Air Quality Conformity Determination
Pittsburgh Transportation Management Area

for the

8-Hour Ozone Air Quality Standards
PM 2.5 Air Quality Standards
CO and PM 10 Air Quality Standards

Companion Document for Amendments
to the
2023-2026 Transportation Improvement Program
and
SmartMoves for a Changing Region

Final Report
July 2022

Southwestern Pennsylvania Commission

2022

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SPC විසින් කිසිදු ගාස්තුවක් අය කිරීමකින් තොරව භාෂා පරිවර්තන හා භාෂණ පරිවර්තන සේවාවන් සපයනු ඇත.
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:Urdu

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The Southwestern Pennsylvania Commission (SPC) hereby gives public notice that it is the policy of the Commission to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI and other related statutes require that no person in the United States of America shall, on the grounds of race, color, sex, national origin, age, or disability, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which SPC receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice by SPC under Title VI has a right to file a formal complaint with the Commission. Any such complaint must be in writing and filed with SPC's Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discrimination Complaint Form, please see our website at: www.spcregion.org or call 412-391-5590.

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I. Introduction

The Southwestern Pennsylvania Commission (SPC) is the designated Metropolitan Planning Organization (MPO) for a 10-county region within Southwestern Pennsylvania. MPOs are responsible for making transportation conformity determinations for both their short range Transportation Improvement Program (TIP) and their long range transportation plan. This report documents the process used by SPC in the spring of 2022 to make its transportation-related conformity determination for the region's 2023-2026 Transportation Improvement Program and amendments to the 2045 Long Range Transportation Plan (*SmartMoves for a Changing Region)*. The conformity determination is required by the federal Clean Air Act (CAA). SPC's conformity finding is based upon criteria and procedures described in the federal Environmental Protection Agency's (EPA) Transportation Conformity Rule (40 CFR Part 93). SPC's conformity finding was conducted consistent with procedures outlined in the EPA-approved Pennsylvania Conformity State Implementation Plan (SIP), which has an effective date of June 29, 2009, and satisfies all applicable conformity process requirements in the Transportation Conformity Rule for designated nonattainment and maintenance areas under federal air quality standards for ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and carbon monoxide (CO).

On November 15, 1990, amendments to the federal Clean Air Act were enacted. The Clean Air Act (as amended) specifies how the EPA designates air quality nonattainment areas and how it defines the geographic boundaries of those areas. Nonattainment areas for three criteria pollutants (ozone, carbon monoxide and fine particulate matter) are classified in accordance with the severity of the area's air pollution problem. Assignment of an area to one of the nonattainment classifications triggers various planning requirements which the area must comply with in order to meet the standard. The requirements vary by pollutant and increase in number and stringency with the severity of pollution.

The EPA promulgated regulations on November 23, 1993 (Transportation Conformity Rule – 40 CFR Part 93) regarding criteria and procedures for demonstrating and assuring conformity of transportation plans, programs and projects with the Clean Air Act. The EPA has periodically revised and amended the Transportation Conformity Rule. All conformity findings must be based on criteria and procedures outlined in the current version of the Rule.

A regional conformity assessment and new conformity finding for the regional transportation Plan and Program is required before MPO adoption, acceptance, approval, or support of a regional Plan, TIP, or amendments to those documents; or the approval, funding, or implementation of transportation projects. Conformity findings must be approved by the MPO before the regional Plan or TIP, or amendments to those documents are approved by the MPO or accepted by United States Department of Transportation (USDOT). The Transportation Conformity Rule cites a number of project types which may be excluded from the regional conformity analysis. The "exempt" project types are listed in Appendix A.

The most recent conformity finding for the region's fiscally constrained TIP and Plan was approved by SPC on August 30, 2021 in conjunction with adoption of amendments to the 2021-2024 TIP and updates to SPC's 2045 Long Range Transportation Plan (*SmartMoves for a*

Changing Region). The United States Department of Transportation, in consultation with EPA, concurred with SPC's conformity finding on November 30, 2021.

SPC has developed a new fiscally constrained Transportation Improvement program (2023-2026 TIP) which includes newly identified regionally significant projects as well as scope and schedule modifications to several currently programmed regionally significant projects. Significant adjustments are also being made to the current Long Range Plan (*SmartMoves for a Changing Region)* to address changes to fiscal projections that result in substantial reductions to estimates of funding available through 2045. These changes to the regionally significant projects to be programmed on the region's 2045 Plan and 2023-2026 TIP triggered the need for a new finding of conformity. The new conformity finding was needed prior to SPC's adoption of the 2023-2026 TIP, modifications to the 2045 Plan, and before any federal action on programmed, regionally significant projects.

Travel simulation work and other relevant quantitative analysis for this demonstration of conformity began on January 27, 2022, the date of statewide air quality conformity training for new participants in the conformity process, and the date of the quarterly meeting of the Pennsylvania Transportation – Air Quality Work Group. The planning assumptions used in this conformity assessment are current as of that date. The major planning assumptions for this conformity assessment are briefly summarized below. As appropriate, the planning assumptions used in the analysis are further detailed in subsequent Sections of the report.

- In accord with EPA guidance and Pennsylvania's interagency consultation process, all emission estimates were derived using EPA's MOVES 2014a emissions model running in "inventory" mode.

- Data for vehicle registrations and vehicle miles traveled (VMT) distribution is from 2017 PennDOT information. The same PennDOT data from 2017 was used in the conformity determination approved on August 30, 2021. This data is normally updated with the latest available files on a three year cycle. Travel trends were severely impacted in 2020 and 2021 by the Covid-19 pandemic. With the concurrence of Pennsylvania's interagency consultation group, the update to 2020 data was not done for this conformity assessment, and instead.it was decided to continue to use the 2017 data.

