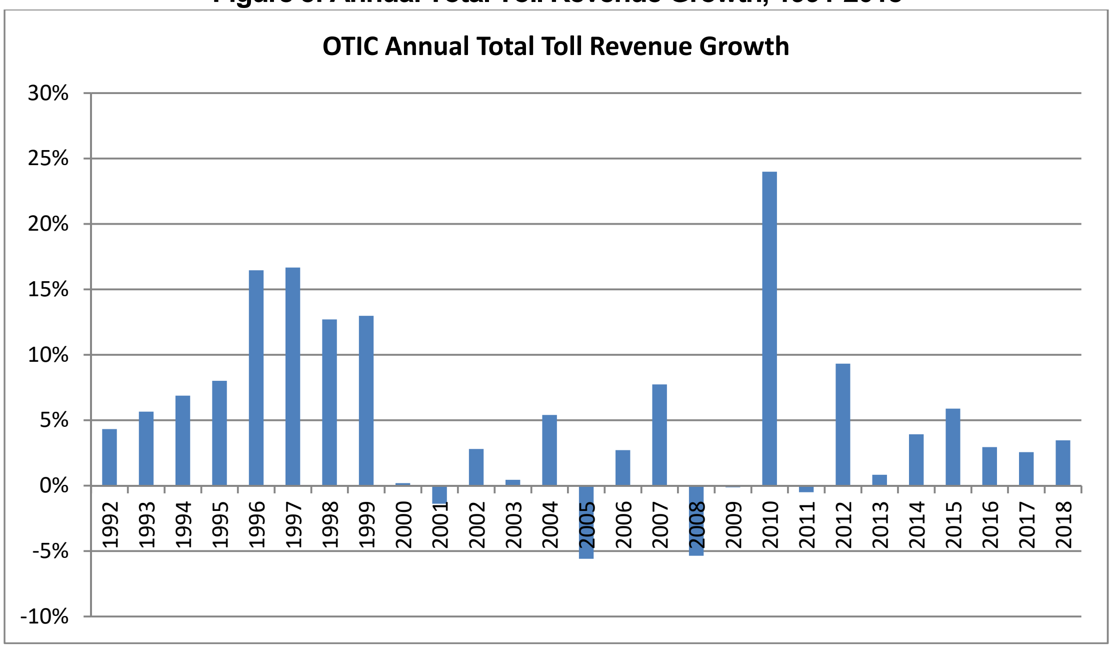
Table 8: Total Growth in Toll Revenue; 1991-2000, 2001-2010, 2008-2012, and 2013-2018

Year	Toll Revenue Growth		
	Cars	Trucks	Total
1991-2000	121.2%	120.0%	120.5%
2001-2010	43. 2%	25.7%	33.2%
2008-2012	42.9%	28.7%	34.7%
2013-2018	12.0%	26.7%	20.2%
2019*	-0.6%	1.2%	0.4%

**January through October 2019*

Source: OTIC CAFRs 1991-2018

Figure 5: Annual Total Toll Revenue Growth, 1991-2018



Notes:
Toll increases occurred in: Jul 1995, Jan 1996, Jan 1997, Jan 1998, Jan 1999, Jan 2007, Oct 2009, Jan 2012 and each Jan 2014-2018.
A truck toll reduction was implemented in Jan 2005.
E-ZPass was implemented in Oct 2009.

4.3 Historical Toll Trips and VMT by Vehicle Class

Table 9 illustrates annual toll trips and VMT by vehicle class from 1991 through October 2019. From 1991 through 2000, the Turnpike experienced an average annual growth in passenger car trips of approximately 3.4 percent, with a corresponding average annual growth of about 2.2 percent in VMT. During the same time period, the average annual growth in commercial truck trips was approximately 3.4 percent, with a corresponding average annual growth of about 3.2 percent in VMT. From 2001 through 2010, passenger car trips grew at an annual rate of 0.5 percent, with a decline in VMT of 0.1 percent annually. Commercial trucks experienced an average annual trip growth of 1.2 percent, with a corresponding annual growth rate in VMT of 1.1 percent. Between 2011 and 2018, vehicle trips for cars increased at an annual rate of 1.2 percent, with a corresponding annual growth rate in VMT of 0.9 percent. During the same time period, commercial truck trips increased by an average annual rate of about 2.3 percent, with a corresponding increase in VMT of 2.3 percent.

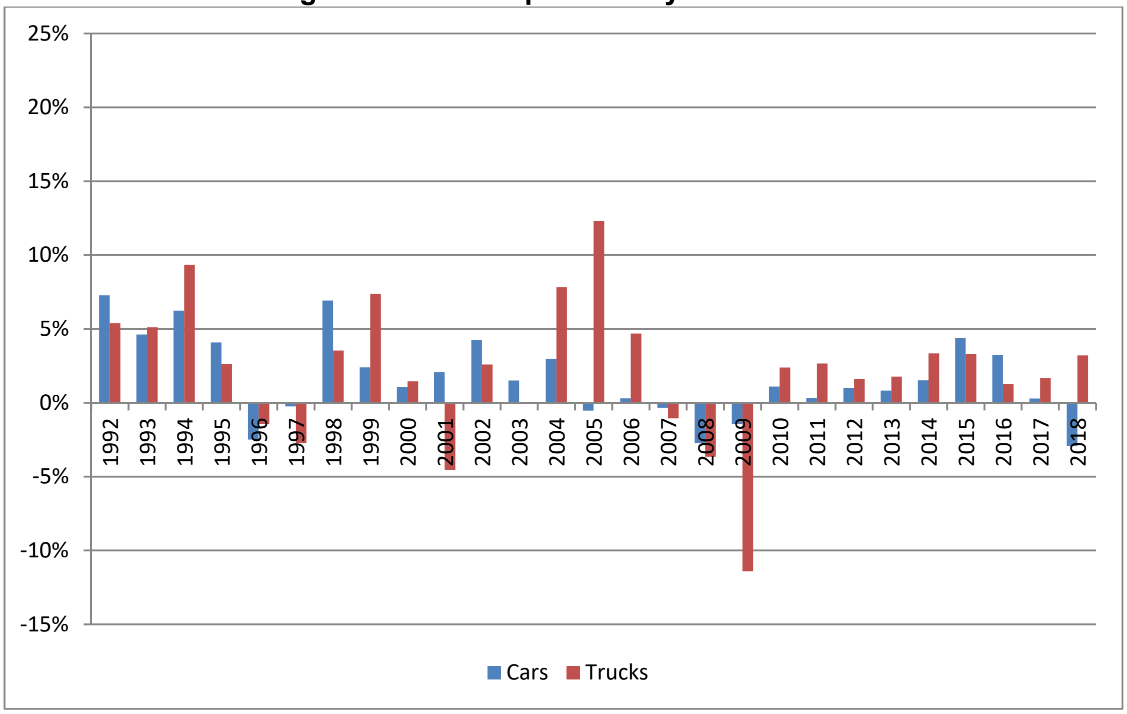
Table 9: Historical Toll Trips and VMT by Vehicle Class 1991 through 2018

Year	Vehicle Trips (in Millions)				VMT (in Millions)			
	Cars	Growth	Trucks	Growth	Cars	Growth	Trucks	Growth
1991	27.2		6.9		1,516.1		642.2	
1992	29.1	7.3%	7.3	5.4%	1,566.9	3.4%	667.9	4.0%
1993	30.5	4.6%	7.7	5.1%	1,602.3	2.3%	704.2	5.4%
1994	32.4	6.2%	8.4	9.3%	1,639.7	2.3%	777.3	10.4%
1995*	33.7	4.1%	8.6	2.6%	1,715.4	4.6%	797.8	2.6%
1996*	32.9	-2.5%	8.5	-1.4%	1,701.5	-0.8%	781.7	-2.0%
1997*	32.8	-0.3%	8.2	-2.7%	1,703.8	0.1%	751.8	-3.8%
1998*	35.1	6.9%	8.5	3.5%	1,797.1	5.5%	772.4	2.8%
1999*	35.9	2.4%	9.2	7.4%	1,820.8	1.3%	836.6	8.3%
2000	36.3	1.1%	9.3	1.4%	1,851.8	1.7%	850.5	1.7%
2001	37.0	2.1%	8.9	-4.5%	1,913.9	3.4%	803.9	-5.5%
2002	38.6	4.3%	9.1	2.6%	1,994.6	4.2%	815.0	1.4%
2003	39.2	1.5%	9.1	-0.1%	2,019.4	1.2%	814.4	-0.1%
2004	40.4	3.0%	9.8	7.8%	2,021.5	0.1%	890.0	9.3%
2005**	40.1	-0.5%	11.0	12.3%	1,964.0	-2.9%	1,026.5	15.3%
2006	40.3	0.3%	11.5	4.7%	1,963.0	-0.1%	1,077.3	4.9%
2007*	40.1	-0.3%	11.4	-1.1%	1,915.1	-2.4%	1,063.3	-1.3%
2008	39.0	-2.7%	11.0	-3.7%	1,831.5	-4.4%	999.4	-6.0%
2009***	38.5	-1.4%	9.7	-11.4%	1,863.1	1.7%	871.6	-12.8%
2010	38.9	1.1%	10.0	2.4%	1,885.4	1.2%	893.4	2.5%
2011	39.0	0.3%	10.2	2.7%	1,851.7	-1.8%	910.8	1.9%
2012*	39.4	1.0%	10.4	1.6%	1,859.1	0.4%	918.8	0.9%
2013	39.7	0.8%	10.6	1.8%	1,891.7	1.8%	936.0	1.9%
2014*	40.3	1.5%	10.9	3.3%	1,906.6	0.8%	968.5	3.5%
2015*	42.1	4.4%	11.3	3.3%	1,998.2	4.8%	1,003.1	3.6%
2016*	43.5	3.2%	11.4	1.3%	2,029.9	1.6%	1,007.7	0.5%
2017*	43.6	0.3%	11.6	1.7%	2,017.0	-0.6%	1,020.9	1.3%
2018*	42.3	-2.9%	12.0	3.2%	1,969.7	-2.3%	1,064.8	4.3%

**Toll increase year*
***Truck toll reduction*
****Toll increase and implementation of E-ZPass (October 2009)*

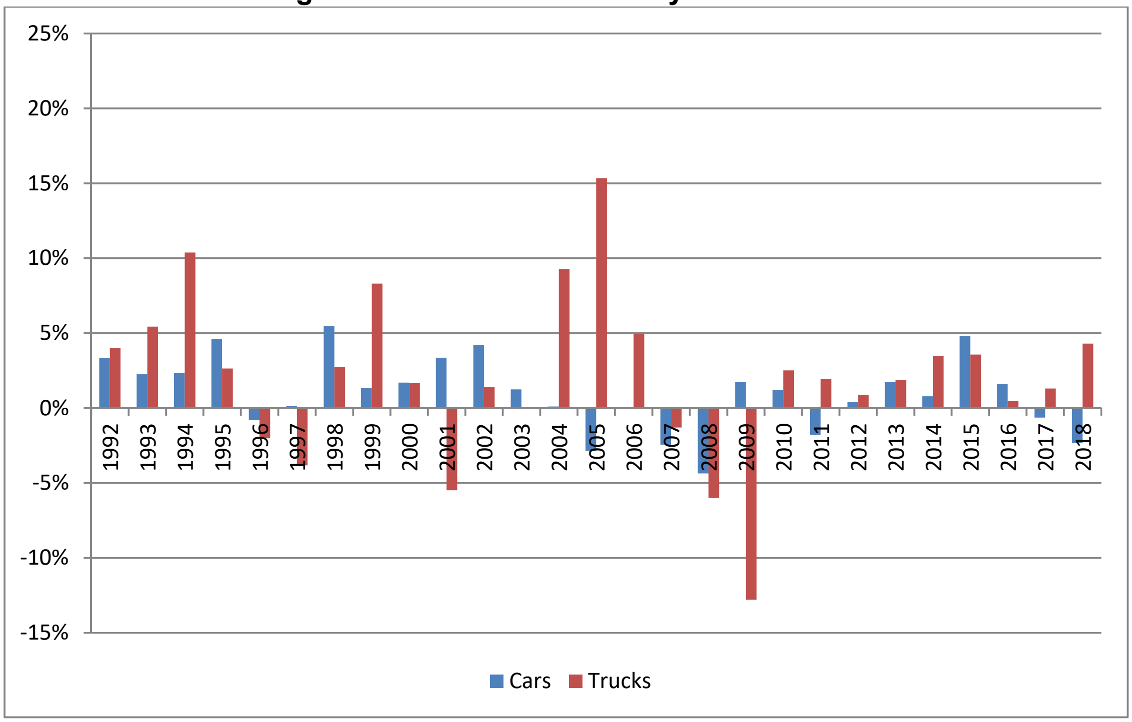
Annual growth in trips, VMT and toll revenue between 1991 and 2018 are illustrated in Figure 6, Figure 7 and Figure 8, respectively.

Figure 6: Annual Trip Growth by Vehicle Class



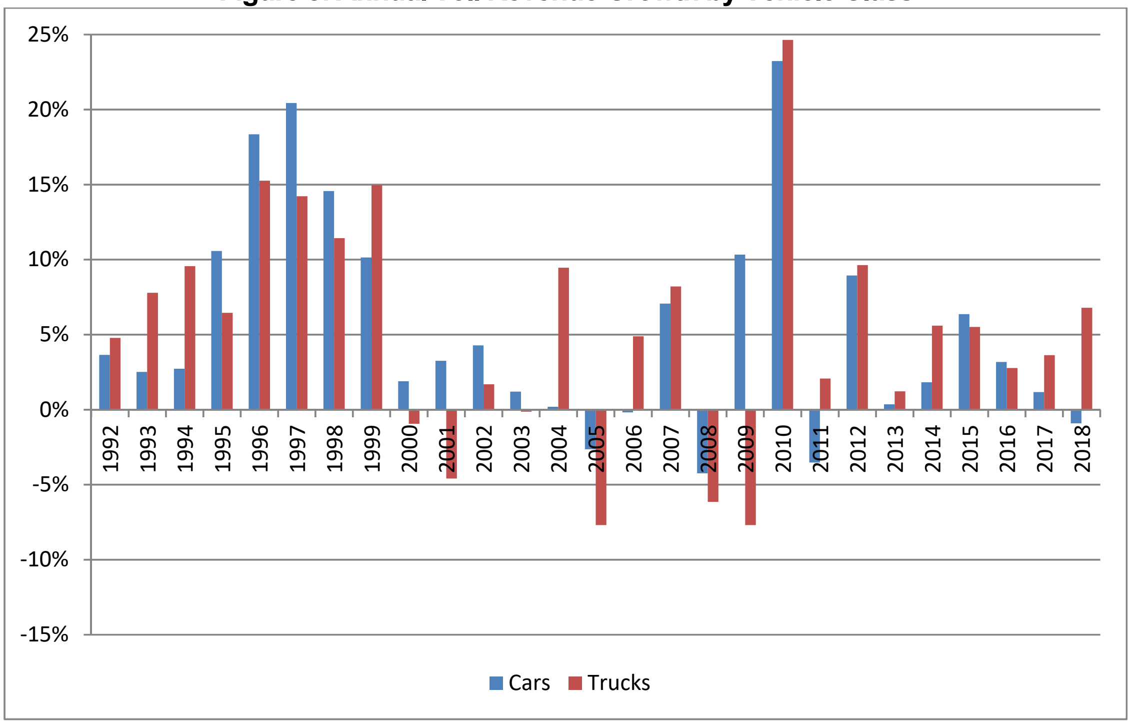
Notes:
Toll increases occurred in: Jul. 1995, Jan. 1996, Jan. 1997, Jan. 1998, Jan. 1999, Jan. 2007, Oct. 2009, Jan 2012 and each Jan 2014-2018.
A truck toll reduction was implemented in Jan. 2005.
E-ZPass was implemented in October 2009.

Figure 7: Annual VMT Growth by Vehicle Class



Notes:
Toll increases occurred in: Jul. 1995, Jan. 1996, Jan. 1997, Jan. 1998, Jan. 1999, Jan. 2007, Oct. 2009, Jan 2012 and each Jan 2014-2018.
A truck toll reduction was implemented in Jan. 2005.
E-ZPass was implemented in October 2009.

Figure 8: Annual Toll Revenue Growth by Vehicle Class



Notes:
Toll increases occurred in: Jul. 1995, Jan. 1996, Jan. 1997, Jan. 1998, Jan. 1999, Jan. 2007, Oct. 2009, Jan 2012 and each Jan 2014-2018.
A truck toll reduction was implemented in Jan. 2005.
E-ZPass was implemented in October 2009.

4.4 Distribution of Current Traffic and Revenue by Exit Point and Entry/Exit Pair

The Turnpike has currently 31 tolling points over its 241-mile length where drivers may enter or exit. Upon exiting the Turnpike, a toll is paid based on the distance traveled, the vehicle class and payment type (E-ZPass or non-E-ZPass). Annual 2018 (the last full year of data available) traffic and revenue by entry and exit point was compiled and sorted into the top ten toll locations (i.e. exit points) in terms of traffic volumes (trips), VMT, and toll revenues; these are shown in Table 10, Table 11 and Table 12, respectively. The eastern terminus (Interchange 239) and the Niles-Youngstown exit at Route 80 (Interchange 218) are the two most popular tolling points in terms of traffic volumes, with over four million toll-paying vehicles per year or almost eight percent of total traffic at each location. In terms of VMT, the two Turnpike endpoints (Westgate/Interchange 2 and Eastgate/Interchange 239) account for over 29 percent of total Turnpike VMT, indicating that there are a large number of vehicles making interstate trips on the Turnpike. The top ten most popular exit points are used by twothirds of all Turnpike trips. In terms of toll revenue, the western end of the Turnpike (Interchange 2) collects almost 21 percent of total toll revenue – significantly more than any other location – indicating that there is a relatively high proportion of long-distance truck trips with over 15 percent of total toll revenue at this location compared to the other 30 Turnpike tolling points. The top ten toll locations in terms of toll revenue collect more than 79 percent of total toll revenue on the Turnpike.

Table 10: Top Ten Exit Points in Terms of Traffic Volume, 2018

Ranking	Exit	Milepoint	2018 Exiting Trips (000s)	% of Total Trips	% Cars	% Trucks
1	Eastgate	239	4,478	8.2%	6.0%	2.2%
2	Niles-Youngstown	218	4,258	7.8%	5.1%	2.8%
3	Westgate	2	3,834	7.1%	3.6%	3.5%
4	Strongsville-Cleveland	161	3,809	7.0%	6.4%	0.6%
5	Streetsboro	187	3,581	6.6%	5.6%	1.0%
6	Akron	180	3,477	6.4%	5.7%	0.7%
7	Cleveland	173	3,401	6.3%	5.3%	0.9%
8	Stony Ridge-Toledo	71	3,270	6.0%	3.5%	2.5%
9	Lorain-Elyria	145	3,169	5.8%	5.3%	0.5%
10	Perrysburg-Toledo	64	3,096	5.7%	4.4%	1.3%
Other			17,936	33.0%	27.0%	6.0%

Note: All trips/traffic volumes shown herein are two-way trips between the entry and exit points.

Table 11: Top Ten Exit Points in Terms of VMT, 2018

Ranking	Exit	Milepoint	2018 Exiting VMT (000s)	% of Total VMT	% Cars	% Trucks
1	Westgate	2	534,868	17.6%	8.8%	8.9%
2	Eastgate	239	351,043	11.6%	7.9%	3.7%
3	Niles-Youngstown	218	334,604	11.0%	5.4%	5.6%
4	Stony Ridge-Toledo	71	288,102	9.5%	5.1%	4.4%
5	Perrysburg-Toledo	64	206,956	6.8%	5.0%	1.9%
6	Strongsville-Cleveland	161	130,309	4.3%	3.7%	0.6%
7	Lorain Co. West	142	126,832	4.2%	2.9%	1.3%
8	N. Ridgeville-Cleveland	151	125,563	4.1%	2.7%	1.4%
9	Streetsboro	187	115,839	3.8%	3.1%	0.8%
10	Akron	180	114,996	3.8%	3.1%	0.7%
Other			705,368	23.2%	17.4%	5.8%

Note: All VMT volumes shown herein are two-way VMT volumes between the entry and exit points.

Table 12: Top Ten Exit Points in Terms of Toll Revenue, 2018

Ranking	Exit	Milepoint	2018 Exiting Revenue (000s)	% of Total Revenue	% Cars	% Trucks
1	Westgate	2	$63,232	20.6%	5.4%	15.2%
2	Niles-Youngstown	218	$39,377	12.8%	3.5%	9.4%
3	Eastgate	239	$33,517	10.9%	4.9%	6.0%
4	Stony Ridge-Toledo	71	$32,951	10.7%	3.4%	7.3%
5	Perrysburg-Toledo	64	$19,464	6.3%	3.2%	3.1%
6	N. Ridgeville-Cleveland	151	$12,510	4.1%	1.8%	2.3%
7	Lorain Co. West	142	$12,270	4.0%	1.9%	2.1%
8	Cleveland	173	$10,261	3.3%	1.7%	1.6%
9	Strongsville-Cleveland	161	$10,114	3.3%	2.3%	1.0%
10	Streetsboro	187	$9,710	3.2%	1.9%	1.2%
Other			$64,125	20.9%	11.3%	9.5%

Note: All revenues shown herein are revenues from two-way trips between the entry and exit points.

Table 13 shows the ten most popular entry/exit movements by traffic volume. The most popular entry/exit movements in terms of traffic are typically shorter trips in more urban areas. Table 14 presents the entry/exit movements that generate the most VMT, and Table 15 shows the entry/exit movements that generate the most toll revenue. It is clear that trips between Indiana and I-80 (Westgate/Interchange 2 to Interchange 218) and full-length trips (Westgate/Interchange 2 to Eastgate/Interchange 239) are the most popular movements in terms of VMT and consequently generate the most toll revenue with almost 19 percent of total toll revenue. Note that in each table, all values shown represent two-way values of either traffic, VMT or revenues between the entry and exit points.