- The current vehicle inspection/maintenance (I/M) programs for southwestern Pennsylvania are reflected in the analysis. Information about the I/M programs is presented in Section V.

- The Pennsylvania Clean Vehicles (PCV) Program, adopted in 1998, incorporates the California Low Emission Vehicle Program (CA LEV) by reference although it allowed automakers to comply with the National Low Emission Vehicle (NLEV) program as an alternative to this Pennsylvania program until model year (MY) 2006. Beginning with MY 2008, "new" passenger cars and light-duty trucks with a gross vehicle weight rating (GVWR) of 8,500 pounds or less that are sold or leased and titled in Pennsylvania must be certified by the California Air Resources Board (CARB) or be certified for sale in all

50 states. For this program, a "new" vehicle is a qualified vehicle with an odometer reading less than 7,500 miles. The Pennsylvania Department of Environmental Protection (DEP) and PennDOT worked with the automobile manufacturers, dealers and other interested business partners and finalized procedures for complying with these new requirements. DEP is focusing its outreach with the manufacturers and dealers on what they can offer for sale and how to certify that the vehicles are compliant. PennDOT's role is to ensure paperwork procedures for title and registrations include these certifications of compliance or that the vehicle owner qualifies for an exemption to the requirements. In all cases, DEP will use information obtained during PennDOT's title and registration process to oversee and audit, as needed, certain vehicle title transactions to determine compliance to the program. The impacts of this program are modeled for all analysis years beyond 2008.

- SPC's Cycle 11 forecast of population, employment and households was developed in the spring of 2019 and was adopted with the 2045 Plan on June 24, 2019. The Cycle 11 forecast replaced the Cycle 10a forecast which was adopted in 2016. The base year for the Cycle 11 forecast is 2015. The horizon year is 2045. The Cycle 11 forecast was used to generate trips for the travel demand model for this conformity assessment. The Cycle 11 forecast was also used in the conformity determination approved on August 30, 2021. Information about SPC's modeling and forecasting process is presented in Section IV.

- SPC's travel demand model is configured for the Cube Voyager modeling software package. The travel model covers SPC's entire 10-county planning region. All of the estimates of vehicle miles traveled (VMT) and emissions projections were developed from SPC's travel model.

- The travel model was validated in the spring of 2020 during development of the conformity assessment that was completed for adoption of the 2021-2024 TIP in June 2020. Simulated 2020 travel was validated with 2018 Census data; and 2018 and 2019 traffic counts, VMT, and 2019 transit ridership data. SPC routinely revalidates the travel demand model during development of each new TIP. The revalidation step was not done for this TIP Cycle. The 2022 base year validation would have been based on 2020 and 2021 data. Travel patterns in those two years were severely disrupted due to the Covid-19 pandemic. The model validation discussion in Section IV is from the work done in the spring of 2020 during development of the 2021-2014 TIP, and is based on 2018 and 2019 (pre-Covid) data.

- SPC's travel demand model is sensitive to road and bridge tolls. Toll rates are coded on highway network links to reflect tolls charged by the Pennsylvania Turnpike Commission (PTC). Once toll rates are coded, the rates remain constant for all analysis years (essentially assuming that tolls will increase at the same rate as inflation).

- SPC's travel demand model includes a mode split component. Current transit operating plans and service levels are incorporated into the future year networks and augmented with facilities and service identified in the TIP and Plan. SPC's mode split model is

sensitive to transit fares. The transit fare structure in effect in late 2016 is built into the model. Fare rates are held constant for all analysis years (essentially assuming that fares will increase at the same rate as inflation). Transit person trips are summarized by trip purpose and analysis year in Table 12.

- Motor vehicle emission budgets (MVEB) are available to SPC for use in the conformity assessment for the Pittsburgh-Beaver Valley 8-hour ozone nonattainment area under the 2008 8-hour ozone NAAQS. That area consists of seven counties within SPC's planning area (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland). On April 22, 2004, DEP submitted SIP revisions to EPA that contained MVEBs for VOC and NOx developed with the MOBILE6.2 emissions model. EPA approved the MVEBs for use in conformity assessments on December 10, 2004 (78 FR 71712). These motor vehicle emission budgets were approved for demonstrating conformity under the 1-hour ozone standard. The Transportation Conformity Rule requires that they are to be used for conformity assessments under the 8-hour ozone standard until new MVEBs for the 8-hour ozone standard are approved by EPA for the Pittsburgh-Beaver Valley nonattainment area. The approved 1-hour ozone MVEBs for VOC and NOx are used for the conformity demonstration in Section VII for the Pittsburgh-Beaver Valley 8-hour ozone nonattainment area.

- Greene and Indiana counties were designated as nonattainment areas under the 1997 8-hour ozone NAAQS. They were designated as attainment areas under the 2008 8-hour ozone NAAQS. EPA subsequently revoked the 1997 NAAQS. EPA guidance (*Transportation Conformity Guidance for the South Coast II Court Decision,* EPA-420-B-18-050), issued in November, 2018 addresses how transportation conformity determinations should be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked, but were designated attainment for the 2008 ozone NAAQS. EPA's guidance does not require regional emissions analysis for these counties. Other conformity requirements, including latest planning assumptions, interagency and public consultation, and fiscal constraint still need to be addressed in the conformity assessment under the 8-hour ozone NAAQS for Greene and Indiana counties. The same analysis process was required for these counties for the conformity assessment that was approved on August 30, 2021.