Table 13: Top Ten Entry/Exit Movements by Traffic Volume, 2018

Ranking	Entry<>Exit	Distance (Miles)	2018 Trips (000s)	% of Total Trips	% Cars	% Trucks
1	Lorain-Elyria<> N. Ridgeville-Cleveland (145<>151)	6	2,684	4.9%	4.7%	0.3%
2	Streetsboro<>Niles-Youngstown (187<>218)	31	1,785	3.3%	2.7%	0.6%
3	Strongsville-Cleveland<>Akron (161<>180)	19	1,759	3.2%	3.1%	0.2%
4	Cleveland<>Akron (173<>180)	7	1,656	3.0%	2.9%	0.2%
5	Niles-Youngstown<>Eastgate (218<>239)	21	1,612	3.0%	2.1%	0.9%
6	Youngstown-Poland<>Eastgate (234<>239)	5	1,432	2.6%	2.2%	0.4%
7	Lorain-Elyria<>Strongsville-Cleveland (145<>161)	16	1,344	2.5%	2.3%	0.2%
8	Westgate<>Niles-Youngstown (2<>218)	216	1,180	2.2%	0.7%	1.4%
9	Streetsboro<>Eastgate (187<>239)	52	1,176	2.2%	1.7%	0.5%
10	Youngstown<>Eastgate (232<>239)	7	1,020	1.9%	1.3%	0.6%
Other			38,661	71.2%	54.3%	16.9%

Note: All trips/traffic volumes shown herein are two-way trips between the entry and exit points.

Table 14: Top Ten Entry/Exit Movements in Terms of VMT, 2018

Ranking	Entry<>Exit	Distance (Miles)	2018 VMT (000s)	% of Total VMT	% Cars	% Trucks
1	Westgate<>Niles-Youngstown (2<>218)	216	257,958	8.5%	2.9%	5.6%
2	Westgate<>Eastgate (2<>239)	237	228,276	7.5%	4.4%	3.1%
3	Stony Ridge-Toledo<>Eastgate (71<>239)	168	141,699	4.7%	2.7%	1.9%
4	Westgate<>Lorain Co. West (2<>142)	140	116,705	3.8%	2.3%	1.5%
5	Stony Ridge-Toledo<>Niles-Youngstown (71<>218)	147	109,549	3.6%	1.3%	2.3%
6	Westgate<>N. Ridgeville-Cleveland (2<>151)	149	96,483	3.2%	1.7%	1.5%
7	Perrysburg-Toledo<>Eastgate (64<>239)	175	70,472	2.3%	1.8%	0.5%
8	Streetsboro<>Eastgate (187<>239)	52	63,479	2.1%	1.6%	0.4%
9	Stony Ridge-Toledo<> N. Ridgeville-Cleveland (71<>151)	80	56,278	1.9%	1.2%	0.7%
10	Streetsboro<>Niles-Youngstown (187<>218)	31	56,223	1.9%	1.5%	0.3%
Other			1,837,358	60.5%	43.3%	17.2%

Note: All VMT values shown herein are total two-way VMT values between the entry and exit points.

Table 15: Top Ten Entry/Exit Movements in Terms of Toll Revenue, 2018

Ranking	Entry<>Exit	Distance (Miles)	2018 Revenue (000s)	% of Total Revenue	% Cars	% Trucks
1	Westgate<>Niles-Youngstown (2<>218)	216	$34,238	11.1%	1.8%	9.4%
2	Westgate<>Eastgate (2<>239)	237	$23,620	7.7%	2.6%	5.1%
3	Stony Ridge-Toledo<>Eastgate (71<>239)	168	$15,155	4.9%	1.8%	3.1%
4	Stony Ridge-Toledo<>Niles-Youngstown (71<>218)	147	$14,353	4.7%	0.9%	3.8%
5	Westgate<>Lorain Co. West (2<>142)	140	$12,000	3.9%	1.5%	2.4%
6	Westgate<>N. Ridgeville-Cleveland (2<>151)	149	$10,595	3.4%	1.0%	2.4%
7	Westgate<>Stony Ridge-Toledo (2<>71)	69	$7,595	2.5%	0.2%	2.3%
8	Perrysburg-Toledo<>Eastgate (64<>239)	175	$6,087	2.0%	1.2%	0.8%
9	Stony Ridge-Toledo<> N. Ridgeville-Cleveland (71<>151)	80	$5,825	1.9%	0.8%	1.1%
10	Perrysburg-Toledo<>Niles-Youngstown (64<>218)	154	$5,613	1.8%	0.6%	1.2%
Other			$172,450	56.1%	29.0%	27.0%

Note: All toll revenues shown herein are total two-way toll revenue values between the entry and exit points.

4.5 Distribution of Traffic and Revenue by Region

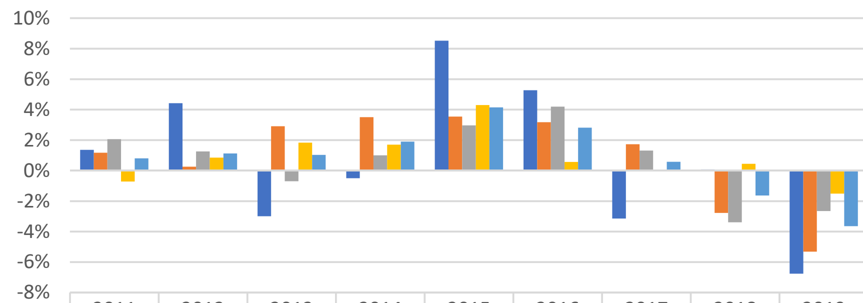
This section describes annual trip, VMT, and toll revenue growth by geographic region. The Turnpike is split into three distinct regions, with a separate fourth category specifically for “long-distance” trips:

1) Western Region: ranges for approximately 92 miles from the Indiana State Line to Fremont–Port Clinton, and spans Interchanges 2 through 91;
2) Central Region: ranges for approximately 96 miles from Sandusky–Bellevue to Streetsboro, and spans Interchanges 110 through 187;
3) Eastern Region: ranges for approximately 53 miles from Ravenna to the Pennsylvania State Line, and spans interchanges 193 through 239; and
4) Long-distance trips on the Turnpike are any trips with a distance greater than 60 miles.

This section illustrates annual trip, VMT, and toll revenue year-over-year growth for each geographic region (and for long-distance trips) by fiscal year with data from January 2011 through October 2019 (the most recent data available).

Figure 9 illustrates trip growth by region for all vehicle classes. For the first ten months of 2019, all regions and long-distance trips experienced somewhat less trip growth as compared to 2018. Total trip growth also slowed by -3.6 percent as compared to the prior year.

Figure 9: Trip Growth by Region for All Vehicle Classes

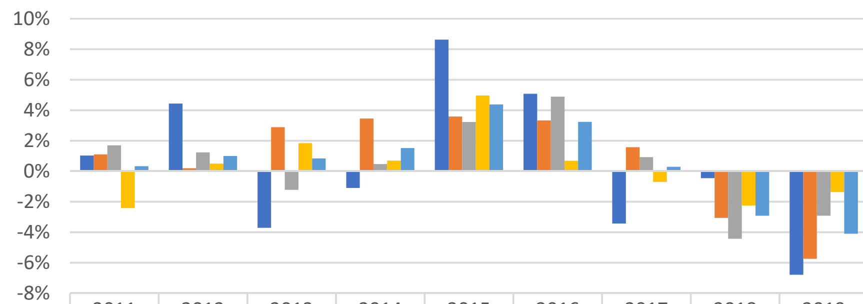


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	1.4%	4.4%	-3.0%	-0.5%	8.5%	5.3%	-3.1%	0.1%	-6.8%
Central Region	1.2%	0.2%	2.9%	3.5%	3.5%	3.2%	1.7%	-2.8%	-5.3%
Eastern Region	2.1%	1.3%	-0.7%	1.0%	3.0%	4.2%	1.3%	-3.4%	-2.7%
Long Distance	-0.7%	0.9%	1.8%	1.7%	4.3%	0.6%	0.0%	0.4%	-1.5%
Total	0.8%	1.1%	1.0%	1.9%	4.1%	2.8%	0.6%	-1.6%	-3.6%

Note: 2019 data through October 2019 (most recent data available).

Figure 9 illustrates trip growth by region for cars. For the first ten months of 2019, all regions and long-distance trips experienced somewhat less trip growth as compared to 2018. Passenger car trip growth decreased 4.1 percent as compared to the prior year.

Figure 10: Trip Growth by Region for Cars

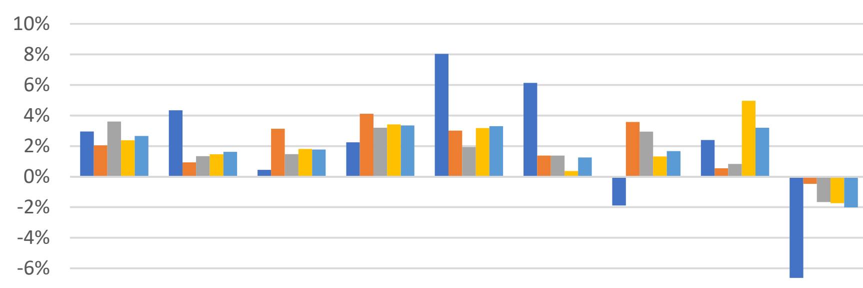


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	1.0%	4.4%	-3.7%	-1.1%	8.6%	5.1%	-3.4%	-0.5%	-6.8%
Central Region	1.1%	0.2%	2.9%	3.4%	3.6%	3.3%	1.6%	-3.1%	-5.8%
Eastern Region	1.7%	1.2%	-1.2%	0.5%	3.2%	4.9%	0.9%	-4.4%	-2.9%
Long Distance	-2.4%	0.5%	1.8%	0.7%	5.0%	0.7%	-0.7%	-2.3%	-1.4%
Total	0.3%	1.0%	0.8%	1.5%	4.4%	3.2%	0.3%	-2.9%	-4.1%

Note: 2019 data through October 2019 (most recent data available).

Figure 11 illustrates trip growth by region for trucks. For the first ten months of 2019, all regions and long-distance trips experienced somewhat less trip growth as compared to 2018. Truck trip growth decreased two percent as compared to the prior year.

Figure 11: Trip Growth by Region for Trucks

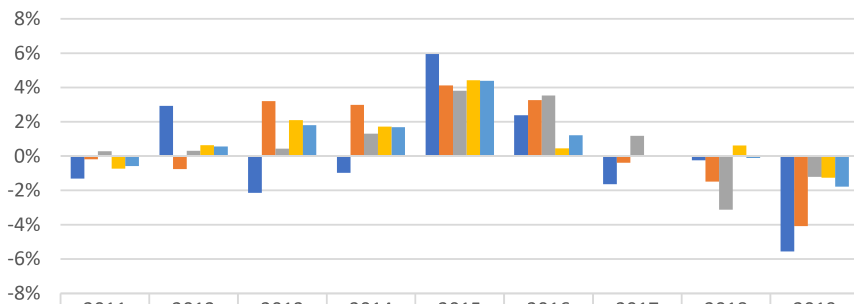


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	3.0%	4.3%	0.4%	2.2%	8.0%	6.1%	-1.9%	2.4%	-6.6%
Central Region	2.0%	0.9%	3.1%	4.1%	3.0%	1.4%	3.6%	0.5%	-0.5%
Eastern Region	3.6%	1.3%	1.5%	3.2%	1.9%	1.4%	2.9%	0.8%	-1.7%
Long Distance	2.4%	1.5%	1.8%	3.4%	3.2%	0.4%	1.3%	5.0%	-1.7%
Total	2.7%	1.6%	1.8%	3.3%	3.3%	1.2%	1.7%	3.2%	-2.0%

Note: 2019 data through October 2019 (most recent data available).

Figure 12 illustrates VMT growth by region for all vehicle classes. For the first ten months of 2019, all regions and long-distance trips experienced somewhat less VMT growth as compared to 2018. Total VMT growth decreased 1.8 percent as compared to the prior year.

Figure 12: VMT Growth by Region for All Vehicle Classes

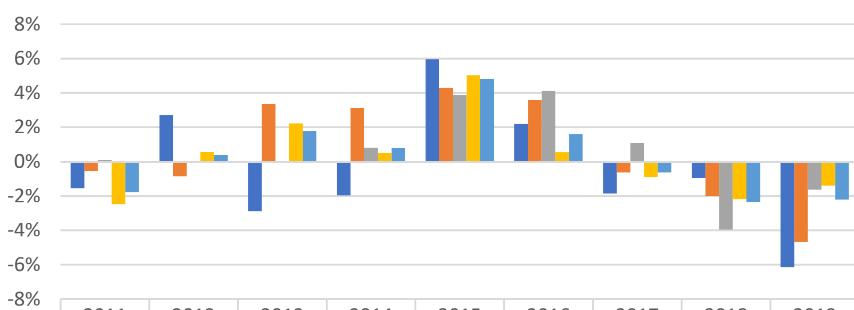


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	-1.3%	2.9%	-2.1%	-1.0%	5.9%	2.4%	-1.6%	-0.3%	-5.6%
Central Region	-0.2%	-0.8%	3.2%	3.0%	4.1%	3.3%	-0.4%	-1.5%	-4.1%
Eastern Region	0.3%	0.3%	0.4%	1.3%	3.8%	3.5%	1.2%	-3.1%	-1.2%
Long Distance	-0.7%	0.6%	2.1%	1.7%	4.4%	0.5%	0.0%	0.6%	-1.3%
Total	-0.6%	0.6%	1.8%	1.7%	4.4%	1.2%	0.0%	-0.1%	-1.8%

Note: 2019 data through October 2019 (most recent data available).

Figure 13 illustrates VMT growth by region for cars. For the first ten months of 2019, all regions and long-distance trips experienced somewhat less VMT growth as compared to 2018. Passenger car VMT growth decreased 2.2 percent as compared to the prior year.

Figure 13: VMT Growth by Region for Cars

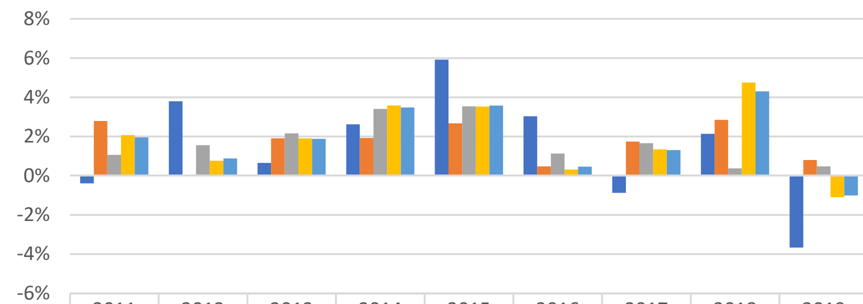


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	-1.6%	2.7%	-2.9%	-2.0%	6.0%	2.2%	-1.9%	-0.9%	-6.1%
Central Region	-0.5%	-0.9%	3.4%	3.1%	4.3%	3.6%	-0.6%	-2.0%	-4.7%
Eastern Region	0.1%	0.0%	0.0%	0.8%	3.9%	4.1%	1.1%	-4.0%	-1.6%
Long Distance	-2.5%	0.6%	2.2%	0.5%	5.0%	0.5%	-0.9%	-2.2%	-1.4%
Total	-1.8%	0.4%	1.8%	0.8%	4.8%	1.6%	-0.6%	-2.3%	-2.2%

Note: 2019 data through October 2019 (most recent data available).

Figure 14 illustrates VMT growth by region for trucks. For the first ten months of 2019, the Central Region and Eastern Region experienced modest VMT growth as compared to 2018. Truck VMT growth decreased one percent as compared to the prior year.

Figure 14 VMT Growth by Region for Trucks

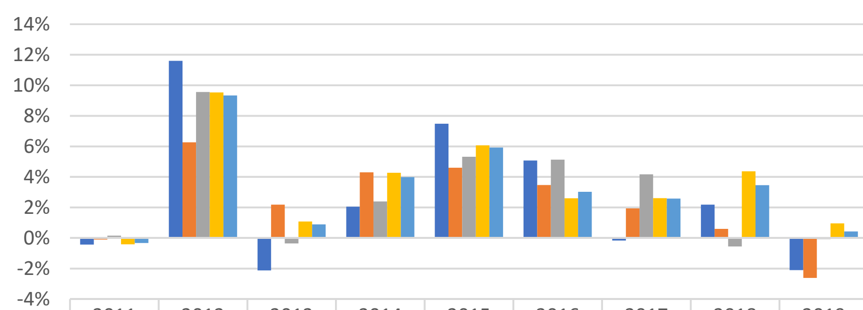


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	-0.4%	3.8%	0.6%	2.6%	5.9%	3.0%	-0.9%	2.1%	-3.7%
Central Region	2.8%	0.1%	1.9%	1.9%	2.7%	0.5%	1.7%	2.8%	0.8%
Eastern Region	1.1%	1.6%	2.2%	3.4%	3.5%	1.1%	1.7%	0.4%	0.5%
Long Distance	2.1%	0.8%	1.9%	3.6%	3.5%	0.3%	1.3%	4.7%	-1.1%
Total	1.9%	0.9%	1.9%	3.5%	3.6%	0.5%	1.3%	4.3%	-1.0%

Note: 2019 data through October 2019 (most recent data available).

Figure 15 illustrates toll revenue growth by region for all vehicle classes. For the first ten months of 2019, only Long distance trips experienced slight toll revenue growth as compared to 2018. Total toll revenue was up by 0.4 percent as compared to the prior year.

Figure 15: Revenue Growth by Region for All Vehicle Classes

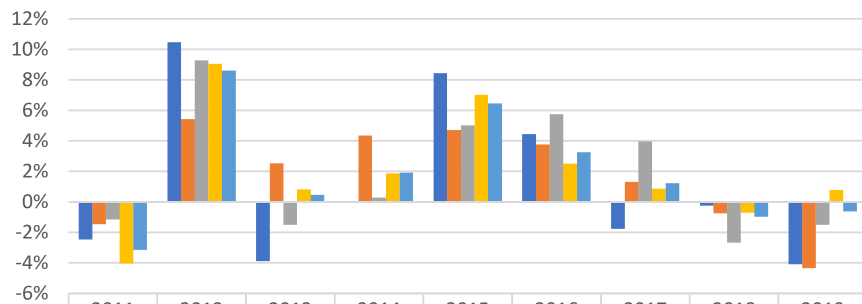


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	-0.4%	11.6%	-2.1%	2.0%	7.5%	5.1%	-0.2%	2.2%	-2.1%
Central Region	-0.1%	6.3%	2.2%	4.3%	4.6%	3.5%	1.9%	0.6%	-2.6%
Eastern Region	0.2%	9.6%	-0.4%	2.4%	5.3%	5.1%	4.2%	-0.6%	-0.1%
Long Distance	-0.4%	9.5%	1.1%	4.3%	6.1%	2.6%	2.6%	4.4%	1.0%
Total	-0.3%	9.3%	0.9%	4.0%	5.9%	3.0%	2.6%	3.5%	0.4%

Note: 2019 data through October 2019 (most recent data available).

Figure 16 illustrates toll revenue growth by region for cars. For the first ten months of 2019, only Long Distance trips experienced slight toll revenue growth as compared to 2018. Car toll revenue growth decreased 0.6 percent as compared to the prior year.

Figure 16: Revenue Growth by Region for Cars

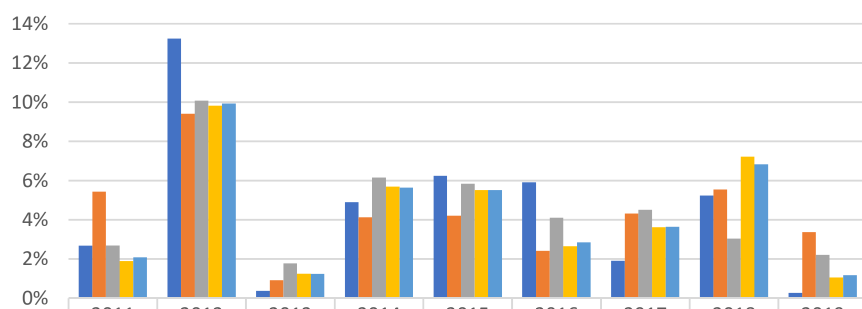


	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	-2.5%	10.5%	-3.9%	-0.1%	8.4%	4.4%	-1.8%	-0.3%	-4.1%
Central Region	-1.5%	5.4%	2.5%	4.3%	4.7%	3.8%	1.3%	-0.8%	-4.4%
Eastern Region	-1.2%	9.3%	-1.5%	0.3%	5.0%	5.7%	4.0%	-2.7%	-1.5%
Long Distance	-4.0%	9.0%	0.8%	1.9%	7.0%	2.5%	0.9%	-0.7%	0.8%
Total	-3.2%	8.6%	0.5%	1.9%	6.4%	3.3%	1.2%	-1.0%	-0.6%

Note: 2019 data through October 2019 (most recent data available).

Figure 17 illustrates toll revenue growth by region for trucks. For the first ten months of 2019, all Regions and Long distance trips experienced modest toll revenue growth as compared to 2018. Truck toll revenue was up by 1.2 percent as compared to the prior year.

Figure 17: Revenue Growth by Region for Trucks



	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Region	2.7%	13.2%	0.4%	4.9%	6.2%	5.9%	1.9%	5.2%	0.3%
Central Region	5.4%	9.4%	0.9%	4.1%	4.2%	2.4%	4.3%	5.5%	3.4%
Eastern Region	2.7%	10.1%	1.8%	6.2%	5.8%	4.1%	4.5%	3.0%	2.2%
Long Distance	1.9%	9.8%	1.2%	5.7%	5.5%	2.6%	3.6%	7.2%	1.1%
Total	2.1%	9.9%	1.2%	5.6%	5.5%	2.8%	3.6%	6.8%	1.2%

Note: 2019 data through October 2019 (most recent data available).

5.0 Historical Operations and Maintenance Expenses

This section presents a review of the historical operation and maintenance (O&M) expenses for the Turnpike. The major assets maintained by the Commission include:

- 241 miles of Turnpike mainline plus interchange ramps;
- 14 service plazas, configured in pairs at seven separate locations along the mainline that average approximately 30 miles apart over the length of the road;
- 31 toll plazas, including two mainline plazas and 29 ramp plazas;
- Three buildings for administration, telecommunication and highway patrol; and
- Eight maintenance buildings and facilities.

Historical operating expenditures are shown in Table 16. Overall, Turnpike operating expenses have increased at an average annual rate of 0.6 percent from 2007 through 2018. The operating expense increased to $111 million in 2007 and further increased to $116 million through 2010. It dropped back to $111 million in 2011 and has been stable since then with a temporary decrease to $109 million in 2013. There was an increase of approximately 6 million in 2016 mainly due to the increase in pension expenses and employee health benefit costs. The total operating expenditures through September 2019 are approximately $90 million or 2.5 percent higher than the total through September 2018. The main triggers for the variation are highlighted below:

- On October 1, 2009, the Turnpike implemented a new toll collection system that included E-ZPass. In addition to E-ZPass, the Commission has gradually extended the use of 28 self-pay Automated Toll Payment Machines ("ATPM's") at 14 interchange locations. As a result of the new toll collection system and the introduction of ATPM's, cost reductions have been achieved through permanent decreases in total toll collector wages. The Commission also offered a Voluntary Separation Incentive Program ("VSIP"). The 2010 Services and Toll Operation expense line item contained $2.5 million in VSIP payments to toll collectors. These measurements combined with milder winter weather in the fall of 2011 resulted in a reduction of total operating expenses in 2011.
- In 2013, the Commission completed the replacement of 14 of its original 16 service plazas with newer and more modern structures; that replacement program started in June of 1999. The service plazas located at Milepost ("MP") 49.0 in Lucas County have been demolished and there currently are no plans for their reconstruction. The overall operating expenses in 2013 decreased largely due to lower fringe benefit expenses as a result of lower health insurance costs and lower workers' compensation costs. The decrease was partially offset by increased snow and ice removal costs due to harsher winter weather in the year.

Table 16: Historical O&M, 2007-2018 (in thousands)

Year	Administration				Maintenance							
	Admin. Personnel	Other Expenditures	Insurance	Traffic Control, Safety, Patrol and Communications	Maintenance Personnel	Roadway and Facility Maintenance	Snow and Ice Control	Equipment	Other Expenditures	Services and Toll Operation	Total Operating Costs	Annual Growth
2007	$5,501	$1,605	$1,009	$14,614	$8,414	$12,682	$7,394	$5,978	$3,234	$50,739	$111,171	7.4%
2008	$5,809	$1,724	$932	$15,794	$8,587	$10,925	$7,964	$6,786	$2,953	$52,394	$113,868	2.4%
2009	$5,880	$1,827	$927	$15,529	$8,479	$12,030	$6,159	$5,862	$3,168	$53,817	$113,679	-0.2%
2010	$6,193	$1,903	$661	$14,998	$8,463	$12,269	$7,611	$6,098	$3,238	$54,700	$116,136	2.2%
2011	$6,101	$1,825	$819	$14,871	$8,500	$11,939	$6,609	$6,077	$3,006	$50,549	$110,296	-5.0%
2012	$7,260	$1,875	$801	$14,558	$8,623	$12,914	$5,110	$6,066	$2,852	$51,266	$111,325	0.9%
2013	$6,589	$1,744	$960	$14,040	$7,618	$10,982	$8,033	$6,587	$1,795	$50,369	$108,717	-2.3%
2014	$6,804	$1,953	$1,005	$13,657	$8,028	$11,284	$7,999	$6,887	$2,504	$50,646	$110,767	1.9%
2015	$6,989	$2,336	$944	$13,912	$8,581	$11,642	$7,460	$5,905	$2,221	$51,911	$111,902	1.0%
2016	$7,600	$2,524	$1,054	$14,399	$8,053	$13,027	$8,693	$5,809	$2,737	$54,072	$117,967	5.4%
2017	$7,850	$2,468	$922	$13,386	$4,214	$3,818	$6,170	$5,111	$18,623	$56,200	$118,761	0.7%
2018	$7,999	$2,803	$836	$13,429	$6,420	$5,425	$5,164	$5,506	$17,256	$54,503	$119,341	0.5%

Notes: Excludes depreciation as shown in financial statement. Excludes R&R and General Fund expenses. Excludes non-cash GASB 68 charges.

The following sections describe the O&M expense items included under each operating expenditure category.

5.1 Administration

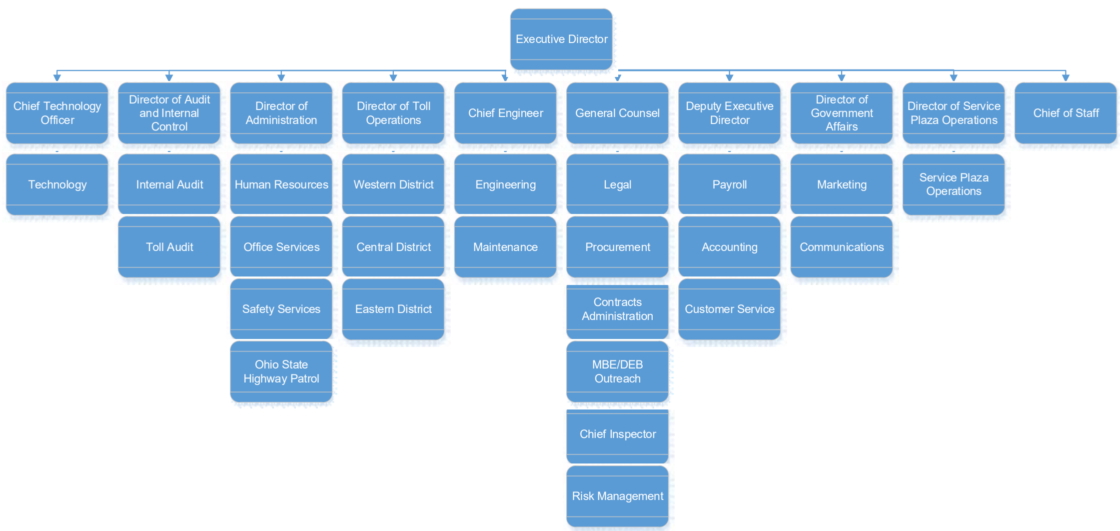
Administration costs include all administrative staff salaries and benefits from the following departments:

- Commission members;
- Executive;
- Legal (includes Risk Management/Right of Way Coordination, Contracts, Workers Compensation and Chief Investigator);
- CFO/Comptroller (includes Accounting, Customer Service Center, Payroll and Procurement);
- Governmental Affairs (includes Marketing and Communications);
- Human Resources;
- Office Services;
- Technology (Information Systems); and
- Internal Auditing.

Figure 18 provides detail of the Commission's organization.

Included in administration costs are third party (i.e., outside) services such as legal, audit, insurance, marketing, financial, and consulting engineering. Office expenditures, including travel and meeting expenses, dues and subscription fees, various office supplies, and other miscellaneous expenses, are also recorded here.

Figure 18: Ohio Turnpike and Infrastructure Commission Organizational Chart



5.2 Insurance

Insurance costs include all insurance policies held by the Commission covering the bridges, buildings, property, equipment, as well as other business-related policies.

5.3 Traffic Control, Safety, Patrol and Communications

Traffic Control, Safety, Patrol and Communications costs consist mainly of the Ohio State Highway Patrol unit assigned to the Turnpike and headquartered at the Commission Telecommunication building in Berea. Other activities in this line item include telecommunication costs, safety and traffic control, and services to distressed travelers. There are also two additional Highway Patrol posts that are incorporated into maintenance buildings and there is one additional free-standing patrol post.

5.4 Maintenance

Maintenance costs consist of a wide range of routine and preventive maintenance activities necessary for the day-to-day operation of the Turnpike. The activities are to ensure that all

Turnpike assets are in good working conditions and provide a safe environment for both customers and employees.

Major categories under Maintenance include Maintenance Management Personnel, Roadway and Facility Maintenance Activities (including field personnel), Snow and Ice Control, Equipment, and Other Expenditures, as described in more detail below.

i. O&M Management Personnel costs mainly consists of salaries and benefits for maintenance and engineering management staff that oversee overall maintenance activities, plan maintenance schedules, and provide guidance to the field personnel. The personnel include several in-house engineers on staff who oversee design and construction of the third lane project, base pavement replacement, resurfacing, bridge deck and vertical construction projects.

ii. Roadway Maintenance costs mainly consist of field personnel salaries, benefits, and overtime expenditures, materials, and third parity services to conduct roadway preventive and routine maintenance. General roadway maintenance items budgeted for on an annual basis and carried out by turnpike staff include such items as:

- Crack sealing and minor pavement repairs;
- Bridge and culvert maintenance;
- Signage and pavement markings;
- Roadside maintenance including mowing, landscaping, vegetation control, cleaning ROW etc.;
- Drainage maintenance;
- Fence and Guardrail;
- Storm water management; and
- Environmental monitoring.

iii. Facility maintenance costs include non-personnel expenditures related to building maintenance and repairs, toll plaza lane repairs, landscaping and mowing. It should be noted that the utility costs for the service plazas have been included under Services and Toll Operations.

iv. Snow and Ice Control cost mainly includes the material and handling of road salts and other related materials.

v. Equipment costs consist of expenditures associated with the maintenance of all equipment including light, medium, and heavy-duty trucks, specialized maintenance vehicles, safety equipment, small tools and supplies.

vi. Other expenditures associated with O&M mainly consist of third-party services, publications and periodicals, various office supplies, travel and meeting expenditures, and other miscellaneous expenses associated with maintenance personnel.

5.5 Service Plaza and Toll Operations

Service Plaza and Toll Operations costs mainly consist of expenditures associated with services provided at Service Plazas and Toll Plazas including service plaza personnel and toll collectors' salaries.

The service plaza expenditures include personnel salaries, benefits, office furniture, supplies, equipment rental, utilities, custodial services, credit card fees, and other miscellaneous expenses.

Toll collection costs consist of salaries of toll collectors, credit card fees, transponders and tickets costs, maintenance costs of the tolling system, third party services such as armored car service, and other expenditures associated with toll revenue collections as well as costs for running the services and toll plazas including utilities, office supplies, custodial and janitorial services, and other miscellaneous expenses.

6.0 Economic Backdrop and Outlook for the Future

Historically, Turnpike traffic trends have been influenced by national and regional socioeconomic conditions, and there have been periods of notable correlations between passenger car growth and Gross Domestic Product (GDP), population, and employment growth; and between commercial vehicle growth and Industrial Production growth (as measured by the Industrial Production Index, or IPI).

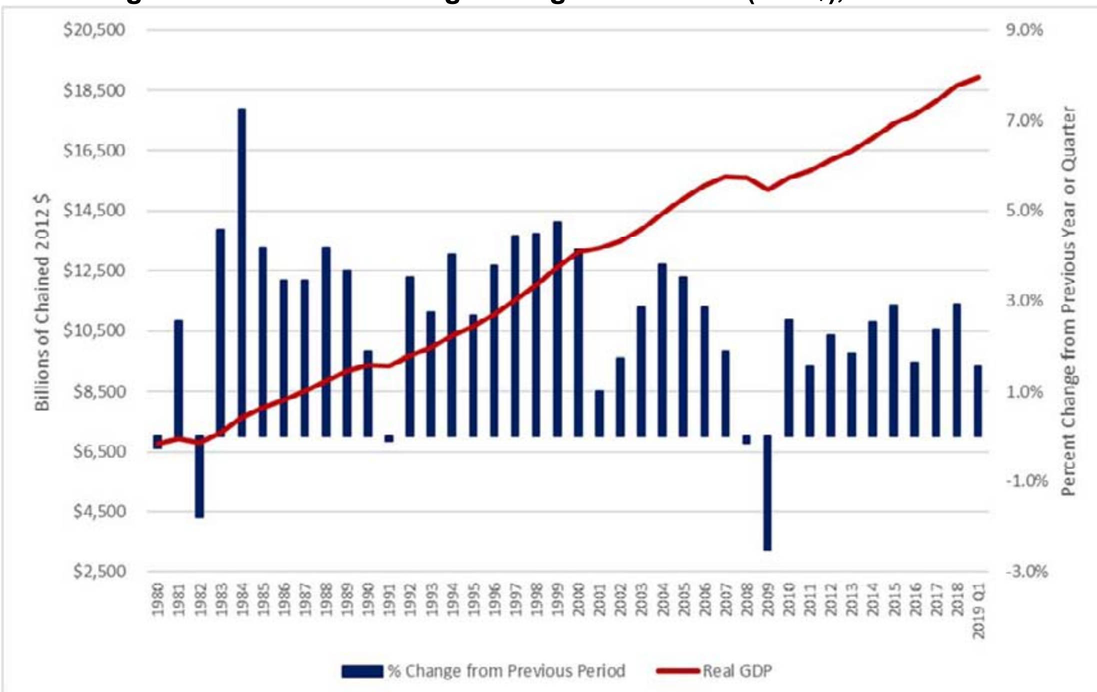
Jacobs uses consensus GDP and IPI forecasts based on a variety of sources as an input into our traffic growth forecasts. The consensus outlook of economists predicts continued slow but reduced economic growth, with real GDP estimated to increase by 2.3 percent for 2019 and 1.8 percent for 2020. Short- to medium-term gas price forecasts through December 2020, while anticipated to increase slightly, are not seen to be dramatic. Our traffic and toll revenue forecasts recognize and consider the current variations in gas pricing and the probability of higher prices to the extent possible. However, we believe that the forecasted increase in the price of gas will not result in major declines in traffic, as consumers are already modifying their vehicle choices to mitigate such increases.

Any forecast of toll traffic and revenues will, of necessity, recognize the significant variations that can and do occur in the national, regional and local economies, and local population changes, in this case within the Turnpike corridor. Taking the aforementioned factors into consideration, Jacobs performed a detailed analysis of the historical economic trends seen over the last few decades. This section presents a summary of these socioeconomic trends.

6.1 Recent Macroeconomic Trends

From 2001 to 2015, real GDP and the IPI in the U.S. increased by an average of 2.0 percent and 0.9 percent per year, respectively. This includes the recession that began and ended in 2001 and the most recent recession, which began in December 2007 and officially ended in June 2009. The 2007-09 Recession resulted in a 0.1 percent decrease in real GDP and a 3.5 percent decrease in industrial production in 2008. Real GDP recovered in 2010 with a 2.3 percent annual increase through 2018. Due to a lag in economic activity, industrial production decreased by 11.5 percent in 2009, but rebounded solidly in 2010 with 5.5 percent annual growth. Since 2010 real GDP growth has ranged from a low of 1.6 percent in 2011 and 2016 to a high of 2.9 percent in 2015 and 2018. Over the same period IPI has similarly fluctuated recording negative growth of 2.0 percent in 2016 and 3.9 percent in 2018. Figure 19 summarizes the annual percentage change in real GDP from 1980 to the first quarter of 2019.

Figure 19: Annual Percentage Change in Real GDP (2012$), 1980 to 2019



Source: U.S, Bureau of Economic Analysis (BEA)

Recessions are technically defined as two consecutive quarters of negative growth. In determining whether a recession has taken place, the National Bureau of Economic Research (NBER) can include other factors in its analysis. According to the NBER, the 2007-2009 recession lasted 18 months, making it the longest economic downturn since the Great Depression.

6.2 Long-Term Structural Trends

The accumulation of productivity improvements and aging of the general population has had a dampening impact on traffic growth across the U.S. over the years.

First, there have been significant productivity improvements in the form of advances in information technology, computing power, transportation, and communications, all of which encouraged the transfer of manufacturing facilities and jobs to areas with higher unemployment and lower wages. This overall shift has altered the engine for economic growth in the U.S., from manufacturing (from 31 percent of GDP in 1970 to 23 percent GDP in 2010 {latest full census data available}) to services (from 32 percent of GDP in 1970 to 47 percent of GDP in 2010). The technology boom of the 1990s and the subsequent decline in the early 2000s intensified these trends, encouraged the expansion of inexpensive communications technologies, and further flattened wage costs internationally that lead to significant outsourcing of jobs to foreign countries.

Second, the U.S population is and has been becoming older, with the median age increasing from 29.5 in 1960 to 37.2 in 2010 (latest full census data available). Within this general trend, the 18-44 age group, which has historically driven the most Vehicle Miles Traveled (VMT) per capita, increased from 35 percent of the total population in 1960 to 43 percent in 1990. However, this age group comprised just 37 percent of the total population in 2010. The aging of the population is one of the factors contributing to slower traffic growth, as older age groups tend to travel less and spend less on transportation. Historical trends and population forecasts indicate that the U.S. median age will likely continue to increase in the next 20 years.

Jacobs has taken into consideration these long-term structural changes in the development of our toll traffic and revenue forecasts for the Turnpike.

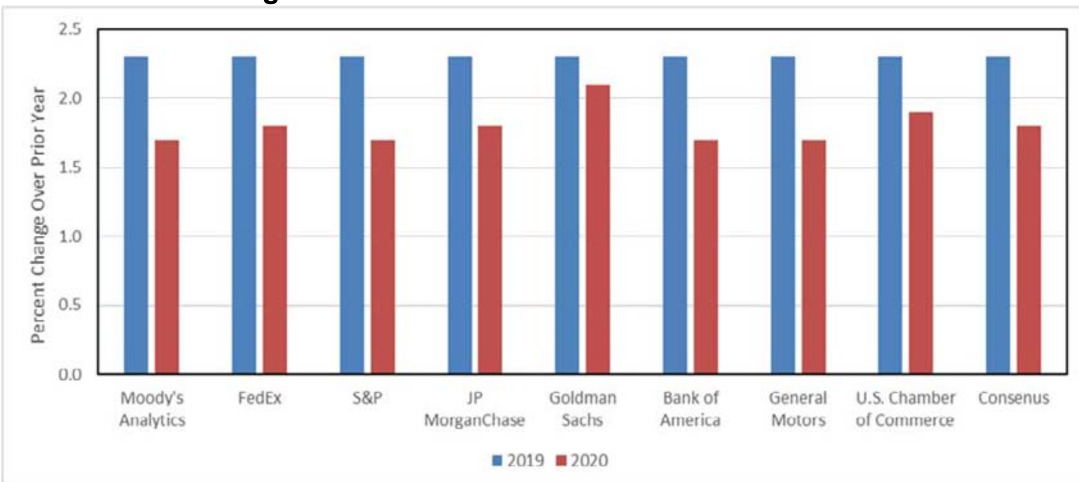
6.3 Short-Term Economic Forecast

At the time of writing (November 2019), the consensus among forecasters is that real GDP growth will continue throughout the remainder of 2019 and will decrease in the following year. Historically, during times of lower levels of GDP growth, IPI has also shown lower levels of growth.

6.3.1 Gross Domestic Product Forecast

Figure 20 presents a range of GDP forecasts for 2019 and 2020. The consensus outlook of economists predicts continued economic growth albeit with real GDP increasing by 2.3 percent for 2019 but decreasing to 1.8 percent in 2020, opposite the GDP growth profile witnessed in the US in recent years however, this is expected to have minimal effect with our current forecast for Turnpike traffic and toll revenues that are contained herein.

Figure 20: Real GDP Forecasts for 2019 and 2020



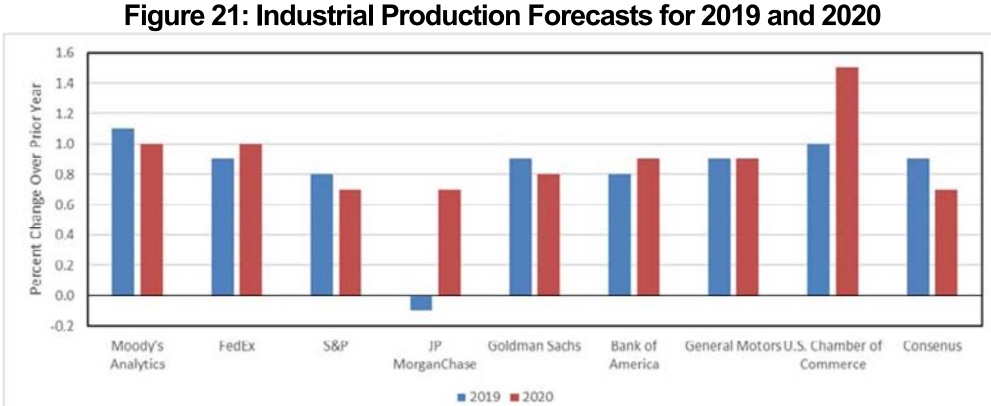
Source: Blue Chip Economic Indicators (BCIE)

6.3.2 Industrial Production Index Forecast

During the most recent recession, the Industrial Production Index (IPI) declined by 3.5 percent in 2008 and a notable 11.5 percent in 2009.

Changes in U.S. industrial production have historically moved in tandem with GDP, albeit with steeper decreases during recessions and larger increases during recovery periods. Like GDP, industrial production has improved since the last recession. Based on consensus forecasts developed by financial institutions and industry analysts, the IPI is forecasted to increase by 0.9 percent in 2019 and by 0.7 percent in 2020. Figure 21 presents a range of IPI forecasts for 2019 and 2020.