- Motor vehicle emission budgets are available to SPC for use in the conformity assessment for the Pittsburgh-Beaver Valley $PM_{2.5}$ nonattainment area under the 1997 annual $PM_{2.5}$ NAAQS and the 2006 daily $PM_{2.5}$ NAAQS. That area consists of four complete counties within SPC's planning area (Beaver, Butler, Washington, and Westmoreland), part of Allegheny County (not including the separate Liberty-Clairton nonattainment area), and parts of Armstrong, Greene and Lawrence counties. EPA approved the $PM_{2.5}$ and NOx MVEBs for use in conformity assessments for the Pittsburgh Area in a final rule published in Federal Register on October 2, 2015 (80 FR 59624).

- Motor vehicle emission budgets are available to SPC for use in the conformity assessment for the Allegheny County $PM_{2.5}$ nonattainment area under the 2012 annual $PM_{2.5}$

NAAQS. EPA approved the $PM_{2.5}$ and NOx MVEBs for use in conformity assessments for the Allegheny County nonattainment area in a final rule published in the Federal Register on May 14, 2021 (86 FR 26388).

- The EPA approved an "insignificance finding" that $PM_{2.5}$ nonattainment in the Liberty-Clairton $PM_{2.5}$ area was primarily the result of industrial stationary sources and motor vehicles were not an important contributor to the nonattainment problem. That finding was approved by EPA in a rulemaking published in the Federal Register on October 2, 2015 (80 FR 59615). With approval of this finding by EPA, no additional quantitative analysis for transportation-related $PM_{2.5}$ impacts is required for conformity purposes for the Liberty-Clairton $PM_{2.5}$ area. Interagency consultation and public review is still required.

- Five major, regionally significant projects were completed in the region since the conformity assessment for the 2021-2024 TIP and 2045 Long Range Plan was prepared in the spring of 2020. Those projects are now included in the existing (2023 base year) transportation network for this conformity assessment. Those projects are:

:

Allegheny County:
- I-79 widening to 3 lanes northbound (Southpointe to Alpine Road)

Beaver County:
- Freedom Road (SR 3020) Bridge Replacement (Widened to 6 lanes) – Over I-76 PA. Turnpike
- SR 228 Corridor Improvements (Widening to 3 lanes Eastbound only) I-79 to SR 3021 Franklin Road

Indiana County:
- SR 286 – Widening to 4 Lanes (US 422 Interchange to Rustic Lodge Road)

Washington County:
- Southern Beltway - New 4-lane limited-access toll Expressway (Route 22 to I-79)

- Eleven non-codable, regionally significant projects were also completed and reflected in the existing year (2023) analysis. These projects are:

Allegheny County:
- Pittsburgh South Side Signals - MPMS#105603 [City of Pittsburgh – Allegheny Co.]
- SR 19 Washington Rd. Adaptive Traffic Signal System – MPMS#26454 [Allegheny Co.]
- SR 50 Chartiers St. – MPMS#100607 [Allegheny Co.]
- SR 19 Banksville Rd. Adaptive Traffic Signal System – MPMS#109556 [Allegheny Co.]
- SR 1001 Freeport Rd. Adaptive Traffic Signal System – MPMS#110372 [Allegheny Co.]
- SR 2040 Lebanon Church Road Adaptive Traffic Signal System – MPMS#106507 [Allegheny Co.]
- McLaughlin Run Rd.@ Lesnett/McMillian Rd. Intersection – MPMS#100963 [Allegheny Co.

Butler County:
- Multi-Modal Project – MPMS#114531 [Butler Co.]
- SR 8 Main St. Signals – MPMS#110464 [Butler Co.]

Fayette County:
- FACO Signals-1 – MPMS#94953 [Fayette Co.]

Washington County:
- SR 18 Signal Upgrades – MPMS#88829 [Washington Co.]

Section II of this report presents an overview of pertinent provisions of the Clean Air Act and the Transportation Conformity Rule. It also describes the areas of the region designated as nonattainment under the 1997 8-hour ozone national ambient air quality standard (NAAQS), 2008 8-hour ozone NAAQS, the 1997 and 2012 Annual $PM_{2.5}$ NAAQS, the 2006 24-hour $PM_{2.5}$ NAAQS, the 1971 carbon monoxide (CO) NAAQS, and the 1987 PM_{10} NAAQS. The 2045 Plan and 2023-2026 TIP are summarized in Section III. Section IV discusses SPC's transportation modeling process. The methods used to develop emissions estimates for this conformity determination are highlighted in Section V. Section VI presents the travel simulations developed for this conformity determination. Section VII highlights the conformity findings and conclusions. The conformity determinations under the 8-hour ozone standard, the $PM_{2.5}$ and PM_{10} air quality standards, and the carbon monoxide standard are also made in Section VII. The public review process is outlined in Section VIII. A series of appendices, described in the text, appear at the end of this report.

The conformity findings and conclusions in this report are based on VMT, average speed, and emissions for five analysis years: 2023 – the base year for the conformity tests; 2025 – a budget year for the $PM_{2.5}$ air quality standards; 2026 – the horizon year for the 2023-2026 TIP;2035 – interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart; and 2045 – the horizon year for the Long Range Transportation Plan.

II. Regional Implications of the 1990 Clean Air Act Amendments and Overview of Conformity Criteria

Criteria and procedures required for demonstrating conformity of transportation plans and programs are specified in EPA's Transportation Conformity Rule. The applicable conformity criteria and procedures are summarized below:

1) A determination should be made that the endorsed transportation plan and program will be consistent with the MVEBs in the approved control strategy SIP or redesignation request. Prior to EPA approval of MVEBs, a determination should be made that the transportation plan and program are consistent with the most recent estimates of mobile source emissions.