Figure 21: Industrial Production Forecasts for 2019 and 2020

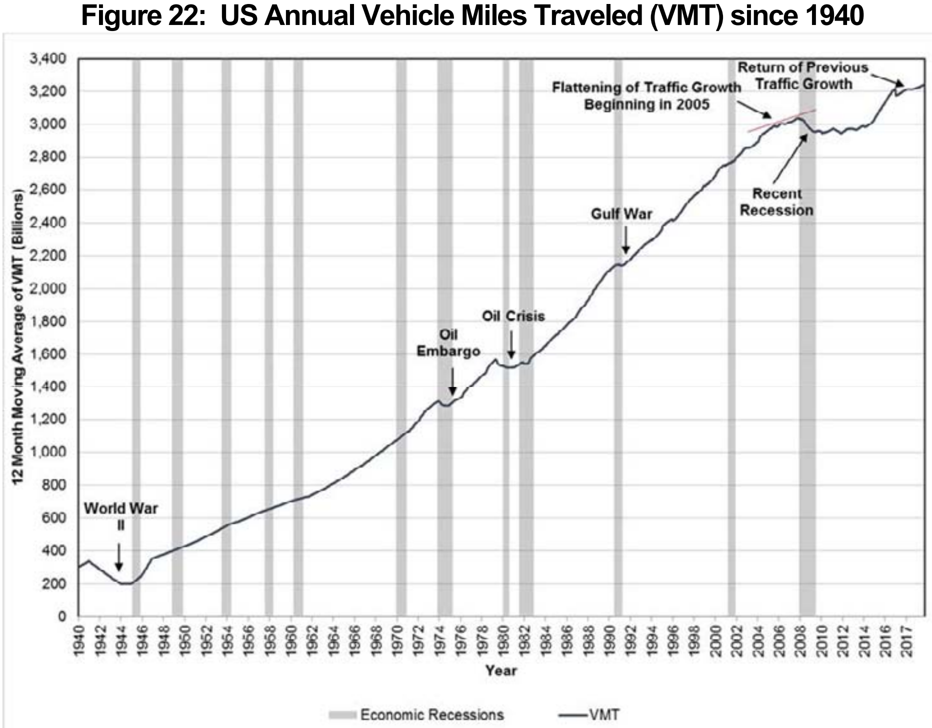


Source: Blue Chip Economic Indicators (BCIE)

6.4 National Trends in Vehicle Miles Traveled

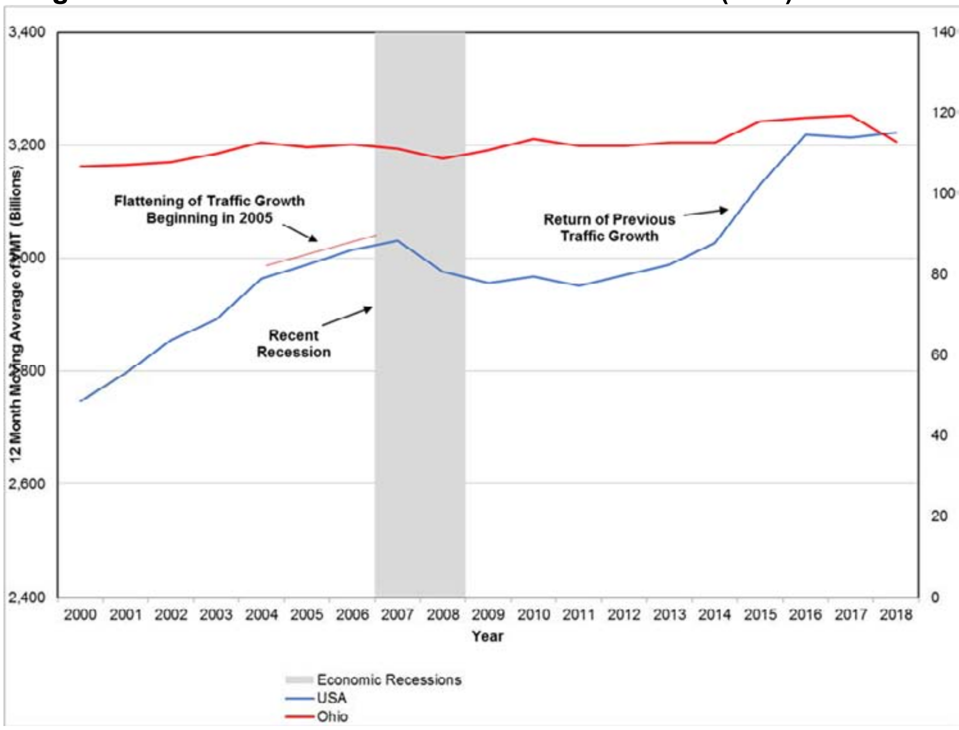
Since 2005 the United States experienced an historic flattening and drop in vehicle-miles traveled (VMT) on its highways although the data show that more recently the VMT growth rate has picked up. Figure 22 depicts the 12-month moving total of national travel mileage on all U.S. highways, from 1940 through August of 2019 while Figure 23 depicts the 12-month moving total of national travel mileage on all U.S. and Ohio highways, from 2000 through 2018. As seen in the first VMT figure, there were temporary reductions in VMT during World War II, the 1970s oil crises, Gulf War and previous economic recessions. In recent years, except for short, flat periods during the 1991 and 2001 recessions (each less than one year), VMT grew at a steady pace through 2005. VMT then grew at a much slower pace through 2008. The increase in gas prices and the downturn in economic activity that took hold in late 2008 resulted in a significant reduction in total national travel mileage after the December 2007 peak. Since the recession ended, VMT has returned to a growth trend although there have been slight increases and decreases in VMT from month to month. As can be seen in the second VMT figure, the VMT pattern on Ohio roads generally mirrored that of the United States until 2017, when there was a decrease. This decrease mirrors the decline in traffic and VMT on the Turnpike and may be attributable to a decline in the local economy of Ohio and the Midwest in general.

Figure 22: US Annual Vehicle Miles Traveled (VMT) since 1940



Source: Federal Highway Administration (FHWA)

Figure 23: US and Ohio Annual Vehicle Miles Traveled (VMT) since 2000



Source: Federal Highway Administration (FHWA), ODOT DVMT Reports

A review of recent VMT trends (2019 YTD) on the Turnpike indicate the following:

- Overall VMT in the Western region has decreased the most, followed by the Central region and the Eastern region with VMT for cars showing greater losses than trucks.
- VMT for cars has decreased the most in the Western region followed by the Central and Eastern regions, respectively.
- VMT for trucks decreased in the Western region and showed small increases (less than one percent) in the Central and Eastern regions.
- Long distance trips decreased less than two percent for cars, trucks and overall.
- For all regions combined, the VMT decreased for cars, trucks and overall.

This trend of decreasing VMT, especially in the Western region, which only has one large city (Toledo), can be attributed to the general decline in manufacturing seen throughout the Midwest over the last few years.

7.0 Transportation Projects Relative to the Ohio Turnpike

This section identifies the existing feeder and competitive roads to the Turnpike and includes a review of future transportation projects slated for northern and central Ohio to determine if any would have a major effect on Turnpike traffic.

7.1 Forecast Considerations

For passenger cars, it is important to note that there are several components of a driver's decision to use the Turnpike that are very difficult to quantify and were indirectly considered in this analysis. These factors include driver considerations for route quality, convenience, familiarity, access to amenities, and other factors. However, toll roads such as the Turnpike generally offer frequent and better-quality service plazas and have other attractive qualities, such as better pavement, no traffic control devices (e.g., traffic signals), no at-grade crossings, controlled access points, lower levels of traffic congestion and more reliable driving conditions in bad weather. These non-tangible factors would likely positively influence a driver's decision to utilize the Turnpike.

Modern route planning techniques used by many of the trucking companies are designed to optimize route selection and take into consideration factors such as travel time, fuel, mileage, tolls, vertical grades, salaries, load optimization and other factors to select the most important route for travel. Our analysis of potential diversions considers these important route choice factors. It is important to note, that most commercial vehicles using the Turnpike are doing so because it has already been determined to be the "best" route for the operation of their specific business needs. Similarly, the operators using the alternative routes have determined that those alternative routes are the "best" route to meet their needs. It should be noted that according to a recently released report by the American Transportation Research Institute (ATRI) entitled "*An Analysis of the Operational Costs of Trucking,*" "the average marginal cost per mile incurred by motor carriers in 2018 increased 7.7 percent to $1.82."

Other factors have been considered in the analysis. There has been significant discussion of the now-completed expansion of the Panama Canal and the larger "Post-Panamax" vessels that are expected to change the movement of freight and containers across the country. According to the Environmental Protection Agency (EPA), as of June 2018 there were four ports in the northeast/mid-Atlantic United States that were capable of handling post-Panamax ships (Baltimore, New York/New Jersey, Norfolk and Philadelphia) however, after performing Internet research, it is not yet clear what other ports in the northeast/mid-Atlantic region will receive the Post-Panamax vessels. In addition, upon further Internet-based research, we were also unable to quantify any positive or negative effect of Post-Panamax ships on the Turnpike. Hence, while the expanded Panama Canal opened in June 2016, it appears that it is still too early to gauge the overall impact on overland transportation modes.

7.2 Competitive Roads

The Turnpike provides a fast, efficient east-west highway traversing the northern part of Ohio and ultimately connecting with the Indiana Toll Road and the Pennsylvania Turnpike. The Ohio Turnpike serves as an alternative route to several roadways, varying from urban arterials to collectors and rural highways. We identified the following parallel routes as among the most likely alternatives to the Turnpike for specific geographic segments, as shown in **Error! Reference source not found.**:

- US Route 20 for trips between Montpelier and Cleveland;
- US Route 30 for trips between Ft. Wayne, IN and Canton;
- US Route 24 for trips between Ft. Wayne, IN and Toledo;
- Ohio State Route 2 for trips between Sandusky and Cleveland;
- US Route 6 for trips between Indiana and Fremont;
- Ohio State Route 113 for trips between Bellevue and Elyria;
- Interstate Route 480 for trips between North Ridgeville and Streetsboro;
- US Route 422 for trips between Bedford and Youngstown;
- Interstate Route 76 for trips between Akron and North Jackson;
- Interstate Route 80 for trips between North Jackson and Pennsylvania;
- Interstate Route 90 for trips between Elyria and Cleveland;
- Interstate Route 70 for trips between Indiana and Pennsylvania; and
- Highway 401 in Canada (via border crossings at Buffalo and Detroit) for trips between New England and Michigan.

Many of the routes between these cities can be considered as alternative route choices for Turnpike travelers. In addition, several other major highways have been constructed since the Turnpike opened; including I-70, I-71, I-76, I-80 and I-90, which in various locations also provide alternatives to the Turnpike. For many trips within and across the state, these alternative routes may provide shorter, faster, and more efficient routes when compared to making the same trip using the Turnpike.

Figure 24: Alternative Routes to the Ohio Turnpike

7.3 Feeder Roads

Several roadways direct traffic, or feed traffic, to and from the Turnpike. The classification of these roadways varies from interstate highways to arterials and collectors. The major feeder roads to the Turnpike, from west to east, are:

- The Indiana Toll Road (at Interchange 2);
- Interstate Route 75 (at Interchange 64);
- Interstate Route 280 (at Interchange 71);
- Interstate Route 90/Ohio State Route 2 (at Interchange 142);
- Ohio State Route 57 (at Interchange 145);
- Interstate Route 480 (at Interchange 151);
- Ohio State Route 10 (at Interchange 152);

- Interstate Route 71 (at Interchange 161);
- Interstate Route 77 (at Interchange 173);
- Ohio State Route 8 (at Interchange 180);
- Interstate Route 480 (at Interchange 187);
- Interstate Route 80 (at Interchange 218);
- Ohio State Route 7 (at Interchange 232);
- Interstate Route 680 (at Interchange 234); and
- The Pennsylvania Turnpike (at Interchange 239)

7.4 Potential Future Transportation Projects

There are several potential highway projects scheduled for construction or completion in the near term that were reviewed to determine their impact, if any, on Turnpike traffic volumes. These projects were drawn from the Turnpike's 2019-2020 Capital Program, the 2019 ODOT district construction program listings and the TRAC (Transportation Review Advisory Council)[2] project listings for the 2020-2023 period. All the listed projects were assumed to be completed for our traffic and revenue forecasts.

Major transportation improvement projects on the Turnpike programmed for funding or already underway that were reviewed in order to determine their potential impact (positive or negative) on Turnpike traffic are:

1. Replacement of the original concrete base under the full 241-mile Ohio Turnpike mainline. This major construction project is scheduled to occur in 5-mile segments over the next 24 years and two lanes of traffic flow will be maintained in each direction during construction;
2. Pavement resurfacing at selected interchanges along the Turnpike;
3. Bridge deck replacement and bridge rehabilitation at selected locations along the Turnpike;
4. Annual pavement markings on the mainline and at all interchanges; and
5. Construction of a new mainline toll plaza facility at Milepost 49.0.

[2] Established by Ohio Revised Code in 1997, the nine-member Transportation Review Advisory Council assists in developing a project selection process for ODOT's largest investments. The TRAC, chaired by ODOT's Director, also approves Major New projects for funding.

Major transportation improvement projects on feeder routes and alternative routes to the Turnpike that are programmed for funding were reviewed in order to determine their potential impact on Turnpike traffic, including:

1. Major rehabilitation of Interstate 75, including reconstruction and widening (City of Findlay and Toledo metropolitan area);
2. Widening of US 20 to five lanes (City of North Ridgeville);
3. Adding one lane in each direction along I-271 (from south of the Summit County Line to Miles Rd);
4. Major improvements to I-90 in the "Central Interchange" area between E 9th Street and E 22nd Street (Cleveland);
5. Major widening of I-77 south of Akron from the I-277/US 224 interchange to Arlington Road;
6. Replacing the decks of the twin I-480 bridges over the Cuyahoga River Valley in Valley View and Independence;
7. Major Rehabilitation of US Route 30 in Mansfield;
8. Reconstruction of I-76/77 in Akron;
9. I-75 Downtown & DiSalle Bridge Projects in the Toledo area. Work includes the following: Widen and reconstruct I-75, from Buck Rd. to Dorr St., to current standards, including reducing the curve between Wales Rd. and Miami St; reconfigure I-75 interchanges with Anthony Wayne Trail, South Avenue, and Miami Street to enhance safety; and, replace I-75 (DiSalle Bridge) over the Maumee River;
10. Major reconstruction of I-70 in multiple areas statewide including bridge re-decking and the addition of auxiliary lanes, new ramps and reconstruction of interchanges with I-71 and I-270 in the Columbus area, construction of an additional lane from US Route 68 to Ohio State Route 72;
11. Major rehabilitation and widening of I-71 from Franklin County Line to SR-315 in Columbus;
12. Replacement/rehabilitation and widening of I-475 to three lanes in each direction from US Route 24 to US Route 20 (Toledo);
13. Extension of I-490 (Opportunity Corridor Section 3) from E. 55th Street to E. 105th Street (Cleveland); and
14. Total pavement replacement along State Route 8 from Graham Road to State Route 303 in the cities of Stow and Hudson.

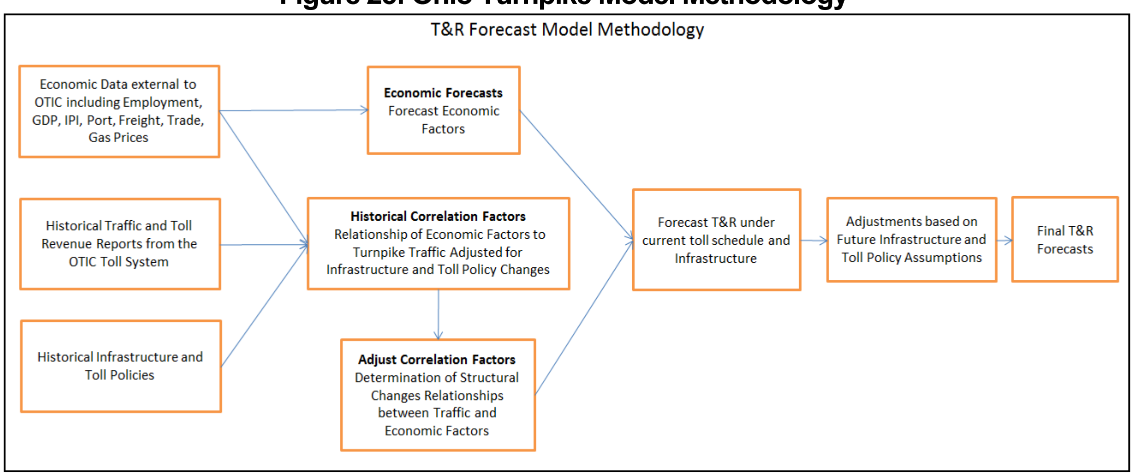
8.0 Toll Transactions and Gross Toll Revenue Forecasts

The following section describes the methodology used for developing Turnpike traffic and toll revenue forecasts, as well as a presentation of those forecasts.

8.1 Methodology Used for Forecasting

Traffic and toll revenue forecasts were developed with the aid of a computerized modeling platform created specifically by Jacobs for the Turnpike. The base function of this model is to take current traffic volumes by class and payment type for each Turnpike movement (origin-destination pair) and adjust them in the future years for various factors such as underlying socio-economic/demographic growth in the corridor, both historic and projected, as well as overall inflationary pressures and applicable customer reactions to anticipated toll adjustments. These adjustments result in forecasted traffic volumes being developed for each year of the forecast period. Gross toll revenues are then calculated based on these new adjusted traffic volumes by applying the appropriate toll rates to the volume of each origin-destination pair by payment type and vehicle class, and total vehicle miles traveled are calculated by multiplying the forecasted trips for each movement by the applicable distance traveled. Figure 25 shows the flow of the forecasting process.

Figure 25: Ohio Turnpike Model Methodology



These forecasts were then fed into a secondary model that adjusted the toll rates by origin-destination pair for the proposed modified toll system, accounting for additional traffic shifts and providing the modified system traffic and revenues.

8.1.1 Inputs and Assumptions

In the creation of a base structure for forecasting calculations, it becomes necessary to assume some consistency in relationships between historical and future traffic and revenue trends. The following assumptions were used in the creation of the forecasting framework:

- Traffic Growth Trends: Correlations between historical traffic and socioeconomic indices such as employment and manufacturing are one source of data used to forecast growth. Gross Domestic Product (GDP) and the Industrial Production Index (IPI) are two factors that we utilize when forecasting;
- E-ZPass Market Share Trends: In the past, on both the Turnpike and other facilities offering electronic payment, the proportion of trips paid by E-ZPass has slowly increased over time until it approaches some level of market saturation, regardless of toll increases. It was assumed that this will hold true in the future;
- Regional Divisions: To simplify general inputs such as annual traffic growth and E-ZPass market share growth, it was assumed that turnpike movements could be grouped regionally or by trip length. The origin-destination matrix was analyzed and O/D pairs were split into four categories: Western Region (Toledo), Central Region (Cleveland), Eastern Region (Youngstown) and Long distance (trip lengths greater than 60 miles);
- Inflation and Toll Schedules: Toll schedules for each class and payment type for 2013 through 2023 for the current system were provided to Jacobs by the Commission. The rates are calculated off an assumed 2.7 percent annual inflation and that same 2.7 percent annual growth was applied to rates through 2028. Jacobs calculated toll schedules for the years 2024 through 2056, adjusting for the expiration of a toll increase exemption for Class 1 E-ZPass trips under 30 miles in length in 2024, and annual toll increases of 2.0 percent beginning in 2029;
- Toll System Modification: For some customers, tolls would be collected in different or multiple locations, but efforts were made to keep tolls for through travelers the same as if there were no modification. For some customers, shorter trips tolls will increase due to the nature of the modification, while for other trips tolls will decrease and some shorter trips will become toll-free. It was assumed that for E-ZPass trips under 30 miles, a rebate would be put in place beginning with the implementation of the new system in late 2022 through 2023 to maintain the current E-ZPass trip toll rates. Additionally, the modified system would adjust the minimum toll rate for cash-paying vehicles from $0.50 to $1.00; and
- Customer Reaction to Toll Adjustments: In the face of a toll adjustment, some customers opt to change their travel behavior. Jacobs developed customer reaction curves based on region, payment type, and experience from previous toll increases on the Turnpike (and on similar projects elsewhere) to estimate the number of customers that might modify their travel behavior if or when a toll

increase occurs. These curves are used to estimate the number of customers reacting to a given toll increase, based on the relative adjustment of the toll increase.

8.1.2 Traffic Trends

Historically, traffic trends have been influenced by socioeconomic conditions, and there are often correlations between traffic growth and socioeconomic factors such as Industrial Production growth (as measured by the IPI) and GDP. Any forecast of toll-paying traffic and resulting toll revenues will, of necessity, consider the significant variations that can and do occur in national, regional, and local economies as well as population changes. Taking this into consideration, Jacobs performed an analysis of the historical economic trends over the last several decades with an emphasis on the most recent correlations, plus an analysis of those trends that can influence driving behavior.

Recent data shows some dampening of the correlations in the short term for some regional movements, however; we still believe there will be continued correlations in the long term; especially between GDP and IPI as they relate to regional trends in truck traffic.

8.1.3 E-ZPass Market Shares

Historically, E-ZPass market share on the Turnpike and other similar facilities offering electronic payment has slowly increased over time until it approaches some level of market saturation, regardless of toll increases. The market share typically increases at a decreasing rate – rapidly in the first few years after implementation, and then at a decreasing rate until eventually leveling out as the market share approaches a maximum sustainable level for the toll facility.

E-ZPass market share on the Turnpike currently varies dramatically by vehicle class and trip movement, with the first ten months of 2019 showing an average of 57.5 percent for car trips and 87.5 percent for truck trips. This calculates to an overall average E-ZPass market share of roughly 64.3 percent. It was assumed that the growth in E-ZPass market share would be similar for a specific class over each analysis region, though the market shares themselves would differ for each trip movement within each analysis region.

8.1.4 Toll Rates Used in Preparing Forecast

Toll schedules for each class and payment type for the years 2014 through 2023 were provided by the Commission. These toll schedules applied an average toll increase of 2.7 percent annually – the assumed rate of inflation – and then rounded to the nearest quarter. Class 1 E-ZPass vehicles traveling under 30 miles were exempted from these toll increases for the full 10-year period. Table 17 compares the toll rates for a full-length trip on the Turnpike for each payment type and vehicle class through 2023. Table 18 shows the rate-per-mile, which is calculated by dividing the full-length toll by 241 miles, the length of the Turnpike. Note that since the tolls are rounded to the nearest quarter, the actual increases may be greater than or less than the target increase of 2.7 percent annually.

Efforts were made to maintain the approved full-length trip tolls in the modified toll system, with some small changes due to rounding at the new barrier tolls. The tables presented below represent the toll rates approved by the commission for the current toll system.

Table 17: Tolls for a Full-Length Turnpike Trip, 2013-2023, by Class and Payment Type

	CLASS 1		CLASS 2		CLASS 3		CLASS 4		CLASS 5		CLASS 6		CLASS 7	
Year	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass
2013	$16.50	$11.25	$28.00	$20.00	$33.00	$24.00	$39.00	$30.00	$44.00	$35.00	$61.00	$50.00	$83.00	$72.00
2014	$17.00	$11.50	$28.75	$20.50	$34.00	$24.75	$40.00	$30.75	$45.25	$36.00	$62.75	$51.25	$85.25	$74.00
2015	$17.50	$11.75	$29.50	$21.00	$34.75	$25.25	$41.25	$31.75	$46.50	$37.00	$64.25	$52.75	$87.50	$76.00
2016	$17.75	$12.25	$30.25	$21.75	$35.75	$26.00	$42.25	$32.50	$47.75	$38.00	$66.00	$54.25	$90.00	$78.00
2017	$18.25	$12.50	$31.25	$22.25	$36.75	$26.75	$43.50	$33.25	$49.00	$39.00	$67.75	$55.50	$92.25	$80.00
2018	$18.75	$12.75	$32.00	$22.75	$37.75	$27.50	$44.50	$34.25	$50.25	$40.00	$69.75	$57.00	$94.75	$82.25
2019	$19.25	$13.25	$32.75	$23.50	$38.75	$28.25	$45.75	$35.25	$51.75	$41.00	$71.50	$58.75	$97.50	$84.50
2020	$20.00	$13.50	$33.75	$24.00	$39.75	$29.00	$47.00	$36.25	$53.00	$42.25	$73.50	$60.25	$100.00	$86.75
2021	$20.50	$14.00	$34.75	$24.75	$40.75	$29.75	$48.25	$37.25	$54.50	$43.25	$75.50	$62.00	$102.75	$89.00
2022	$21.00	$14.25	$35.50	$25.50	$42.00	$30.50	$49.50	$38.25	$56.00	$44.50	$77.50	$63.50	$105.50	$91.50
2023	$21.50	$14.75	$36.50	$26.00	$43.00	$31.25	$51.00	$39.25	$57.50	$45.75	$79.50	$65.25	$108.25	$94.00

Table 18: Toll per Mile Based on a Full-Length Turnpike Trip, 2013-2023, by Class and Payment Type

	CLASS 1		CLASS 2		CLASS 3		CLASS 4		CLASS 5		CLASS 6		CLASS 7	
Year	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass	Cash	E-ZPass
2013	$0.068	$0.047	$0.116	$0.083	$0.137	$0.100	$0.162	$0.124	$0.183	$0.145	$0.253	$0.207	$0.344	$0.299
2014	$0.071	$0.048	$0.119	$0.085	$0.141	$0.103	$0.166	$0.128	$0.188	$0.149	$0.260	$0.213	$0.354	$0.307
2015	$0.073	$0.049	$0.122	$0.087	$0.144	$0.105	$0.171	$0.132	$0.193	$0.154	$0.267	$0.219	$0.363	$0.315
2016	$0.074	$0.051	$0.126	$0.090	$0.148	$0.108	$0.175	$0.135	$0.198	$0.158	$0.274	$0.225	$0.373	$0.324
2017	$0.076	$0.052	$0.130	$0.092	$0.152	$0.111	$0.180	$0.138	$0.203	$0.162	$0.281	$0.230	$0.383	$0.332
2018	$0.078	$0.053	$0.133	$0.094	$0.157	$0.114	$0.185	$0.142	$0.209	$0.166	$0.289	$0.237	$0.393	$0.341
2019	$0.080	$0.055	$0.136	$0.098	$0.161	$0.117	$0.190	$0.146	$0.215	$0.170	$0.297	$0.244	$0.405	$0.351
2020	$0.083	$0.056	$0.140	$0.100	$0.165	$0.120	$0.195	$0.150	$0.220	$0.175	$0.305	$0.250	$0.415	$0.360
2021	$0.085	$0.058	$0.144	$0.103	$0.169	$0.123	$0.200	$0.155	$0.226	$0.179	$0.313	$0.257	$0.426	$0.369
2022	$0.087	$0.059	$0.147	$0.106	$0.174	$0.127	$0.205	$0.159	$0.232	$0.185	$0.322	$0.263	$0.438	$0.380
2023	$0.089	$0.061	$0.151	$0.108	$0.178	$0.130	$0.212	$0.163	$0.239	$0.190	$0.330	$0.271	$0.449	$0.390

Proposed toll schedules for the years 2024 through 2057 were calculated using the following assumptions:

- Class 1 E-ZPass vehicles traveling 30 miles or less would have a one-time “catch up” toll increase in 2024, by compounding a 2.7 percent increase over 10 years, rounded to the nearest quarter;
- A toll increase of 2.7 percent for all vehicles and payment types would occur annually, from 2024 through 2028, rounded to the nearest quarter; and

- A toll increase of 2.0 percent for all vehicles and payment types would occur annually, beginning in 2029, rounded to the nearest quarter.

Toll rates after 2023 have not been approved by the Commission at this time.

Table 19 presents a comparison of estimated Class 1 (passenger car) toll rates for 2022, the first year the modified toll system would be fully operational. There is some variance in full-length trip tolls by direction between the current system vs. the modified system due to the way tolls would be rounded at the new barriers and on the reduced ticket system, but round-trip toll rates would be similar.

Table 19: Estimated 2022 System Full Trip Toll for Class 1

Direction of Travel	Current System		Modified System (Including Barrier Toll)	
	Cash	E-ZPass	Cash	E-ZPass
Westbound	$21.00	$14.25	$22.75	$15.75
Eastbound	$21.00	$14.25	$19.25	$13.25
Round Trip	$42.00	$28.50	$42.00	$29.00

The conversion of Westgate and Eastgate to the new West Barrier and East Barrier would break toll collection into three separate "zones" for through travelers. The new West Barrier, located at approximately between mileposts 4 and 5, would charge a toll calculated by the per-mile rate times the distance from the Indiana state line through MP 32. The new, more compact, ticket system would calculate tolls based on the distance from MP 32 to MP 220. The new East Barrier would calculate tolls based on the distance from milepost 220 to the Pennsylvania state line, multiplied by two in order to account for round trip mileage at this newly westbound-only barrier.

Table 20 shows estimated toll rates that would be charged to Class 1 (Cars) and Class 5 (5-axle trucks) at the new West Barrier and East Barrier.

Table 20: Estimated 2022 Barrier Toll Rates

Direction of Travel	CLASS 1		CLASS 5	
	Cash	E-ZPass	Cash	E-ZPass
West Barrier (EB & WB)	$2.75	$2.00	$7.50	$6.00
East Barrier (WB Only)	$3.50	$2.50	$9.50	$7.50

8.1.5 Diversion Analysis

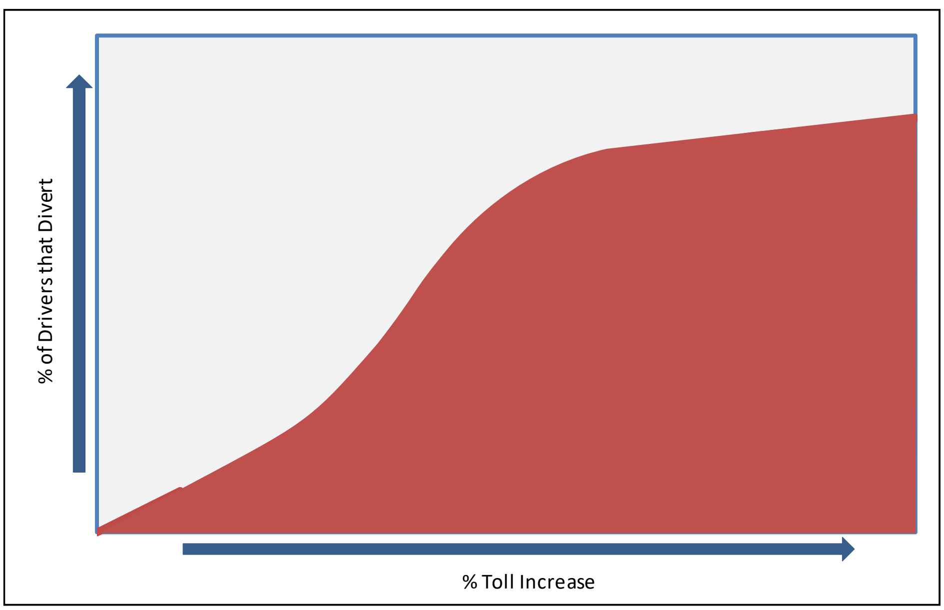
The traffic and toll revenue model developed by Jacobs for the Turnpike accounts for the impact of the assumed toll rate schedule on traffic volumes and estimates the resulting toll revenue. Generally, increases in toll rates will cause tolled traffic volumes to decrease, either because motorists switch to alternative routes to avoid paying the higher toll or reduce their number of trips as a result of the price elasticity of their travel demand.

Not all customers will react to a toll increase in the same way. Some customers may not change their behavior at all, while others might decide to use a different route, combine trips, or not make that trip at all anymore. Still other customers might decide to change how they pay for a trip (e.g., current cash-paying customers may open E-ZPass accounts) to lessen the impact to their wallet.

This effect has been observed on the Turnpike and many other national toll facilities that also offer multiple payment methods and discount plans, often resulting in an overall lower diversion of traffic from the facility than may have been experienced in the past when tolls were increased and there was a single method of payment.

Jacobs developed toll reaction curves to estimate the total number of trips that would be impacted by a given toll increase, and to determine those trips that would remain on the toll facility and pay the new toll rate, those that would divert off the toll facility, and those that would switch toll payment methods. Figure 26 shows a representative illustration of how customers may react to toll increases of varying degrees. In addition to diversion from the toll facility, some motorists will also convert to different payment methods and thus incur a smaller toll rate increase.

Figure 26: Representative Diversion Curve, Percent Diverted Vehicles vs. Percent Toll Increase



Drivers familiar with their travel route options are likely to weigh their travel time versus their trip cost when choosing how to get from point A to point B, or whether to make the trip at all. The proposed toll increases on the Turnpike will cause a certain amount of traffic to leave the facilities. Of this traffic, many will travel on another route to their destination; however, some trips will also no longer be made. Often, customers will initially test alternative routes, only to revert to their original path after finding the alternative route less desirable.

8.1.6 Model Calculations

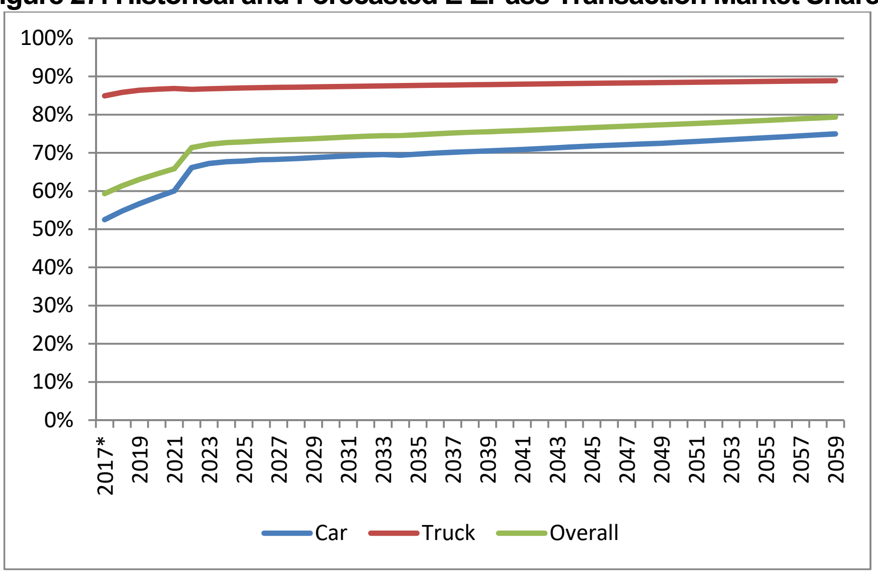
The model creates a framework based on the assumptions outlined above and calculates the forecasted toll transactions for the entire system, VMT on the ticket portion of the Turnpike and toll revenue by applying logic to matrices of the projected annual trip movements for each payment class. Each toll increase is analyzed on an individual basis, and some adjustment to traffic is necessary even in years without toll increases, as traffic grows and shifts between payment types based on historical trends. As all calculations are performed on an individual trip movement level, the applicable toll and mileage can be applied to each trip for a customized forecast resulting in more precise estimates of total revenue and toll transactions.

8.2 E-ZPass Market Share Forecasts

Jacobs previously conducted a study in 2012 that examined the E-ZPass market share behavior on the Turnpike. It was found that not as many frequent customers of the Turnpike had adopted E-ZPass, mainly due to factors such as the lack of a discount for short trips (due to the minimum Turnpike toll rate), coupled with the fixed costs of enrolling in the E-ZPass Ohio program. The lack of E-ZPass participants who make frequent Turnpike trips contributed to a relatively low overall passenger car E-ZPass market share. Since then, the Turnpike has been working to increase passenger car E-ZPass market share by actively recruiting both frequent and infrequent customers to use E-ZPass, but in general it is anticipated that the Turnpike's E-ZPass market share would remain low when compared to other, more urban toll facilities. For the purpose of these forecasts, it was assumed that E-ZPass market share would continue to increase, and that the rate of growth would start to level out beginning in 2022.

Figure 27 and Table 21 present a summary of the average trip E-ZPass market shares for cars and trucks and the projected E-ZPass market share through the 40-year forecast period, showing a bump in E-ZPass market shares in 2022, the first full year of modified toll collection system operations.

Figure 27: Historical and Forecasted E-ZPass Transaction Market Shares



**Actual for 2017 and 2018.*

Table 21: Historical and Forecasted E-ZPass Market Share of Transactions, 2017-2059

Year	Car	Truck	Overall
2017*	52.5%	84.9%	59.3%
2018*	54.8%	85.8%	61.4%
2019	56.7%	86.4%	63.0%
2020	58.4%	86.6%	64.5%
2021	60.0%	86.9%	65.8%
2022	66.1%	86.6%	71.4%
2023	67.2%	86.8%	72.2%
2024	67.7%	86.9%	72.7%
2025	67.9%	87.0%	72.9%
2026	68.2%	87.1%	73.2%
2027	68.3%	87.1%	73.3%
2028	68.5%	87.2%	73.5%
2029	68.8%	87.3%	73.8%
2030	68.9%	87.3%	73.9%
2031	69.2%	87.4%	74.1%
2032	69.4%	87.5%	74.3%
2033	69.5%	87.5%	74.5%
2034	69.4%	87.6%	74.5%
2035	69.7%	87.6%	74.7%
2036	69.9%	87.7%	75.0%
2037	70.2%	87.8%	75.2%
2038	70.3%	87.8%	75.3%
2039	70.5%	87.9%	75.5%
2040	70.7%	87.9%	75.7%
2041	70.9%	88.0%	75.9%
2042	71.1%	88.0%	76.0%
2043	71.3%	88.1%	76.2%
2044	71.6%	88.1%	76.5%
2045	71.8%	88.2%	76.6%
2046	72.0%	88.2%	76.8%
2047	72.2%	88.3%	77.0%
2048	72.3%	88.3%	77.1%
2049	72.5%	88.4%	77.3%
2050	72.8%	88.5%	77.5%
2051	73.0%	88.5%	77.7%
2052	73.2%	88.5%	77.9%
2053	73.5%	88.6%	78.1%
2054	73.7%	88.6%	78.3%
2055	74.0%	88.7%	78.5%
2056	74.2%	88.7%	78.7%
2057	74.5%	88.8%	78.9%
2058	74.7%	88.8%	79.1%
2059	75.0%	88.9%	79.3%

**Actual*

Note: Toll increases are planned each year.

New Toll System Fully Implemented in 2023.

8.3 Revenue Collection Assumptions

With the removal of gates from toll collection points, the Ohio Turnpike will implement a violation enforcement system. Vehicles that pass through the toll plaza without an E-ZPass transponder (or a non-working or improperly mounted transponder) will be identified by images of their license plates and invoiced by mail.

The invoicing process results in some amount of unpaid toll revenue, due to factors such as blocked license plates, invalid vehicle records or addresses, and customers who do not respond to the invoice. This uncollectable revenue is generally referred to as “leakage” and is calculated by applying payment assumptions in the form of a revenue collection “waterfall”. The assumptions in this waterfall are a combination of statistics specific to the Ohio Turnpike, such as estimates of the prevalence of in-state versus out-of-state license plates, as well as Jacobs experience and knowledge from other toll facilities. Figure 28 presents a sample revenue collection waterfall.

Each of the elements that factor into the collectability of toll revenue is described in detail in the following sections.

8.3.1 Non-Usable Images

Not all license plates would be readable due to various reasons such as weather, dirt on the plate or other obstructions, a missing plate, or a temporary plate in the window of the vehicle. Current image-based toll facilities have about four to ten percent non-usable images. Jacobs estimated ten percent non-usable images for cars, which is on the higher end of the range primarily because of the potential for winter weather. Jacobs estimated 15 percent non-usable images for trucks on the Ohio Turnpike.

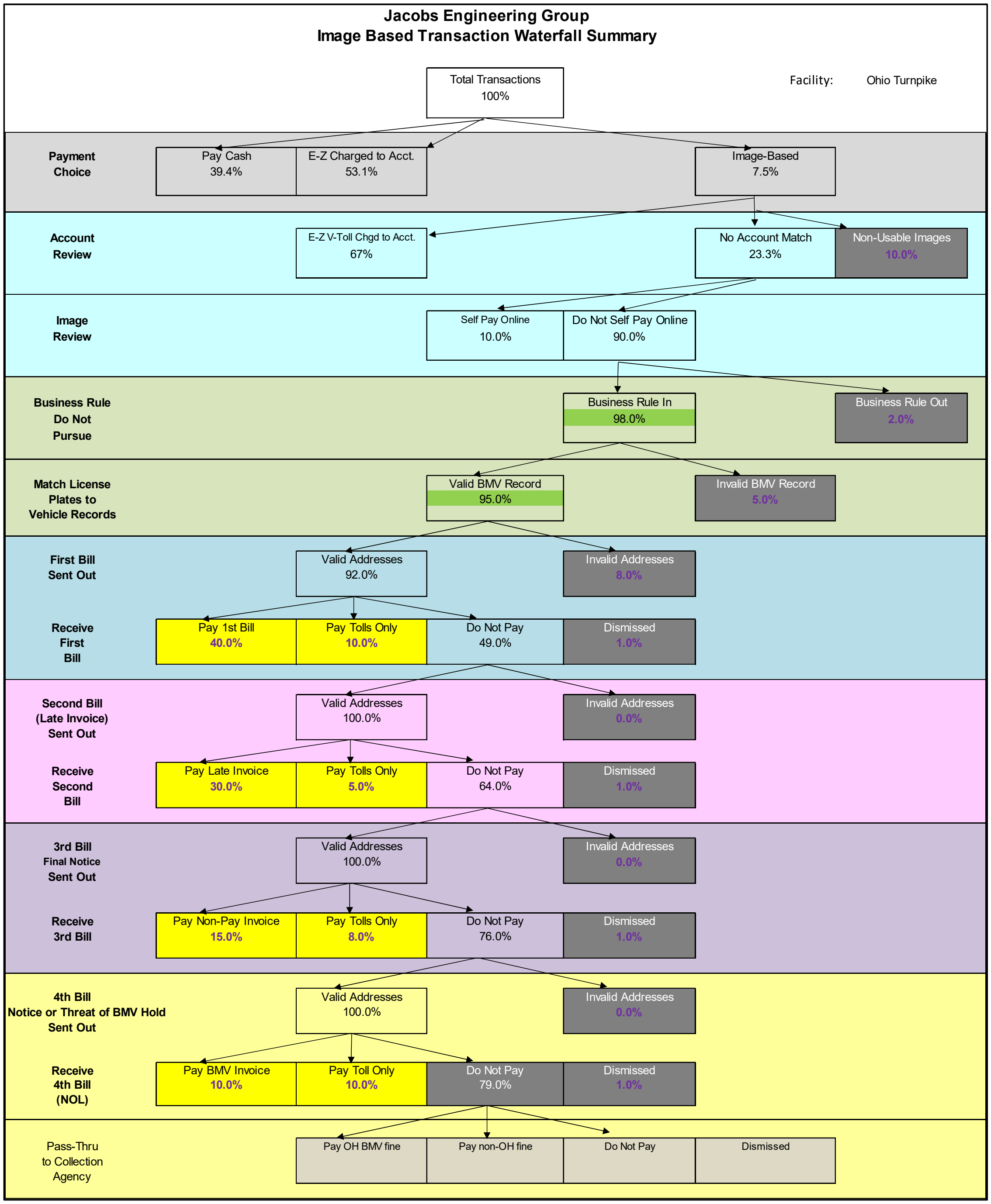
8.3.2 Business Rule Out

We expect that, like most image-based toll facilities, OTIC will utilize business rules that will determine which violators they will and will not pursue. For example, they may choose that it is not feasible to pursue a customer with a Canadian license plate. Typically, image-based toll facilities do not pursue one to two percent of customers with readable license plates. We have assumed that OTIC would ‘business rule out’ two percent of unpaid toll transactions.

8.3.3 Invalid BMV record

Jacobs estimated that five percent of Turnpike traffic would not have a valid Bureau of Motor Vehicles (BMV) record. Other image-based toll facilities have a range of one percent to four percent of total vehicles with invalid records.

Figure 28: Sample Revenue "Waterfall"



8.3.4 Invalid Addresses

Many people who move do not change their address attached to their BMV vehicle registration and do not have mail forwarded; therefore, they could not receive an image-based toll invoice in the mail. On current image-based toll facilities where information is available, four to nine percent of vehicles who have a valid BMV record would not receive their first invoice. Jacobs estimated this share to be eight percent on the Turnpike.

When the first invoice is returned to OTIC or the customer service center because of a bad address, another invoice would not be sent. As a result, it was assumed that the share of invalid addresses on subsequent invoices would be zero.

8.3.5 Percent of Invoices Paid

The most difficult factors to pinpoint when projecting revenue for image-based toll facilities are the percent of toll invoices paid on each level of invoicing. On current image-based toll facilities there is a wide range in the share of transactions that are paid on the first toll invoice. Jacobs assumed that 50 percent of Turnpike transactions would be paid on the first invoice.