2) An assurance should be given that no goals, directives, recommendations or projects identified in the transportation plan and program contradict in a negative manner any specific requirements or commitments of the applicable SIP.

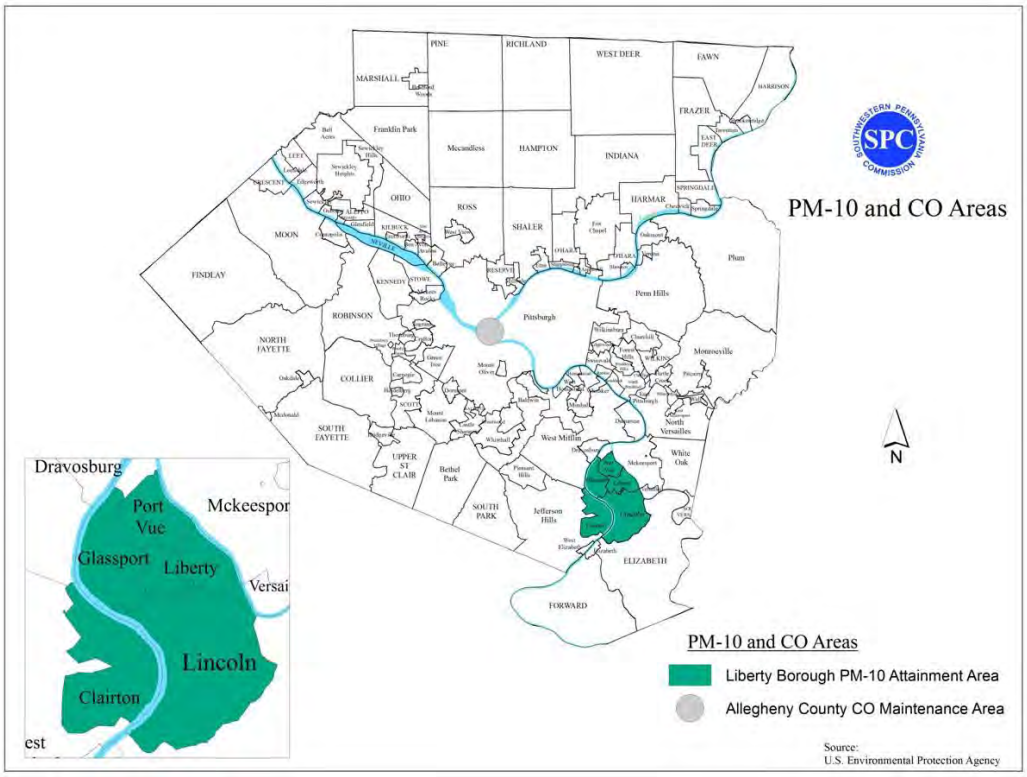
3) Transportation plans and programs should provide for the expeditious implementation of transportation control measures in the applicable SIP.

4) Transportation plan and program conformity determinations will be based on the most recent emissions estimates which in turn are to be based on the most recent population, employment, travel and congestion estimates as determined by the MPO or other authorized agency.

5) A determination should be made that the transportation plans and programs contribute to reductions in emissions in nonattainment areas and that the transportation plans and programs do not increase the frequency or severity of existing violations of the applicable NAAQS.

In accord with the federal Clean Air Act, the U.S. Environmental Protection Agency (EPA) has designated several nonattainment areas within Southwestern Pennsylvania for seven separate NAAQS. The seven air quality standards are: (1) the 1987 PM_{10} NAAQS (one designated area, covering five municipalities within Allegheny County) – Map 1, (2) the 1971 carbon monoxide NAAQS (one designated area, covering the City of Pittsburgh's Central Business District and certain other high traffic density areas in and near the City's Oakland neighborhood) – Map 1, (3) the 1997 8-hour ozone NAAQS (two designated areas, covering Greene and Indiana counties within SPC's planning area) – Map 2, (4) the 2008 8-hour ozone NAAQS (one designated area, covering seven of the ten counties within SPC's planning area) – Map 2, (5) the 1997 $PM_{2.5}$ annual NAAQS (three separate areas that, combined, cover five entire counties and parts of four other counties within SPC's planning area) – Map 3, (6) the 2006 $PM_{2.5}$ 24-hour NAAQS (the same three geographic areas designated nonattainment for the $PM_{2.5}$ annual standard) – Map 3, and (7) the 2012 $PM_{2.5}$ annual NAAQS (one designated area, covering all of Allegheny County) – Map 3. Transportation conformity must be addressed by SPC for each nonattainment and maintenance area.

This report addresses conformity for all of the designated nonattainment areas and applicable NAAQS.



Map 1 **SPC July 2022**

PM_{10}

In accord with the federal Clean Air Act, the EPA designated a moderate nonattainment area for particulate matter under the 1987 PM_{10} NAAQS within Allegheny County (56 FR 11105), effective on May 14, 1991. That area includes the City of Clairton and the Boroughs of Glassport, Liberty, Lincoln and Port Vue (Map 1). PM_{10} nonattainment in that area stemmed primarily from industrial sources in the area and not from mobile sources. This nonattainment area was not required to have a PM_{10} transportation conformity budget. Because the PM_{10} violations were primarily caused by industrial stationary sources and motor vehicles were not an important contributor to the nonattainment problem, no additional quantitative analysis for transportation-related PM_{10} impacts is required for conformity purposes. Interagency consultation, fiscal constraint, and public review are still required.