To address the costs associated with invoicing based on images, many toll facilities charge fees to counter the additional processing costs associated with violation transactions. For this forecast, it was assumed that fees would be assessed as shown in Table 22. It was assumed that invoices would be sent monthly, and an average of five transactions would appear on each invoice. Estimated Fee Revenues are presented in Chapter 10.0.

Table 22: Fee Schedule

Transaction Based	
Pay Online	$1.00
Pay 1st Bill & Fee	$0.00
Pay Late Notice & Fee	$1.00
Pay Final Notice & Fee	$20.00
Pay upon BMV Threat	$20.00
Invoice Based	
Pay Online	$0.00
Pay 1st Bill & Fee	$3.00
Pay Late Notice & Fee	$6.00
Pay Final Notice & Fee	$9.00
Pay upon BMV Threat	$12.00

If the fourth invoice is not paid, the transactions may be sent to a collection agency, who keeps a portion of the revenue that they are able to collect. The toll revenue collected at this level is expected to be de minimis and is not included in our forecasts.
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If the fourth invoice is not paid, the transactions may be sent to a collection agency, who keeps a portion of the revenue that they are able to collect. The toll revenue collected at this level is expected to be de minimis and is not included in our forecasts.

8.3.6 Dismissals and Forgiveness of Tolls and Late/Violation Fees

There are several reasons why tolls or fees may be dismissed or forgiven, such as incorrect license plate identification. Based on experience with other image-based toll facilities, Jacobs estimated that there might be forgiveness of fees for roughly 20 percent of invoiced tolls.

8.3.7 Resulting Uncollectable Image-Based Tolls

After applying all the various factors, the resulting share of uncollectable toll revenue is estimated at 36.1 percent for cars and 39.7 percent for trucks. As the E-ZPass market share grows throughout the forecast period, the amount of uncollectable toll revenue will decrease.

8.4 Toll Transactions, VMT and Gross Toll Revenue Forecasts

The forecast is presented in terms of toll transactions and toll revenues. When the modified system begins operation in 2022, the number of toll transactions and the total vehicle miles traveled will change significantly from the current system. Full-length trip single transactions will become two or three transactions in the future system. Some non-tolled trips will be introduced with the removal of collection points on several interchanges and will not be recorded. When the existing East and West Gates are converted to a fixed toll rate, it will no longer be able to calculate actual VMT for those trips. Because of these changes all future year forecasts will be expressed in terms of tolled transactions and toll revenue.

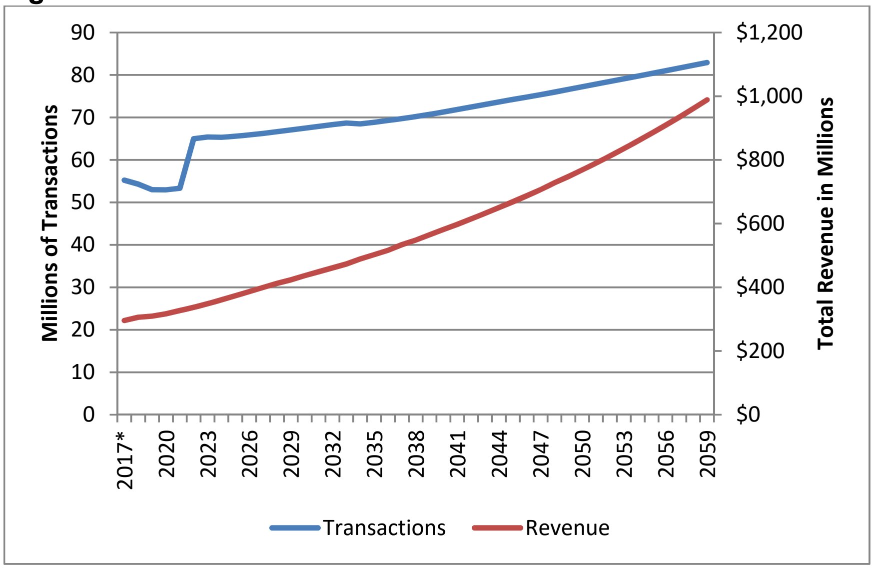
Table 23 presents the forecasted transactions, VMT and toll revenue for the years 2017 through 2059, as well as the resulting annual growth rates. Figure 29 presents the forecasts graphically, while Figure 30 and Figure 31 show the future year-to-year growth in trips and gross toll revenues. Table 24 breaks out the transactions and toll revenues into car and truck trips. All estimates of gross toll revenue are in nominal dollars. Over the 40-year forecast period 2020 through 2059, gross toll revenues total some $24.014 Billion. It should be noted that the forecast of VMT includes trip-miles that will not be tolled in the modified system.

Table 23: Forecasted OTIC Transactions and Gross Toll Revenues, 2017 to 2059 (in millions)

Ohio Turnpike Annual Estimates of Traffic and Revenue						
Year	Transactions		VMT		Revenue	
2017*	55.2	0.6%	3,037.9	1.4%	$295.8	2.6%
2018*	54.3	-1.6%	3,034.5	-0.1%	$306.0	3.5%
2019	53.0	-2.4%	2,982.8	-1.7%	$309.7	1.2%
2020	53.0	-0.1%	2,984.5	0.1%	$316.7	2.3%
2021	53.3	0.7%	3,004.7	0.7%	$327.0	3.3%
2022	53.4	0.1%	3,013.5	0.3%	$337.6	3.2%
2023	65.4	22.5%	3,032.2	0.6%	$348.2	3.1%
2024	65.3	-0.1%	3,041.7	0.3%	$360.0	3.4%
2025	65.6	0.4%	3,058.3	0.5%	$373.6	3.8%
2026	65.9	0.5%	3,075.6	0.6%	$386.4	3.4%
2027	66.3	0.6%	3,093.3	0.6%	$399.4	3.4%
2028	66.6	0.6%	3,112.1	0.6%	$412.0	3.2%
2029	67.0	0.6%	3,131.6	0.6%	$423.3	2.7%
2030	67.5	0.6%	3,150.9	0.6%	$436.6	3.1%
2031	67.9	0.6%	3,171.2	0.6%	$448.7	2.8%
2032	68.3	0.7%	3,191.8	0.6%	$460.9	2.7%
2033	68.7	0.6%	3,212.3	0.6%	$473.4	2.7%
2034	68.5	-0.3%	3,228.8	0.5%	$489.1	3.3%
2035	68.9	0.6%	3,249.2	0.6%	$502.3	2.7%
2036	69.3	0.6%	3,270.6	0.7%	$516.3	2.8%
2037	69.7	0.5%	3,290.0	0.6%	$533.6	3.4%
2038	70.2	0.8%	3,313.3	0.7%	$548.1	2.7%
2039	70.7	0.8%	3,336.7	0.7%	$565.0	3.1%
2040	71.3	0.8%	3,359.1	0.7%	$581.5	2.9%
2041	71.9	0.8%	3,383.4	0.7%	$597.5	2.8%
2042	72.4	0.8%	3,408.0	0.7%	$614.5	2.8%
2043	73.0	0.8%	3,432.9	0.7%	$632.4	2.9%
2044	73.6	0.8%	3,457.6	0.7%	$650.3	2.8%
2045	74.2	0.8%	3,482.8	0.7%	$668.5	2.8%
2046	74.8	0.8%	3,507.5	0.7%	$687.4	2.8%
2047	75.4	0.7%	3,532.8	0.7%	$706.3	2.7%
2048	75.9	0.8%	3,557.3	0.7%	$728.0	3.1%
2049	76.6	0.9%	3,583.9	0.7%	$747.6	2.7%
2050	77.2	0.8%	3,610.7	0.7%	$768.7	2.8%
2051	77.9	0.9%	3,638.0	0.8%	$789.9	2.8%
2052	78.5	0.8%	3,664.9	0.7%	$812.3	2.8%
2053	79.1	0.8%	3,692.0	0.7%	$835.3	2.8%
2054	79.7	0.8%	3,719.3	0.7%	$859.1	2.8%
2055	80.3	0.8%	3,746.9	0.7%	$883.5	2.8%
2056	81.0	0.8%	3,774.8	0.7%	$908.6	2.8%
2057	81.6	0.8%	3,803.0	0.7%	$934.5	2.8%
2058	82.3	0.8%	3,831.4	0.7%	$961.1	2.9%
2059	82.9	0.8%	3,860.1	0.7%	$988.6	2.9%

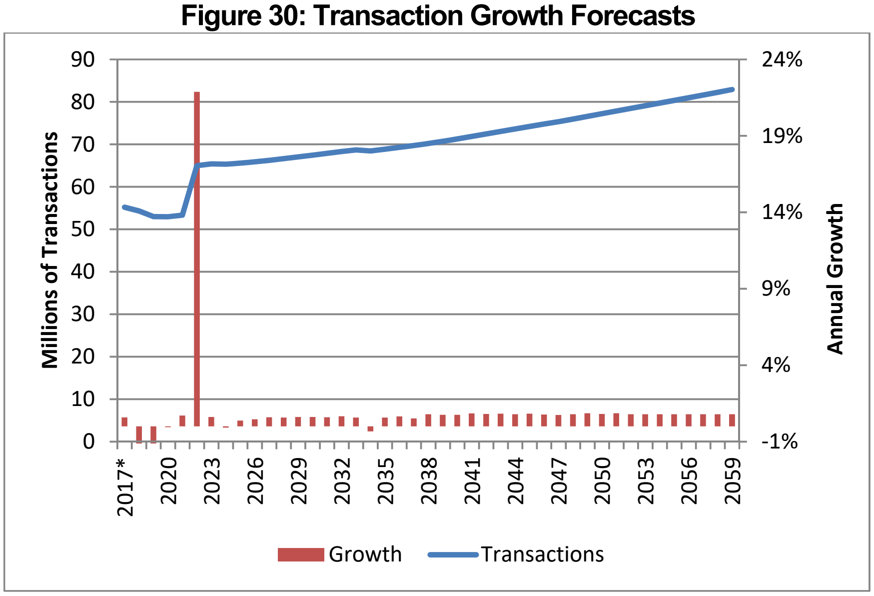
**Actual; Notes: Toll increases are planned each year. New Toll System Fully Implemented in 2023. Numbers may not add due to rounding.*

Figure 29: Historical and Forecasted Transactions and Toll Revenues



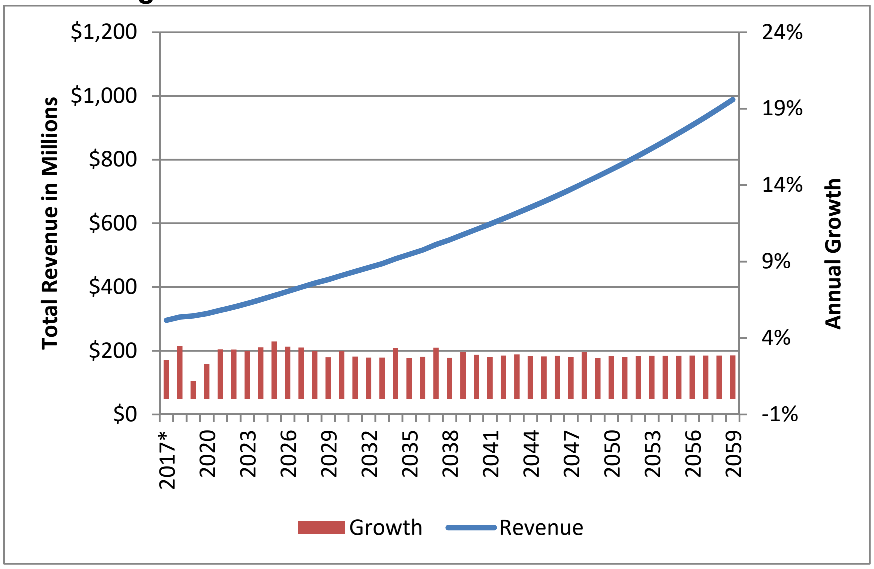
**Actual; Notes: Toll increases are planned each year.*
New Toll System Fully Implemented in 2023.

Figure 30: Transaction Growth Forecasts



**Actual; Notes: Toll increases are planned each year.*
New Toll System Fully Implemented in 2023.

Figure 31: Potential Toll Revenue Growth Forecasts



**Actual; Notes: Toll increases are planned each year.*
New Toll System Fully Implemented in 2023.

Table 24: Forecasted OTIC Transactions, VMT and Gross Toll Revenues by Vehicle Type, 2017 to 2059 (in millions)

Year	Transactions		VMT		Revenue		
	Car	Truck	Car	Truck	Car	Truck	Total
2017*	43.6	11.6	2,017.0	1,020.9	$127.5	$168.3	$295.8
2018*	42.3	12.0	1,969.7	1,064.8	$126.4	$179.7	$306.0
2019	41.3	11.7	1,921.7	1,061.2	$125.8	$183.9	$309.7
2020	41.3	11.7	1,920.5	1,064.0	$128.5	$188.2	$316.7
2021	41.5	11.8	1,928.0	1,076.6	$131.4	$195.7	$327.0
2022	41.4	12.0	1,925.3	1,088.2	$133.7	$204.0	$337.6
2023	48.2	17.2	1,931.0	1,101.2	$136.2	$211.9	$348.2
2024	47.9	17.4	1,927.5	1,114.2	$139.8	$220.2	$360.0
2025	47.9	17.6	1,930.8	1,127.5	$144.7	$228.8	$373.6
2026	48.0	17.8	1,934.7	1,140.8	$148.6	$237.8	$386.4
2027	48.2	18.1	1,939.0	1,154.3	$152.4	$247.0	$399.4
2028	48.4	18.3	1,944.0	1,168.0	$155.3	$256.7	$412.0
2029	48.6	18.5	1,949.4	1,182.2	$158.3	$265.0	$423.3
2030	48.7	18.7	1,954.4	1,196.5	$163.0	$273.6	$436.6
2031	48.9	18.9	1,960.2	1,211.0	$166.3	$282.4	$448.7
2032	49.1	19.2	1,966.1	1,225.7	$169.3	$291.5	$460.9
2033	49.3	19.4	1,971.6	1,240.6	$172.4	$301.0	$473.4
2034	48.8	19.7	1,973.1	1,255.7	$178.4	$310.7	$489.1
2035	49.0	19.9	1,978.2	1,271.0	$181.6	$320.7	$502.3
2036	49.2	20.1	1,984.2	1,286.4	$185.2	$331.1	$516.3
2037	49.3	20.4	1,987.9	1,302.0	$191.8	$341.8	$533.6
2038	49.6	20.6	1,995.5	1,317.8	$195.2	$352.9	$548.1
2039	49.9	20.9	2,002.8	1,333.8	$200.8	$364.3	$565.0
2040	50.1	21.1	2,009.1	1,350.0	$205.4	$376.0	$581.5
2041	50.5	21.4	2,017.0	1,366.4	$209.3	$388.2	$597.5
2042	50.8	21.7	2,025.0	1,382.9	$213.7	$400.7	$614.5
2043	51.1	21.9	2,033.2	1,399.7	$218.8	$413.7	$632.4
2044	51.4	22.2	2,040.8	1,416.7	$223.2	$427.1	$650.3
2045	51.8	22.5	2,048.8	1,434.0	$227.6	$440.9	$668.5
2046	52.1	22.7	2,056.2	1,451.4	$232.3	$455.1	$687.4
2047	52.3	23.0	2,063.8	1,469.0	$236.5	$469.8	$706.3
2048	52.6	23.3	2,070.4	1,486.9	$243.0	$485.0	$728.0
2049	53.0	23.6	2,079.0	1,504.9	$246.9	$500.7	$747.6
2050	53.3	23.9	2,087.6	1,523.1	$251.9	$516.9	$768.7
2051	53.7	24.2	2,096.5	1,541.6	$256.4	$533.6	$789.9
2052	54.0	24.5	2,104.6	1,560.3	$261.5	$550.8	$812.3
2053	54.3	24.8	2,112.7	1,579.2	$266.7	$568.6	$835.3
2054	54.7	25.1	2,120.9	1,598.4	$272.0	$587.0	$859.1
2055	55.0	25.4	2,129.1	1,617.8	$277.5	$606.0	$883.5
2056	55.3	25.7	2,137.4	1,637.5	$283.0	$625.6	$908.6
2057	55.6	26.0	2,145.6	1,657.3	$288.7	$645.8	$934.5
2058	55.9	26.3	2,154.0	1,677.5	$294.4	$666.7	$961.1
2059	56.3	26.6	2,162.3	1,697.8	$300.3	$688.3	$988.6

** Actual; Notes: Toll increases are planned each year. New Toll System Fully Implemented in 2023. Numbers may not add due to rounding.*

9.0 Review of Projected Operations and Maintenance Expenses

This section presents a review of projected Operation and Maintenance (O&M) expenditures consisting of Administration, Insurance, Traffic Control and Safety, Maintenance, as well as Service and Toll Operations costs for the Turnpike.

Of note is that the Commission has consistently performed all their Operation and Maintenance activities below their projected budgets in each year since 2008. The past performance shown in Table 25 highlights the conservative budgeting approach applied by the Commission and provides a sound basis for projecting future operating and maintenance costs.

Table 25: Comparison of Actual and Budgeted O&M Expenditures (000s)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*
Actual O&M	113,868	113,679	116,136	110,296	111,325	108,717	110,767	111,902	117,967	118,761	119,341	89,762
Budgeted O&M	116,510	119,918	120,311	120,303	122,419	115,950	113,092	117,604	122,090	126,338	128,148	96,958
Difference	(2,642)	(6,240)	(4,175)	(10,007)	(11,093)	(7,233)	(2,324)	(5,703)	(4,124)	(7,577)	(8,808)	(7,196)
% of Difference	-2.3%	-5.2%	-3.5%	-8.3%	-9.1%	-6.2%	-2.1%	-4.8%	-3.4%	-6.0%	-6.9%	-7.4%

** YTD data (9 months) for both Actual O&M and Budget*

Jacobs completed this review of future operating expenditures based on both historical information and the Commission's latest 2019 projection of operating expenses, as well as further cost measures being planned by the Commission and the planned implementation of TCS and CSC modernization. For the long-term projections, Jacobs has considered most operating expenditures will be recurring costs and only increase due to inflation except for toll collection costs. This is because the Turnpike has been in operation for over 50 years, with a stable organization structure and labor force, and with no major infrastructure expansions or major reorganizations being planned in the foreseeable future.

Jacobs analyzed toll collection costs in further detail, as these costs will fluctuate with traffic and revenue projection and account for a large portion of the annual budget (approximately 45 percent). Factors that will affect the long-term projection of the costs have been analyzed, including:

- Planned conversion of existing TCS and CSC: Several initiatives were proposed in the recently adopted TCS and CSC Strategic Plan, including removal of nine of the existing gantries, removal of all entry lanes for all remaining gantries and installation of license plate cameras. In addition, two new gantries will be constructed at MP 49 and MP 211 (new endpoints of the closed ticket system) and the existing Eastgate toll plaza will be converted to one-way westbound. These changes will have major impacts on the toll collection costs and toll infrastrcture-related maintenance costs, most notably a reduction in toll staffing needs due to the removal of some of the existing gantries and introduction of dedicated gateless E-ZPass lanes.

- E-ZPass market share rates: The increasing usage of E-ZPass will reduce the number of cash transactions, which would in turn reduce the need for manual toll collection. Also, the introduction of dedicated gateless E-ZPass lanes from the TCS conversion will further encourage such a trend. On the other hand, the increases in total traffic and the continued increase in the use of credit cards could potentially slow down such reduction.
- ATPMs: Further implementation of ATPMs could potentially reduce the need for manual toll collection at some toll locations. The Commission has implemented ATPMs at 21 of 31 plaza locations with six locations operating in an unstaffed setting 24/7/365 and the remainder operating unstaffed for at least one, eight-hour shift.
- Staffing Replacements: As noted earlier, in 2010 the Commission reduced staffing levels through the Voluntary Separation Incentive Program ("VSIP"). More recently it has, through attrition, replaced some of the full-time employees with part-time employees to further reduce toll collection costs. It is believed that the current practices of replacing full-time staff with part-time staff would continue in the near future, as more employees voluntarily choose to retire or resign. The implementation of the new toll collection system and ATPMs is anticipated to further reduce the need for both full-time and part-time staffing.
- Labor contract negotiation with the Teamsters Union: in May 2017 the Commssion adopted a resolution authorizing execution of a new three-year collective bargaining agreement for the full-time, part-time and radio room operator bargaining units.

Jacobs has assumed salaries will continue to grow with inflation (estimated at 2.7 percent per year) to be consistent with what has been forecasted for the maintenance labor forces.

Table 26 presents the results of the projections for Total Operations and Maintenance Expenditures over the next 40 years. As shown in the table, the forecasted operations and maintenance expenditures grow from about $122 million in 2019 to $350 million in 2059. In addition, Service Plaza and Tolling Operations account for almost half of total O&M expenditures ranging from about $56 million in 2019 to some $158 million in 2059. It should be noted that the forecasted operations and maintenance expenditures assumed the conversion to the new TCS and CSC will occur by the end of 2022.