On January 6, 1994, the Allegheny County Health Department (ACHD) submitted a PM_{10} Attainment Plan to EPA for review and approval. That was followed on July 12, 1995 with submittal of contingency measures that would be enforced if the area failed to attain the PM_{10} standard. On September 8, 1998, EPA's final approval of those documents was announced in the Federal Register (63 FR 47434) and EPA declared that the area had attained the PM_{10} standard. On October 28, 2002, a request to redesignate the area as attainment for PM_{10} was submitted to

EPA by ACHD. EPA's approval of the redesignation request, and the formal redesignation of the area from nonattainment to attainment of the PM_{10} NAAQS, was announced in the Federal Register on September 11, 2003 (68 FR 53515).

The 2023-2026 TIP and the 2045 Plan will not worsen the PM_{10} emissions in that area, nor will they interfere with the expeditious implementation of mitigation measures to control those emissions. Two projects are identified on the 2023-2026 TIP and the 2045 Plan in those five municipalities. They are: 1). PA 837 Slide Remediation – Slide remediation work on North State Street (PA 837) in the City of Clairton and West Mifflin Borough, $15,650,000 (MPMS#114193); 2). SR 2010 Slide Remediation – Slide remediation work on Lovedale Road (SR 2010) in Lincoln Borough and Elizabeth Township, $10,750,000 (MPMS#114194). The total cost programmed on the 2023-2026 TIP and 2045 Plan for these two projects is $26,400,000.

Carbon Monoxide

While the region has not exceeded the 1971 carbon monoxide NAAQS since March 1986, the City of Pittsburgh's central business district and high traffic density areas in and near the City's Oakland neighborhood were designated by EPA as an "unclassified" nonattainment area for carbon monoxide (43 FR 40513), effective on September 12, 1978 (Map 1). In August 2001, ACHD submitted a redesignation request to DEP asking that it be forwarded to EPA with a recommendation for approval. That redesignation request was subsequently approved by EPA and announced in the Federal Register on November 12, 2002 (67 FR 68521). A limited carbon monoxide maintenance plan is part of that approved redesignation for Allegheny County. That maintenance plan ensured maintenance of the CO NAAQS until January 2013. On July 18, 2011 DEP, on behalf of ACHD, submitted as a SIP revision a second 10-year CO maintenance plan. EPA approved the second 10-year limited maintenance plan effective on May 27, 2014 (79 FR 17054). The maintenance demonstration shows that the Pittsburgh area will continue to maintain the CO NAAQS during the second 10-year maintenance period, which extends through 2022. Conformity must be demonstrated for this area through the end of the second 10-year limited maintenance plan. After the maintenance plan expires, transportation conformity determinations will no longer be needed for this CO area.

Under limited maintenance plans, EPA policy does not require a carbon monoxide emission budget test for conformity determinations. Emission budgets in limited maintenance plan areas are considered to be not constraining for the length of the maintenance period. Therefore, conformity for carbon monoxide is demonstrated in the county. No quantitative analysis for transportation-related CO impacts is required for conformity purposes. Interagency consultation, fiscal constraint, and public review are still required.

Ozone

The EPA published the 1997 8-hour ozone NAAQS on July 18, 1997 (62 FR 38856). Three nonattainment areas were designated in the SPC planning area under the 1997 8-hour ozone NAAQS (69 FR 23858) effective June 15, 2004. These areas are:

- Pittsburgh - Beaver Valley. This area includes seven counties within SPC's planning area (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland).
- Clearfield and Indiana counties. This area includes all of Indiana County which is within SPC's planning area, and all of Clearfield County which is outside of SPC's planning area.
- Greene County. This area includes all of Greene County which is within SPC's planning area.

The EPA published the 2008 8-hour ozone NAAQS on March 27, 2008 (73 FR 16436). One nonattainment area was designated in the SPC planning area under the 2008 8-hour ozone NAAQS (77 FR 30088) effective July 20, 2012. That area is:

- Pittsburgh - Beaver Valley. This area includes the same seven counties within SPC's planning area that were included under the 1997 8-hour ozone NAAQS (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland).

Greene and Indiana counties were designated as attainment areas under the 2008 8-hour ozone NAAQS. Nevertheless, the Clean Air Act's "anti-backsliding" measures require that transportation conformity continue to be demonstrated for those two areas. EPA guidance does not require regional emissions modeling for them, but does require demonstration of fiscal constraint, public review, interagency consultation, and implementation of TCMs in the SIP.

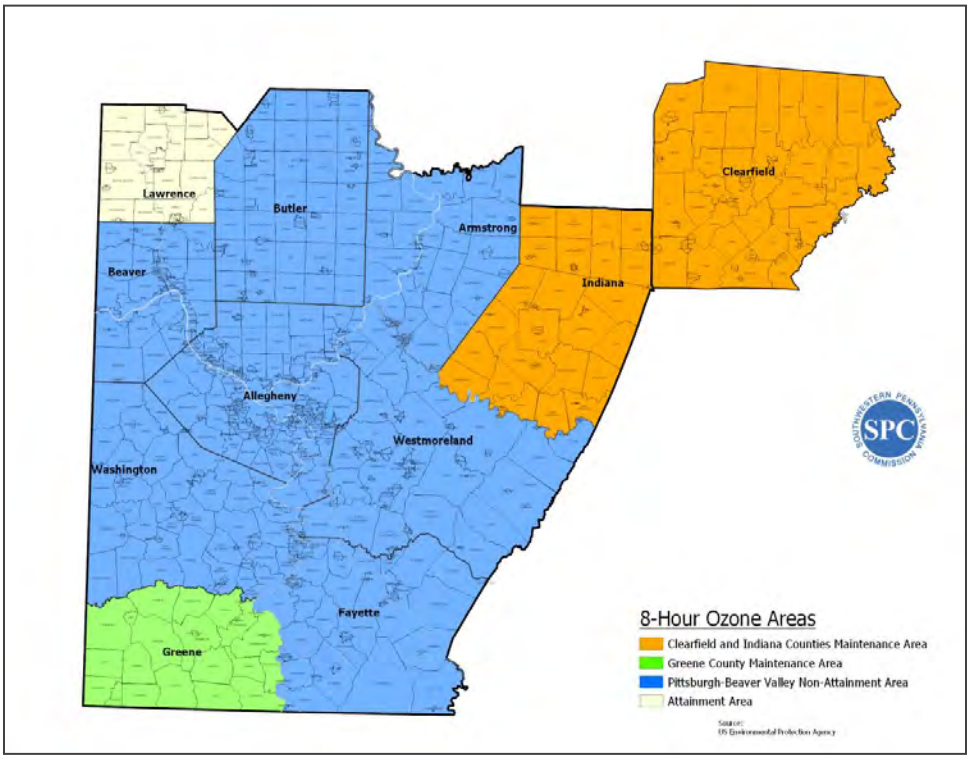
Map 2 shows the boundaries of the designated 8-hour ozone areas under the 1997 and 2008 NAAQS.

The EPA published the 2015 8-hour ozone NAAQS on October 26, 2015 with an effective date of December 28, 2015 (80 FR 65292). Subsequently, EPA published air quality designations under the 2015 ozone NAAQS on November 16, 2017 (82 FR 54232). All areas of the SPC region were designated as attainment areas under the 2015 Ozone NAAQS. A conformity finding under the 2015 ozone NAAQS is not required.

Ozone is formed through chemical reactions induced when sunlight reacts with volatile organic compounds (VOCs, principally "hydrocarbons"), and nitrogen oxides (NOx). A major source of VOCs and NOx is the incomplete combustion of fossil fuels. Transportation-related activities are a major contributor of these pollutants. Since heat speeds the reactions, ozone levels are typically highest during hot summer days. For ozone nonattainment areas, reductions in both VOC and NOx are required in order to demonstrate conformity.

The Transportation Conformity Rule requires that the conformity determination for transportation plans and programs be based on comparisons to established VOC and NOx MVEBs, provided that the budgets are established in a control strategies State Implementation Plan and that EPA has declared the MVEBs to be adequate for transportation conformity

purposes. The MVEBs establish a cap on emissions which cannot be exceeded by predicted highway and transit vehicle emissions. The conformity analysis should demonstrate reduced VOC and NOx emissions in a future year for the transportation plan or program when compared to the established MVEBs. The analysis must estimate total transportation-related emissions within the ozone nonattainment area for certain future years, and may include the effects of any emission control programs which are already adopted or committed to in the applicable State Implementation Plan.



Map 2 **SPC July 2022**

MVEBs for VOC and NOx were established in the Maintenance Plan for the Pittsburgh-Beaver Valley Ozone Area (*Pittsburgh-Beaver Valley Area Ozone Maintenance Plan and Request for Redesignation as Attainment for Ozone*). This is the Maintenance Plan and Attainment SIP approved for this area by EPA under the 1979 1-hour ozone NAAQS. It will remain in effect until the state submits, and EPA approves, an attainment demonstration and MVEBs for the 8-hour ozone NAAQS. The MVEBs from this SIP are based on analysis using EPA's MOBILE6.2 emissions model. The budgets were approved by EPA on December 10, 2004 for use in conformity assessments (69 FR 71712). These budgets are, therefore, available to SPC for use in demonstrating 8-hour ozone transportation conformity. The approved emissions budgets for the Pittsburgh – Beaver Valley Ozone Area are presented in Table 17 and are shown graphically in Figures 9 (VOC) and 10 (NOx) in Section VII.

EPA's November, 2018 guidance addresses how transportation conformity determinations can be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked, but were designated attainment for the 2008 ozone NAAQS

in EPA's original designations for this NAAQS. This situation applies to both Greene and Indiana counties. EPA's guidance does not require regional emissions analysis for these counties. Other conformity requirements, including latest planning assumptions, interagency and public consultation, and fiscal constraint still need to be addressed in the conformity assessment under the 8-hour ozone NAAQS for Greene and Indiana counties.

The process used to develop the emission factors needed for the 8-hour ozone conformity assessment is presented in Section V. Results of the analysis, and the conformity determination for the Pittsburgh – Beaver Valley Ozone Area, are found in Section VII.

Lawrence county is designated as an air quality attainment area under the 1997, 2008, and 2015 8-hour ozone NAAQS. A transportation conformity assessment is not needed for Lawrence County under the 8-hour ozone NAAQS.