Table 26: Historical and Projected Total O&M Expenditures (000s)

Year	Administration			Traffic Control, Safety, Patrol and Communications	Maintenance					Services and Toll Operation	Total Operating Costs	Annual Growth
	Admin. Personnel	Other Expenditures	Insurance		Maintenance Personnel	Roadway and Facility Maintenance	Snow and Ice Control	Equipment	Other Expenditures			
2017*	$7.8	$2.5	$0.9	$13.4	$4.2	$3.8	$6.2	$5.1	$18.6	$56.2	$118.8	0.7%
2018*	$8.0	$2.8	$0.8	$13.4	$6.4	$5.4	$5.2	$5.5	$17.3	$54.5	$119.3	0.5%
2019	$8.2	$2.9	$0.9	$13.8	$6.6	$5.6	$5.3	$5.6	$17.7	$55.9	$122.3	2.5%
2020	$8.4	$3.0	$0.9	$14.1	$6.8	$5.7	$5.4	$5.8	$18.2	$56.7	$124.9	2.2%
2021	$8.6	$3.0	$0.9	$14.5	$6.9	$5.9	$5.6	$6.0	$18.7	$58.4	$128.4	2.8%
2022	$8.9	$3.1	$0.9	$14.9	$7.1	$6.0	$5.7	$6.1	$19.2	$60.0	$132.0	2.7%
2023	$9.1	$3.2	$1.0	$15.3	$7.3	$6.2	$5.9	$6.3	$19.7	$61.4	$135.4	2.6%
2024	$9.4	$3.3	$1.0	$15.7	$7.5	$6.4	$6.0	$6.4	$20.2	$62.1	$138.0	1.9%
2025	$9.6	$3.4	$1.0	$16.1	$7.7	$6.5	$6.2	$6.6	$20.7	$63.5	$141.5	2.5%
2026	$9.9	$3.5	$1.0	$16.6	$7.9	$6.7	$6.4	$6.8	$21.3	$65.1	$145.1	2.6%
2027	$10.	$3.6	$1.1	$17.0	$8.1	$6.9	$6.5	$7.0	$21.9	$66.7	$148.9	2.6%
2028	$10.	$3.7	$1.1	$17.5	$8.4	$7.1	$6.7	$7.2	$22.5	$68.3	$152.8	2.6%
2029	$10.	$3.7	$1.1	$18.0	$8.6	$7.3	$6.9	$7.4	$23.1	$70.0	$156.7	2.6%
2030	$11.	$3.9	$1.1	$18.4	$8.8	$7.5	$7.1	$7.6	$23.7	$71.7	$160.8	2.6%
2031	$11.	$4.0	$1.2	$18.9	$9.1	$7.7	$7.3	$7.8	$24.3	$73.5	$165.0	2.6%
2032	$11.	$4.1	$1.2	$19.5	$9.3	$7.9	$7.5	$8.0	$25.0	$77.6	$171.5	4.0%
2033	$11.	$4.2	$1.2	$20.0	$9.6	$8.1	$7.7	$8.2	$25.7	$77.6	$174.0	1.5%
2034	$12.	$4.3	$1.3	$20.5	$9.8	$8.3	$7.9	$8.4	$26.4	$79.7	$178.7	2.7%
2035	$12.	$4.4	$1.3	$21.1	$10.1	$8.5	$8.1	$8.6	$27.1	$81.9	$183.7	2.8%
2036	$12.	$4.5	$1.3	$21.6	$10.3	$8.7	$8.3	$8.9	$27.8	$84.0	$188.6	2.7%
2037	$13.	$4.6	$1.4	$22.2	$10.6	$9.0	$8.5	$9.1	$28.6	$86.3	$193.6	2.7%
2038	$13.	$4.8	$1.4	$22.8	$10.9	$9.2	$8.8	$9.4	$29.3	$88.5	$198.7	2.6%
2039	$14.	$4.9	$1.5	$23.4	$11.2	$9.5	$9.0	$9.6	$30.1	$90.8	$204.0	2.7%
2040	$14.	$5.0	$1.5	$24.1	$11.5	$9.7	$9.3	$9.9	$30.9	$93.4	$209.6	2.7%
2041	$14.	$5.2	$1.5	$24.7	$11.8	$10.0	$9.5	$10.	$31.8	$96.0	$215.4	2.7%
2042	$15.	$5.3	$1.6	$25.4	$12.1	$10.3	$9.8	$10.	$32.6	$101.3	$224.0	4.0%
2043	$15.	$5.4	$1.6	$26.1	$12.5	$10.5	$10.0	$10.	$33.5	$101.4	$227.3	1.5%
2044	$16.	$5.6	$1.7	$26.8	$12.8	$10.8	$10.3	$11.	$34.4	$104.2	$233.6	2.7%
2045	$16.	$5.7	$1.7	$27.5	$13.2	$11.1	$10.6	$11.	$35.4	$107.1	$240.0	2.7%
2046	$16.	$5.9	$1.8	$28.3	$13.5	$11.4	$10.9	$11.	$36.3	$110.1	$246.5	2.7%
2047	$17.	$6.1	$1.8	$29.0	$13.9	$11.7	$11.2	$11.	$37.3	$113.1	$253.2	2.7%
2048	$17.	$6.2	$1.9	$29.8	$14.2	$12.0	$11.5	$12.	$38.3	$116.3	$260.2	2.8%
2049	$18.	$6.4	$1.9	$30.6	$14.6	$12.4	$11.8	$12.	$39.3	$119.6	$267.3	2.7%
2050	$18.	$6.6	$2.0	$31.4	$15.0	$12.7	$12.1	$12.	$40.4	$122.9	$274.7	2.7%
2051	$19.	$6.7	$2.0	$32.3	$15.4	$13.0	$12.4	$13.	$41.5	$126.3	$282.2	2.7%
2052	$19.	$6.9	$2.1	$33.2	$15.8	$13.4	$12.7	$13.	$42.6	$133.4	$293.5	4.0%
2053	$20.	$7.1	$2.1	$34.0	$16.3	$13.8	$13.1	$14.	$43.7	$133.5	$297.9	1.5%
2054	$20.	$7.3	$2.2	$35.0	$16.7	$14.1	$13.4	$14.	$44.9	$137.2	$306.1	2.7%
2055	$21.	$7.5	$2.2	$35.9	$17.2	$14.5	$13.8	$14.	$46.1	$141.1	$314.5	2.7%
2056	$22.	$7.7	$2.3	$36.9	$17.6	$14.9	$14.2	$15.	$47.4	$145.0	$323.1	2.7%
2057	$22.	$7.9	$2.4	$37.9	$18.1	$15.3	$14.6	$15.	$48.7	$149.1	$332.0	2.7%
2058	$23.	$8.1	$2.4	$38.9	$18.6	$15.7	$15.0	$15.	$50.0	$153.3	$341.1	2.7%
2059	$23.	$8.3	$2.5	$39.9	$19.1	$16.1	$15.4	$16.	$51.3	$157.6	$350.5	2.7%

**Actual; Notes: New Toll System Fully Implemented in 2023. Numbers may not add due to rounding.*

10.0 Net Revenues

Net revenues are the result of subtracting O&M costs from total gross pledged revenues. Total gross pledged revenues include both toll revenues and other pledged revenues.

10.1 Forecast of Other Pledged Revenues

"Other" pledged revenues (i.e., non-toll revenues) are shown in Table 27. Other revenues are estimated to total around $2,397 million over the course of the 40-year forecast period 2020 through 2059. Other revenues were forecasted based on the following assumptions:

- Special Toll Permits include fees for large combination vehicles (LCVs) and permits for oversize and overweight vehicles. These fees are assumed to remain constant in relative terms to toll rates. Revenue growth for this category is forecasted to be at the 2.0 percent rate of inflation plus the rate of traffic growth.
- Concession Revenues consist of both fixed and percentage-based revenues from sales at the Commission's Service Plazas. Concession revenues are mainly comprised of restaurant and fuel sales, and common area maintenance charges, property management fees and capital improvement fees. These revenues were grown at the 2.7 percent rate of inflation plus traffic growth.
- Other Revenues include all the other pledged income to the Commission including E-ZPass transponder fees, licenses, tower leases, royalties and advertising, and are grown at the 2.7 percent rate of inflation.
- Investment Income was provided by the Commission and is based on the current plan of finance.

10.2 Forecast of Net Revenues

Table 28 presents the net revenues, calculated from the total Turnpike gross revenues (toll revenues plus other revenues) less O&M costs. The estimates of gross and net toll revenue are in nominal dollars. Over the 40-year forecast period from 2020 through 2059, Toll, Fee and Other revenues total some $26.179 Billion, while O&M costs total roughly $8.715 Billion. Net revenues for the 40-year period are estimated at $17.464 Billion.

Table 27: Ohio Turnpike Non-Toll ("Other") Revenues in millions

Year	Other Revenue				
	Special Toll Permits	Concession	Other	Investment Earnings	Total
2017*	$3.4	$17.1	$5.6	$2.1	$28.2
2018*	$3.5	$17.3	$6.2	$5.0	$32.0
2019	$3.5	$17.3	$6.8	$6.3	$33.9
2020	$3.6	$17.7	$7.3	$5.1	$33.8
2021	$3.7	$18.2	$7.8	$4.5	$34.2
2022	$3.8	$18.6	$8.3	$4.3	$35.0
2023	$3.9	$19.1	$8.8	$4.7	$36.5
2024	$4.0	$19.6	$9.3	$5.3	$38.2
2025	$4.1	$20.1	$9.8	$4.9	$38.9
2026	$4.2	$20.6	$10.3	$5.0	$40.1
2027	$4.3	$21.1	$10.8	$5.0	$41.2
2028	$4.4	$21.6	$11.3	$5.8	$43.1
2029	$4.5	$22.1	$11.8	$6.1	$44.6
2030	$4.6	$22.7	$12.3	$5.9	$45.5
2031	$4.8	$23.3	$12.8	$6.0	$46.8
2032	$4.9	$23.8	$13.3	$6.2	$48.2
2033	$5.0	$24.4	$13.8	$6.3	$49.5
2034	$5.1	$25.1	$14.3	$6.4	$50.9
2035	$5.3	$25.7	$14.8	$6.5	$52.2
2036	$5.4	$26.3	$15.3	$6.6	$53.6
2037	$5.5	$27.0	$15.8	$6.7	$55.0
2038	$5.7	$27.7	$16.3	$6.8	$56.4
2039	$5.8	$28.3	$16.8	$6.9	$57.8
2040	$5.9	$29.1	$17.3	$7.0	$59.3
2041	$6.1	$29.8	$17.8	$7.1	$60.8
2042	$6.2	$30.5	$18.3	$7.2	$62.3
2043	$6.4	$31.3	$18.8	$7.3	$63.8
2044	$6.6	$32.1	$19.3	$7.4	$65.3
2045	$6.7	$32.9	$19.8	$7.5	$66.9
2046	$6.9	$33.7	$20.3	$7.6	$68.5
2047	$7.1	$34.5	$20.8	$7.7	$70.1
2048	$7.2	$35.4	$21.3	$7.8	$71.7
2049	$7.4	$36.3	$21.8	$7.9	$73.4
2050	$7.6	$37.2	$22.3	$8.0	$75.1
2051	$7.8	$38.1	$22.8	$8.1	$76.8
2052	$8.0	$39.1	$23.3	$8.2	$78.6
2053	$8.2	$40.1	$23.8	$8.3	$80.4
2054	$8.4	$41.1	$24.4	$8.4	$82.2
2055	$8.6	$42.1	$24.9	$8.5	$84.1
2056	$8.8	$43.1	$25.5	$8.6	$86.1
2057	$9.0	$44.2	$26.0	$8.7	$88.0
2058	$9.3	$45.3	$26.6	$8.8	$90.1
2059	$9.5	$46.5	$27.2	$8.9	$92.1

**Actual; Note: Numbers may not add due to rounding.*

Table 28: Toll System Revenues, O&M Costs and Net Revenues, in millions

Year	Toll Revenues (Collectable)		Fee Revenues		Other Revenues		Total Revenues		O&M		Net Revenues	
2017*	$295.8	2.6%	-		$28.2	8.0%	$324.0	3.0%	$118.8	0.7%	$205.3	4.4%
2018*	$306.0	3.5%	-		$32.0	13.3%	$338.0	4.3%	$119.3	0.5%	$218.7	6.5%
2019	$309.7	1.2%	-		$33.9	6.1%	$343.6	1.6%	$122.3	2.5%	$221.3	1.2%
2020	$316.7	2.3%	-		$33.8	-0.5%	$350.5	2.0%	$124.9	2.2%	$225.5	1.9%
2021	$327.0	3.2%	-		$34.2	1.3%	$361.2	3.1%	$128.4	2.8%	$232.7	3.2%
2022	$334.8	2.4%			$35.0	2.5%	$369.8	2.4%	$132.0	2.7%	$237.9	2.2%
2023	$345.2	3.1%	$2.2		$36.5	4.2%	$381.7	3.2%	$135.4	2.6%	$246.4	3.6%
2024	$356.9	3.4%	$2.1	-1.0%	$38.2	4.6%	$395.1	3.5%	$138.0	1.9%	$257.1	4.4%
2025	$370.4	3.8%	$2.1	-0.3%	$38.9	1.8%	$409.2	3.6%	$141.5	2.5%	$267.8	4.1%
2026	$383.1	3.4%	$2.1	-0.2%	$40.1	3.1%	$423.1	3.4%	$145.1	2.6%	$278.0	3.8%
2027	$395.9	3.4%	$2.1	0.1%	$41.2	2.8%	$437.1	3.3%	$148.9	2.6%	$288.2	3.7%
2028	$408.4	3.1%	$2.1	0.1%	$43.1	4.7%	$451.5	3.3%	$152.8	2.6%	$298.7	3.6%
2029	$419.5	2.7%	$2.1	-0.1%	$44.6	3.4%	$464.1	2.8%	$156.7	2.6%	$307.4	2.9%
2030	$432.6	3.1%	$2.1	0.2%	$45.5	2.2%	$478.2	3.0%	$160.8	2.6%	$317.4	3.3%
2031	$444.6	2.8%	$2.1	0.1%	$46.8	2.8%	$491.5	2.8%	$165.0	2.6%	$326.5	2.9%
2032	$456.6	2.7%	$2.1	0.1%	$48.2	3.0%	$504.9	2.7%	$171.5	4.0%	$333.4	2.1%
2033	$469.0	2.7%	$2.1	0.2%	$49.5	2.7%	$518.5	2.7%	$174.0	1.5%	$344.5	3.3%
2034	$484.6	3.3%	$2.1	-0.4%	$50.9	2.7%	$535.5	3.3%	$178.7	2.7%	$356.8	3.6%
2035	$497.6	2.7%	$2.1	-0.2%	$52.2	2.7%	$549.9	2.7%	$183.7	2.8%	$366.2	2.6%
2036	$511.4	2.8%	$2.1	0.1%	$53.6	2.6%	$565.0	2.8%	$188.6	2.7%	$376.5	2.8%
2037	$528.6	3.4%	$2.1	0.0%	$55.0	2.6%	$583.6	3.3%	$193.6	2.7%	$390.0	3.6%
2038	$542.9	2.7%	$2.1	0.3%	$56.4	2.6%	$599.3	2.7%	$198.7	2.6%	$400.6	2.7%
2039	$559.7	3.1%	$2.2	0.3%	$57.8	2.5%	$617.5	3.0%	$204.0	2.7%	$413.5	3.2%
2040	$575.9	2.9%	$2.2	0.3%	$59.3	2.5%	$635.2	2.9%	$209.6	2.7%	$425.6	2.9%
2041	$591.7	2.7%	$2.2	0.3%	$60.8	2.5%	$652.5	2.7%	$215.4	2.7%	$437.2	2.7%
2042	$608.5	2.8%	$2.2	0.3%	$62.3	2.5%	$670.8	2.8%	$224.0	4.0%	$446.8	2.2%
2043	$626.3	2.9%	$2.2	0.2%	$63.8	2.4%	$690.1	2.9%	$227.3	1.5%	$462.7	3.6%
2044	$643.9	2.8%	$2.2	0.2%	$65.3	2.4%	$709.2	2.8%	$233.6	2.7%	$475.7	2.8%
2045	$661.8	2.8%	$2.2	0.3%	$66.9	2.4%	$728.7	2.7%	$240.0	2.7%	$488.8	2.8%
2046	$680.6	2.8%	$2.2	0.3%	$68.5	2.4%	$749.0	2.8%	$246.5	2.7%	$502.5	2.8%
2047	$699.1	2.7%	$2.2	0.1%	$70.1	2.4%	$769.2	2.7%	$253.2	2.7%	$516.0	2.7%
2048	$720.6	3.1%	$2.2	0.2%	$71.7	2.3%	$792.3	3.0%	$260.2	2.8%	$532.1	3.1%
2049	$739.9	2.7%	$2.2	0.3%	$73.4	2.3%	$813.3	2.7%	$267.3	2.7%	$546.0	2.6%
2050	$760.7	2.8%	$2.2	0.3%	$75.1	2.3%	$835.9	2.8%	$274.7	2.7%	$561.2	2.8%
2051	$781.6	2.7%	$2.2	0.4%	$76.8	2.3%	$858.5	2.7%	$282.2	2.7%	$576.3	2.7%
2052	$803.7	2.8%	$2.2	0.3%	$78.6	2.3%	$882.3	2.8%	$293.5	4.0%	$588.8	2.2%
2053	$826.4	2.8%	$2.2	0.3%	$80.4	2.3%	$906.8	2.8%	$297.9	1.5%	$608.9	3.4%
2054	$849.8	2.8%	$2.2	0.3%	$82.2	2.3%	$932.1	2.8%	$306.1	2.7%	$626.0	2.8%
2055	$873.9	2.8%	$2.3	0.3%	$84.1	2.3%	$958.1	2.8%	$314.5	2.7%	$643.6	2.8%
2056	$898.8	2.8%	$2.3	0.3%	$86.1	2.3%	$984.8	2.8%	$323.1	2.7%	$661.7	2.8%
2057	$924.4	2.8%	$2.3	0.3%	$88.0	2.3%	$1,012.4	2.8%	$332.0	2.7%	$680.4	2.8%
2058	$950.7	2.8%	$2.3	0.3%	$90.1	2.3%	$1,040.7	2.8%	$341.1	2.7%	$699.6	2.8%
2059	$977.7	2.8%	$2.3	0.3%	$92.1	2.3%	$1,069.9	2.8%	$350.5	2.7%	$719.4	2.8%

**Actual; Notes: Toll increases are planned each year. New Toll System Fully Implemented in 2023. Numbers may not add due to rounding.*

11.0 Limits and Disclaimers

It is Jacobs' opinion that the traffic and gross toll revenue estimates provided herein are reasonable and that they have been prepared in accordance with accepted industry-wide practice. However, given the uncertainties in any forecast, it is important to note the following assumptions which, in our opinion, are reasonable:

i. This report presents the results of Jacobs' consideration of the information available as of the date hereof and the application of our experience and professional judgment to that information. It is not a guarantee of any future events or trends.

ii. The traffic and gross toll revenue estimates will be subject to future economic and social conditions, demographic developments and regional transportation construction activities that cannot be predicted with certainty.

iii. The estimates contained in this report, while presented with numeric specificity, are based on a number of estimates and assumptions which, though considered reasonable to us, are inherently subject to economic and competitive uncertainties and contingencies, most of which are beyond the control of an operating agency and cannot be predicted with certainty. In many instances, a broad range of alternative assumptions could be considered reasonable. Changes in the assumptions used could result in material differences in estimated outcomes.

iv. Jacobs' traffic and gross toll revenue estimations only represent our best judgment and we do not warrant or represent that the actual gross toll revenues will not vary from our estimates.

v. We do not express any opinion on the following items: socioeconomic and demographic forecasts, proposed land use development projects and potential improvements to the regional transportation network.

vi. No other competing projects, tolled or non-tolled, are assumed to be constructed or significantly improved in the project corridor during the project period, as to negatively impact Ohio Turnpike traffic, except those identified within this report.

vii. Major highway improvements that are currently underway or fully funded will be completed as planned.

viii. The system will be well maintained, efficiently operated, and effectively signed to encourage maximum usage.

ix. No reduced growth initiatives or related controls that would significantly inhibit normal development patterns will be introduced during the estimate period.

x. There will be no future serious protracted recession during the estimate period.

xi. There will be no protracted fuel shortage during the estimate period.

xii. No local, regional, or national emergency will arise that will abnormally restrict the use of motor vehicles.

In Jacobs' opinion, the assumptions underlying the study provide a reasonable basis for the analysis. However, any financial projection is subject to uncertainties. Inevitably, some assumptions used to develop the projections will not be realized, and unanticipated events and circumstances may occur. There are likely to be differences between the projections and actual results, and those differences may be material. Because of these uncertainties, Jacobs makes no guaranty or warranty with respect to the projections in this Study.

This document, and the opinions, analysis, evaluations, or recommendations contained herein are for the sole use and benefit of the contracting parties. There are no intended third-party beneficiaries, and Jacobs Engineering Group Inc., (and its affiliates) shall have no liability whatsoever to any third parties for any defect, deficiency, error, omission in any statement contained in or in any way related to this document or the services provided.

Neither this document nor any information contained therein or otherwise supplied by Jacobs Engineering Group Inc. in connection with the study and the services provided to our client shall be used in connection with any financing solicitation, proxy, and proxy statement, proxy soliciting materials, prospectus, Securities Registration Statement or similar document without the express written consent of Jacobs Engineering Group Inc.

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We are of the opinion that the Turnpike has the ability to raise tolls and generate higher revenues than forecasted if the provisions of the Trust Agreement or other needs of the Commission require the generation of additional revenues.

We greatly appreciate the invaluable assistance provided by the staff of the Ohio Turnpike and Infrastructure Commission.

Yong Zhao
Interim US Traffic and Revenue Forecasting Group Leader

Jill Rankin
Manager of Projects

EXHIBIT E

BOOK ENTRY ONLY SYSTEM

Description of DTC's Procedures

The following information on the Book Entry Only System applicable to the 2020 Bonds has been supplied by DTC, and none of the Commission, the Commission's Municipal Advisor, the Underwriters, Bond Counsel, or Underwriters' Counsel make any representations, warranties or guarantees with respect to its accuracy or completeness.

DTC will act as securities depository for the 2020 Bonds. The 2020 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 2020 Bond certificate will be issued for each maturity in each series in the aggregate principal amount of the 2020 Bonds for that maturity and series and will be deposited with DTC.

DTC, the world's largest securities depository, 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. 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 securities 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" and, together with Direct Participants, "Participants"). DTC has S&P's rating of "AA+." 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 the 2020 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2020 Bonds on DTC's records. The ownership interest of each actual purchaser of each of the 2020 Bonds (the "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 purchases. Beneficial Owners are, however, expected to receive written confirmations providing details of the transactions, as well as periodic statements of their holdings, from the Direct or Indirect Participants through which the Beneficial Owners entered into the transaction. Transfers of ownership interests in the 2020 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 interest in 2020 Bonds, except in the event that use of the Book Entry Only System for the 2020 Bonds is discontinued. See "Revision of Book Entry System - Replacement 2020 Bonds," below.

To facilitate subsequent transfers, all 2020 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 the 2020 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee does not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2020 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2020 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.

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.

Redemption notices shall be sent to DTC. If less than all of the Series 2013 Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to the 2020 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Commission 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 the 2020 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium, if any, and interest payments on the 2020 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 Commission or its agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Direct and Indirect 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 Direct and Indirect Participants and not of DTC (or its nominee), or the Commission or its agent, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Commission or its agent, disbursement of such payments to Direct Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

Revision of Book Entry System

DTC may discontinue providing its service with respect to the 2020 Bonds at any time by giving reasonable notice to the Commission or its agent. Under such circumstances, in the event a successor securities depository is not obtained, the 2020 Bond certificates are required to be printed and delivered. The Beneficial Owner, upon registration of certificates held in the Beneficial Owner's name, will become the Holder of the 2020 Bonds.

The Commission may decide to discontinue use of the system of book entry transfers through DTC (or a successor securities depository). In such event, 2020 Bond certificates will be printed and delivered to DTC.

The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC, Euroclear or Clearstream (DTC, Euroclear and Clearstream together, the "Clearing Systems ") currently in effect. The information in this subsection concerning the Clearing

Systems has been obtained from sources believed to be reliable. No representation is made herein by the Commission as to the accuracy, completeness or adequacy of such information or as to the absence of material adverse changes in such information subsequent to the date of this Official Statement. The Commission will not have any responsibility or liability for any aspect of the records relating to, or payments made on account of beneficial ownership interests in the Bonds held through the facilities of any Clearing System or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Euroclear and Clearstream. Euroclear and Clearstream each hold securities for their customers and facilitate the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream also deal with domestic securities markets in several countries through established depositary and custodial relationships. Euroclear and Clearstream have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream customers are worldwide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system, either directly or indirectly.

Clearing and Settlement Procedures. The Bonds sold in offshore transactions will be initially issued to investors through the book-entry facilities of DTC, or Clearstream and Euroclear in Europe if the investors are participants in those systems, or indirectly through organizations that are participants in the systems. For any of such Bonds, the record holder will be DTC's nominee. Clearstream and Euroclear will hold omnibus positions on behalf of their participants through customers' securities accounts in Clearstream's and Euroclear's names on the books of their respective depositories.

The depositories, in turn, will hold positions in customers' securities accounts in the depositories' names on the books of DTC. Because of time zone differences, the securities account of a Clearstream or Euroclear participant as a result of a transaction with a participant, other than a depository holding on behalf of Clearstream or Euroclear, will be credited during the securities settlement processing day, which must be a business day for Clearstream or Euroclear, as the case may be, immediately following the DTC settlement date. These credits or any transactions in the securities settled during the processing will be reported to the relevant Euroclear participant or Clearstream participant on that business day. Cash received in Clearstream or Euroclear as a result of sales of securities by or through a Clearstream participant or Euroclear participant to a DTC Participant, other than the depository for Clearstream or Euroclear, will be received with value on the DTC settlement date but will be available in the relevant Clearstream or Euroclear cash account only as of the business day following settlement in DTC.

Transfer Procedures. Transfers between participants will occur in accordance with DTC rules. Transfers between Clearstream participants or Euroclear participants will occur in accordance with their respective rules and operating procedures. Cross-market transfers between persons holding directly or indirectly through DTC, on the one hand, and directly or indirectly through Clearstream participants or Euroclear participants, on the other, will be effected in DTC in accordance with DTC rules on behalf of the relevant European international clearing system by the relevant depositories; however, cross-market transactions will require delivery of instructions to the relevant European international clearing system by the counterparty in the system in accordance with its rules and procedures and within its established deadlines in European time.

The relevant European international clearing system will, if the transaction meets its settlement requirements, deliver instructions to its depository to take action to effect final settlement on its behalf by delivering or receiving securities in DTC, and making or receiving payment in accordance with normal procedures for same day funds settlement applicable to DTC. Clearstream participants or Euroclear participants may not deliver instructions directly to the depositories.

The Commission will not impose any fees in respect of holding the Bonds; however, holders of book-entry, interests in the Bonds may incur fees normally payable in respect of the maintenance and operation of accounts in the DTC, Euroclear and Clearstream.

Initial Settlement. Interests in the Bonds will be in uncertified book-entry form. Purchasers electing to hold book-entry interests in the Bonds through Euroclear and Clearstream accounts will follow the settlement procedures applicable to conventional Eurobonds. Book-entry interests in the Bonds will be credited to Euroclear and Clearstream participants' securities clearance accounts on the business day following the date of delivery of the Bonds against payment (value as on the date of delivery of the Bonds). DTC participants acting on behalf of purchasers electing to hold book-entry interests in the Bonds through DTC will follow the delivery practices applicable to securities eligible for DTC's Same Day Funds Settlement system. DTC participants' securities accounts will be credited with book-entry interests in the Bonds following confirmation of receipt of payment to the Commission on the date of delivery of the Bonds.

Secondary Market Trading. Secondary market trades in the Bonds will be settled by transfer of title to book-entry interests in Euroclear, Clearstream or DTC, as the case may be. Title to such book-entry interests will pass by registration of the transfer within the records of Euroclear, Clearstream or DTC, as the' case may be, in accordance with their respective procedures. Book-entry interests in the Bonds may be transferred within Euroclear and within Clearstream and between Euroclear and Clearstream in accordance with procedures established for these purposes by Euroclear and Clearstream. Book-entry interests in the Bonds may be transferred within DTC in accordance with procedures established for this purpose by DTC. Transfer of book-entry interests in the Bonds between Euroclear or Clearstream and DTC may be effected in accordance with procedures established for this purpose by Euroclear, Clearstream and DTC.

Special Timing Considerations. Investors should be aware that investors will only be able to make and receive deliveries, payments and other communications involving the Bonds through Euroclear or Clearstream on days when those systems are open for business. In addition, because of time-zone differences, there may be complications with completing transactions involving Clearstream and/or Euroclear on the same business day as in the United States. U.S. investors who wish to transfer their interests in the Bonds, or to receive or make a payment or delivery of the Bonds, on a particular day, may find that the transactions will not be performed until the next business day in Luxembourg if Clearstream is used, or Brussels if Euroclear is used.

Clearing Information. The Commission expects that the Bonds will be accepted for clearance through the facilities of Euroclear and Clearstream. The international securities identification numbers, common codes and CUSIP numbers for the Bonds are set forth on the inside cover of the Official Statement.

General. Neither Euroclear nor Clearstream is under any obligation to perform or continue to perform the procedures referred to above, and such procedures may be discontinued at any time.

NEITHER THE COMMISSION NOR ANY OF ITS AGENTS WILL HAVE ANY RESPONSIBILITY FOR THE PERFORMANCE BY EUROCLEAR OR CLEARSTREAM OR THEIR RESPECTIVE DIRECT OR INDIRECT PARTICIPANTS OR ACCOUNT HOLDERS OF THEIR RESPECTIVE OBLIGATIONS UNDER THE RULES AND PROCEDURES GOVERNING THEIR OPERATIONS OR THE ARRANGEMENTS REFERRED TO ABOVE

EXHIBIT F

COMPOSITE ANNUAL DEBT SERVICE REQUIREMENT COVERAGE TABLE

See attached.

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COMPOSITE ANNUAL DEBT SERVICE REQUIREMENT COVERAGE TABLE

Fiscal Year	Net Pledged Revenues (1)	Outstanding Senior Lien Annual Debt Service Requirement (2)	2020 Senior Lien Bonds Annual Debt Service Requirement	Total Senior Lien Annual Debt Service Requirement	Senior Lien Debt Service Coverage	Outstanding Junior Lien Annual Debt Service Requirement (2)	2020 Junior Lien Bonds Annual Debt Service Requirement	Total Composite Annual Debt Service Requirement	Aggregate Debt Service Coverage
2020	$225,544,163	$54,020,017	$2,130,806	$56,150,822	4.02x	$42,173,671	$11,572,587	$109,897,080	2.05x
2021	232,719,326	57,616,371	2,540,033	60,156,404	3.87x	38,465,338	13,876,505	112,498,246	2.07x
2022	237,870,084	58,242,679	2,540,033	60,782,713	3.91x	41,827,838	13,889,190	116,499,740	2.04x
2023	246,359,672	51,306,767	2,540,033	53,846,800	4.58x	64,270,996	13,887,029	132,004,825	1.87x
2024	257,095,118	43,120,754	2,540,033	45,660,788	5.63x	71,253,461	13,887,035	130,801,284	1.97x
2025	267,762,766	49,286,588	2,540,033	51,826,621	5.17x	64,979,961	13,888,677	130,695,259	2.05x
2026	277,989,773	29,918,529	2,540,033	32,458,563	8.56x	79,098,253	13,888,013	125,444,828	2.22x
2027	288,220,046	25,734,656	2,540,033	28,274,690	10.19x	87,283,669	13,888,321	129,446,680	2.23x
2028	298,712,812	12,417,800	2,540,033	14,957,833	19.97x	105,599,128	13,890,079	134,447,040	2.22x
2029	307,365,070	9,750,633	2,540,033	12,290,667	25.01x	113,270,711	13,889,028	139,450,405	2.20x
2030	317,397,354	9,580,425	2,540,033	12,120,458	26.19x	118,435,794	13,889,431	144,445,683	2.20x
2031	326,484,012	4,519,675	4,419,200	8,938,875	36.52x	128,499,078	11,733,827	149,171,779	2.19x
2032	333,366,051	3,514,300	4,798,035	8,312,335	40.10x	130,298,911	11,302,679	149,913,925	2.22x
2033	344,491,018	3,514,300	4,798,458	8,312,758	41.44x	131,474,928	11,302,679	151,090,365	2.28x
2034	356,778,072	3,514,300	4,795,955	8,310,255	42.93x	131,513,065	11,302,679	151,125,999	2.36x
2035	366,208,889	3,514,300	4,794,212	8,308,512	44.08x	131,516,312	11,302,679	151,127,502	2.42x
2036	376,450,400	8,072,633	2,652,274	10,724,907	35.10x	126,961,599	13,719,345	151,405,852	2.49x
2037	390,026,903	14,660,300	2,223,937	16,884,237	23.10x	120,369,146	14,202,859	151,456,241	2.58x
2038	400,586,200	14,128,833	2,223,937	16,352,770	24.50x	120,369,833	14,204,919	150,927,523	2.65x
2039	413,497,019	14,170,500	2,223,937	16,394,437	25.22x	120,368,902	14,204,898	150,968,237	2.74x
2040	425,609,460	14,620,500	2,223,937	16,844,437	25.27x	120,371,792	14,206,102	151,422,330	2.81x
2041	437,157,141	14,701,750	2,223,937	16,925,687	25.83x	120,370,875	14,205,956	151,502,518	2.89x
2042	446,842,930	7,831,750	2,223,937	10,055,687	44.44x	120,370,417	14,206,824	144,632,927	3.09x
2043	462,723,768	1,076,250	7,294,770	8,371,020	55.28x	40,224,500	66,363,348	114,958,868	4.03x
2044	475,652,283	-	8,309,373	8,309,373	57.24x	21,244,625	84,328,922	113,882,920	4.18x
2045	488,756,510	-	8,308,869	8,308,869	58.82x	20,804,292	84,354,068	113,467,229	4.31x
2046	502,518,141	-	21,686,167	21,686,167	23.17x	3,472,375	70,990,315	96,148,857	5.23x
2047	515,964,845	-	28,139,342	28,139,342	18.34x	-	48,424,879	76,564,221	6.74x
2048	532,108,166	-	4,815,813	4,815,813	110.49x	-	7,405,748	12,221,561	43.54x
Total	$10,552,257,989	$508,834,610	$145,687,228	$654,521,839		$2,414,889,465	$668,208,618	$3,737,619,922	

*Table does not reflect interest earnings in Debt Service Reserve Fund, Debt Service Fund and the Infrastructure Fund. Table does not reflect any bonds that may be issued after the issuance of the Series 2020 Bonds.

(1) Net Revenues are projected by Jacobs Engineering Group. Please see the Traffic and Revenue Report for further details.

(2) Net of Refunded Bonds. See Exhibit H (Information Relating to The Refunded Bonds).

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EXHIBIT G

FORM OF CONTINUING DISCLOSURE CERTIFICATE

THIS CONTINUING DISCLOSURE CERTIFICATE (the "Certificate") is executed and delivered February 13, 2020 by the Ohio Turnpike and Infrastructure Commission (the "Issuer") in connection with the issuance of $81,465,000 State of Ohio Turnpike Revenue Refunding Bonds, 2020 Series A (Federally Taxable) and $376,850,000 State of Ohio Turnpike Junior Lien Revenue Refunding Bonds, 2020 Series A (Infrastructure Projects) (Federally Taxable) (collectively, the "Bonds"). The Issuer certifies, covenants and agrees as follows:

1. Purpose of Continuing Disclosure Certificate.

This Certificate is being given, signed and delivered for the benefit of the Bondholders (defined herein) and Beneficial Owners (defined herein) of the Bonds and in order to assist the Participating Underwriters of the Bonds in complying with the Rule (defined herein).

2. Definitions.

Certain capitalized terms are defined in the introduction of this Certificate. In addition, the following capitalized terms shall have the following meanings when used in this Certificate:

"*Annual Financial Information*" shall mean a copy of the annual audited financial statements of the Issuer. Those financial statements shall be prepared in accordance with accounting principles generally accepted in the United States of America, provided, however, that the Issuer may change the accounting principles used for preparation of such financial information so long as the Issuer includes a statement to the effect that different accounting principles are being used, stating the reason for such change and how to compare the financial information provided by the differing financial accounting principles. Any or all of the items listed above may be set forth in other documents, including a Comprehensive Annual Financial Report or offering documents of debt issues of the Issuer or related public entities, which have been transmitted to the MSRB, or may be included by specific reference to documents available on the MSRB's Internet Website.

"*Beneficial Owner*" shall mean any person which has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including holding Bonds through nominees, depositories or other intermediaries).

"*Bondholders*" shall mean any holder of the Bonds and any Beneficial Owner thereof.

"*EMMA*" means the Electronic Municipal Market Access System of the MSRB or any successor system or process of disclosure.

"*Event*" shall mean any of the following events with respect to the Bonds:

(i) Principal and interest payment delinquencies;

(ii) Non-payment related defaults, if material;

(iii) Unscheduled draws on debt service reserves reflecting financial difficulties;

(iv) Unscheduled draws on credit enhancements reflecting financial difficulties;

(v) Substitution of credit or liquidity providers, or their failure to perform;

(vi) 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-exempt status of the security;

(vii) Modifications to rights of security holders, if material;

(viii) Bond calls, if material, and tender offers (except for mandatory scheduled redemptions not otherwise contingent upon the occurrence of an event);

(ix) Defeasances;

(x) Release, substitution or sale of property securing repayment of the securities, if material;

(xi) Rating changes;

(xii) Bankruptcy, insolvency, receivership or similar event of the obligated person (Note: For the purposes of this event, 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);

(xiii) 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;

(xiv) Appointment of a successor or additional trustee or the change of name of a trustee, if material;

(xv) Incurrence by the Issuer of a (i) debt obligation, (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) a guarantee of (i) or (ii), excluding municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule (each, a "Financial Obligation"), if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect security holders, if material; and

(xvi) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

The SEC requires the listing of (i) through (xvi) although some of such events may not be applicable to the Bonds.

"*MSRB*" shall mean the Municipal Securities Rulemaking Board.

"*Offering Document*" shall mean the Official Statement, dated January 29, 2020.

"*Operating Data*" shall mean an update of the information of the type included in the following sections of the Offering Document: the tables titled **"Comparative Traffic Statistics," "Vehicles by Class," "Toll Revenue by Class", "Approved Toll Rate Schedule For Years 2020 through 2023 Cost of One-Way Full Length Trip Across The Ohio Turnpike",** and **"Toll Rates Per Mile"** under the caption **"TOLLS and TOLL COLLECTION"** and the table titled **"Revenue Bond Coverage"** under the caption **"RESULTS OF OPERATIONS"**.

"*Participating Underwriter*" shall mean any of the original underwriters of the Bonds required to comply with the Rule in connection with the offering of the Bonds.

"*Rule*" means SEC Rule 15c2-12, as amended from time to time

"*SEC*" shall mean the Securities and Exchange Commission.

"*State*" shall mean the State of Ohio.

3. Disclosure of Information.

(A) Information to be Provided and Filing Date. Except to the extent this Certificate is modified or otherwise altered in accordance with Section 4 hereof, the Issuer shall make, or cause to made, public through the MSRB (EMMA system) the information set forth in subsections (1), (2) and (3) below:

(1) Annual Financial Information and Operating Data. Annual Financial Information and Operating Data at least annually not later than July 1 following each fiscal year beginning July 1, 2020. The Annual Financial Information and Operating Data may be submitted as a single submission (for example but without limitation, included within the Issuer's Comprehensive Annual Financial Report, if any) or as separate submissions comprising a package, and may cross-reference other information; provided that the Annual Financial Information may be submitted separately if the audited financial statements of the Issuer are not available by the filing date set forth above, in which case those audited financial statements of the Issuer will be submitted when and if available.

(2) Events Notices. Notice of the occurrence of an Event, in a timely manner, not in excess of ten (10) business days after the occurrence of the Event.

(3) Failure to Provide Annual Financial Information or Operating Data. Notice, in a timely manner, of the failure of Issuer to provide the Annual Financial Information or Operating Data by the date required herein.

(B) Filing of Information.

Annual Financial Information, Operating Data and notice of all Event occurrences shall be filed with the MSRB (EMMA), in an electronic format as prescribed by the MSRB, accompanied by identifying information as prescribed by the MSRB, or in such other manner in the future as may be prescribed by the MSRB.

To the extent the Issuer is obligated to file any Annual Financial Information or Operating Data with the MSRB pursuant to this Certificate, such Annual Financial Information or Operating Data may be set forth in the document or set of documents transmitted to the MSRB, or may be included by specific reference to documents transmitted to the MSRB or SEC.

4. Amendment or Modification.

The Issuer reserves the right to amend this Certificate, and noncompliance with any provision of this Certificate may be waived, as may be necessary or appropriate to (a) achieve its compliance with any applicable federal securities law or rule, (b) cure any ambiguity, inconsistency or formal defect or omission, and (c) address any change in circumstances arising from a change in legal requirements, change in law or change in the identity, nature or status of the Issuer or type of business conducted by the Issuer. Any such amendment or waiver shall not be effective unless the Certificate (as amended or taking into account such waiver) would have materially complied with the requirements of the Rule at the time of the primary offering of the Bonds, after taking into account any applicable amendments to or official interpretations of the Rule, as well as any change in circumstances, and until the Issuer shall have received either (i) a written opinion of bond counsel or other qualified independent special counsel selected by the Issuer that the amendment or waiver would not materially impair the interests of Holders or Beneficial Owners, or (ii) the written consent to the amendment or waiver of the Holders of at least a majority of the principal amount of each series of the Bonds then outstanding.

5. Miscellaneous.

(A) Termination. The Issuer's obligations under this Certificate shall terminate when all of the Bonds are or are deemed to be no longer outstanding by reason of redemption or legal defeasance or at maturity.

(B) Additional Information. Nothing in this Certificate shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Certificate or any other means of communication, or including any other information in any Annual Financial Statement or notice of occurrence of an Event, in addition to that which is required by this Certificate. If the Issuer chooses to include any information in any Annual Financial Statement, Operating Data or notice of occurrence of an Event in addition to that which is specifically required by this Certificate, the Issuer shall have no obligation under this Certificate to update such information or include it in any future Annual Financial Statement, Operating Data or notice of occurrence of an Event.

(C) Defaults; Remedies. In the event of a failure of the Issuer to comply with any provision of this Certificate, any Bondholder may take such action as may be necessary and appropriate, including seeking an action in mandamus or specific performance to cause the Issuer to comply with its obligations under this Certificate. A default under this Certificate shall not constitute a default on the Bonds or any trust agreement pursuant to which they are issued, and the sole remedy available in any proceeding to enforce this Certificate shall be an action to compel specific performance.

(D) Beneficiaries. This Certificate shall inure solely to the benefit of the Issuer, the Participating Underwriter and Bondholders, or beneficial owners thereof, and shall create no rights in any other person or entity.

6. Notices.

Any notices or communications to the Issuer may be given as follows:

To the Issuer: Ohio Turnpike and Infrastructure Commission
682 Prospect Street
Berea, Ohio 44017-2799
Attention: Chief Financial Officer

IN WITNESS WHEREOF, the Issuer has caused its duly authorized officer to execute this Certificate as of the day and year first above written.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION, Issuer

By:____
Name:
Title:

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EXHIBIT H

INFORMATION RELATED TO THE REFUNDED BONDS

Information Relating to the Refunded Bonds

Turnpike Revenue Bonds (Senior Lien Bonds)

Series	Dated Date	Par Amount	Maturity (February 15,)	Interest Rate	Redemption Date (February 15,)	Redemption Price	CUSIP Number
2013A	8/15/2013	$73,495,000	2048	5.000%	2023	100%	67760HJK8
Total		**$73,495,000**					

Turnpike Junior Lien Revenue Bonds (Junior Lien Bonds)

Series	Dated Date	Par Amount	Maturity (February 15,)	Interest Rate	Redemption Date (February 15,)	Redemption Price	CUSIP Number
2013A-1	8/15/2013	$340,000,000	2048	5.000%	2023	100%	67760HJY8
Total		**$340,000,000**					
Total		**$413,495,000**					

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OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION • STATE OF OHIO TURNPIKE REVENUE REFUNDING BONDS, 2020 SERIES A (FEDERALLY TAXABLE) AND STATE OF OHIO TURNPIKE JUNIOR LIEN REVENUE REFUNDING BONDS, 2020 SERIES A (FEDERALLY TAXABLE) (INFRASTRUCTURE PROJECTS)

OHIO TURNPIKE

Mixed Sources
Product group from well managed forests, controlled sources and recycled wood or fiber.

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