$PM_{2.5}$

The EPA published the 1997 Annual $PM_{2.5}$ NAAQS on July 18, 1997 (62 FR 38653). Three nonattainment areas were designated in the SPC planning area under the 1997 Annual $PM_{2.5}$ NAAQS (70 FR 944) effective April 5, 2005. These areas are:

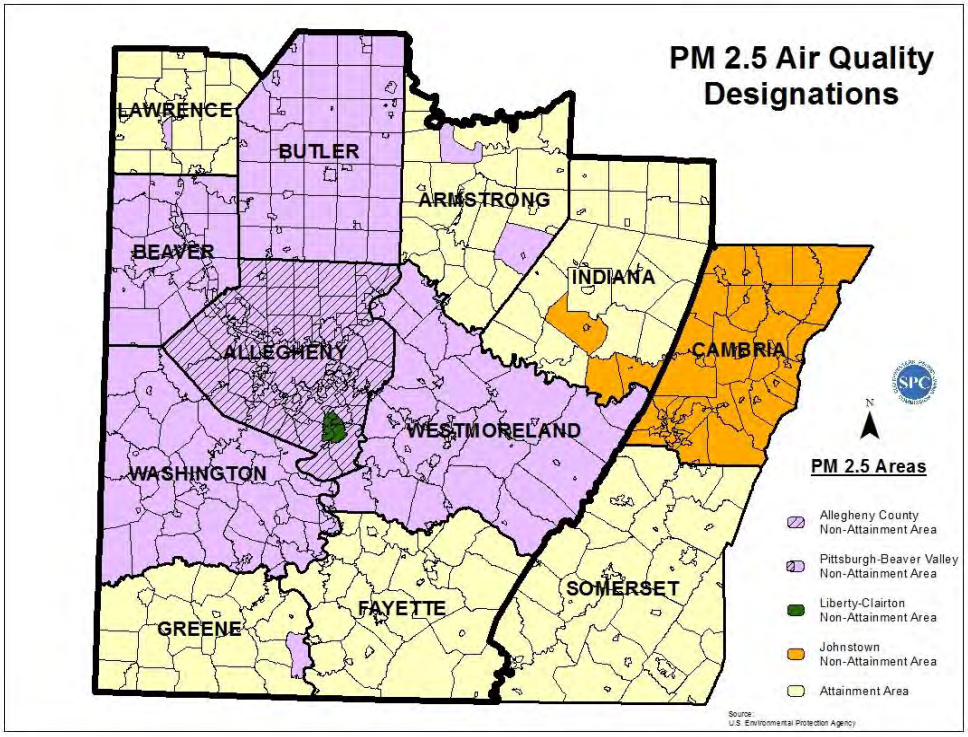
- Johnstown. This area includes all of Cambria County (which is outside of the SPC planning area), plus five municipalities within Indiana County (West Wheatfield, Center, and East Wheatfield townships, and Armagh and Homer City boroughs).
- Liberty – Clairton. This area includes five municipalities within Allegheny County (Glassport, Liberty, Lincoln, and Port Vue boroughs, and Clairton City).
- Pittsburgh - Beaver Valley. This area includes all or part of eight counties within SPC's planning area as follows: Allegheny County (remainder not included in the Liberty – Clairton area); Armstrong County (Plumcreek and Washington townships, and Elderton Borough); Beaver County (entire county); Butler County (entire county); Greene County (Monongahela Township); Lawrence County (portions of Taylor Township south of New Castle City); Washington County (entire county); and Westmoreland County (entire county).

The EPA published the 2006 24-hour $PM_{2.5}$ NAAQS on October 17, 2006 (71 FR 61144). Three nonattainment areas were designated in the SPC planning area under the 2006 24-hour $PM_{2.5}$ NAAQS effective December 14, 2009 (74 FR 58688). The boundaries of the three nonattainment areas designated under the 2006 24-hour $PM_{2.5}$ NAAQS are identical to the three nonattainment areas designated under the 1997 Annual $PM_{2.5}$ NAAQS.

Map 3 shows the boundaries of the three 1997/2006 $PM_{2.5}$ nonattainment areas in southwestern Pennsylvania. These three areas are designated nonattainment for both the 1997 Annual $PM_{2.5}$ NAAQS and the 2006 24-hour $PM_{2.5}$ NAAQS.

The remainder of the SPC planning area is designated as an attainment area under both the 1997 Annual and 2006 24-hour $PM_{2.5}$ NAAQS. The attainment area includes all of Fayette County and the remainder of Armstrong, Greene, Indiana, and Lawrence counties.

The Transportation Conformity Rule requires that the conformity determination for transportation plans and programs be based on comparisons to approved emission budgets, provided that the budgets are established in a control strategies State Implementation Plan and that EPA has declared the MVEBs to be adequate for transportation conformity purposes. The MVEBs establish caps on emissions which cannot be exceeded by predicted highway and transit vehicle emissions. The conformity analysis should demonstrate reduced emissions in a future year for the transportation plan or program when compared to the approved emission budgets. The analysis must estimate total transportation-related emissions within the nonattainment area for certain future years, and may include the effects of any emission control programs which are already adopted or committed to in the applicable SIP.



Map 3 **SPC July 2022**

MVEBs for $PM_{2.5}$ and NOx were approved by EPA under the 2006 24-hour $PM_{2.5}$ NAAQS and the 1997 Annual $PM_{2.5}$ NAAQS for the Pittsburgh – Beaver Valley $PM_{2.5}$ Area in a final rule published in the Federal Register on October 2, 2015 (80 FR 59624). These MVEBs are based on analysis using EPA's MOVES emissions model. These budgets are, therefore, available to SPC for use in demonstrating transportation conformity for the Pittsburgh Area under both the Annual and the 24-hour $PM_{2.5}$ NAAQS. The approved MVEBs are expressed as annual values in EPA's approval. EPA guidance indicates that they apply to both the annual and daily NAAQS and that conformity assessments are to be based on the annual emissions. If conformity is demonstrated for the annual NAAQS, it is also demonstrated for the daily NAAQS. The annual values for the MVEBs for the Pittsburgh – Beaver Valley $PM_{2.5}$ Area are presented in Table 14 and are shown graphically in Figures 3 ($PM_{2.5}$) and 4 (NOx) in Section VII.

MVEBs for $PM_{2.5}$ and NOx were approved by EPA under the 2006 24-hour $PM_{2.5}$ NAAQS and the 1997 Annual $PM_{2.5}$ NAAQS for the Indiana County portion of the Johnstown $PM_{2.5}$ nonattainment area in a final rule published in the Federal Register on July 16, 2015 (80 FR 42046). These MVEBs are based on analysis using EPA's MOVES emissions model. These budgets are, therefore, available to SPC for use in demonstrating transportation conformity for the Indiana County portion of the Johnstown $PM_{2.5}$ nonattainment area under both the annual and the daily $PM_{2.5}$ NAAQS. The approved MVEBs are expressed as annual values in EPA's approval. EPA guidance indicates that they apply to both the annual and daily NAAQS and that conformity assessments are to be based on the annual emissions. If conformity is demonstrated for the annual NAAQS, it is also demonstrated for the daily NAAQS. The annual values for the MVEBs for the Indiana County portion of the Johnstown $PM_{2.5}$ nonattainment area are presented in Table 15 and shown graphically in Figures 5 ($PM_{2.5}$) and 6 (NOx) in Section VII.

The ACHD submitted, on May 13, 2014, a supplement to its Attainment Demonstration SIP for the Liberty – Clairton area under the 1997 annual $PM_{2.5}$ NAAQS and the 2006 daily $PM_{2.5}$ NAAQS requesting an "insignificance finding" from EPA that nonattainment was primarily the result of industrial stationary sources and motor vehicles were not an important contributor to the nonattainment problem. That finding was approved by EPA in a rulemaking published in the Federal Register on October 2, 2015 (80 FR 59615) and effective December 1, 2015. With approval of this finding by EPA, no additional quantitative analysis for transportation-related $PM_{2.5}$ impacts is required for conformity purposes. Interagency consultation, fiscal constraint, and public review are still required.

The 2045 Plan and 2023-2026 TIP will not worsen the $PM_{2.5}$ emissions in that area, nor will they interfere with the expeditious implementation of mitigation measures to control those emissions. The three projects identified on the 2023-2026 TIP and the 2045 Plan in the Liberty – Clairton $PM_{2.5}$ Area are listed in the PM_{10} discussion above.

The EPA published the 2012 Annual $PM_{2.5}$ NAAQS on January 15, 2013 (78 FR 3086), with an effective date of March 18, 2013. One nonattainment area, covering all of Allegheny County, was designated in the SPC planning area under the 2012 Annual $PM_{2.5}$ NAAQS effective April 15, 2015 (80 FR 2206 and 80 FR 18535). Map 3 shows the boundaries of that nonattainment area.

The other nine counties in the SPC planning area are designated as attainment areas under the 2012 Annual $PM_{2.5}$ NAAQS.

MVEBs for $PM_{2.5}$ and NOx were approved by EPA under the 2012 Annual $PM_{2.5}$ NAAQS for the Allegheny County $PM_{2.5}$ Area in a final rule published in the Federal Register on May 14, 2021 (86 FR 26388). These MVEBs are based on analysis using EPA's MOVES emissions model. These budgets are, therefore, available to SPC for use in demonstrating transportation conformity for the Allegheny County Area under the Annual $PM_{2.5}$ NAAQS. The annual values for the MVEBs for the Allegheny County $PM_{2.5}$ Area under the 2012 Annual $PM_{2.5}$ NAAQS are presented in Table 16 and are shown graphically in Figures 7 ($PM_{2.5}$) and 8 (NOx) in Section VII.

$PM_{2.5}$ emissions (fine particulates) are emitted directly by motor vehicles as a result of the fuel combustion process (tailpipe emissions) and as a result of brake and tire wear. $PM_{2.5}$ emissions are contained in re-entrained road dust and transportation construction dust. $PM_{2.5}$ emissions are also formed through reactions in the atmosphere among several precursor emissions including VOC, NOx, ammonia (NH_3) and sulfates (SOx). Under EPA conformity regulations:

- Direct $PM_{2.5}$ tailpipe, brake wear, and tire wear emissions must be analyzed.
- Re-entrained road dust is included only if EPA or the Pennsylvania DEP determines that it is a significant contributor to $PM_{2.5}$ in the nonattainment area, or is named in a $PM_{2.5}$ SIP and a MVEB is established for this item.
- Transportation construction dust is encompassed in regional transportation conformity if it is named in a $PM_{2.5}$ SIP and a MVEB is established for this item.
- NOx must be analyzed in the period prior to SIP submission and budget adequacy determination or approval, unless EPA and DEP determine it is not a significant contributor.
- VOC, NH_3 and SOx analysis is not required in the period prior to SIP submission unless EPA or DEP determines one or more of these precursors to be a significant contributor.

As a result of the interagency consultation process required by the Transportation Conformity Rule, and in the absence of a SIP and attendant emission budgets, and in the absence of EPA and DEP significance determinations, SPC's $PM_{2.5}$ conformity analysis encompasses the following pollutants: Direct $PM_{2.5}$ emissions (tailpipe, brake wear, tire wear); and NOx precursor emissions.

The process used to develop the emission factors needed for the $PM_{2.5}$ conformity assessments is presented in Section V. Results of the analysis, and the conformity determinations for the $PM_{2.5}$ nonattainment areas within the SPC planning area, are found in Section VII.

III. Transportation Networks Developed for Conformity Assessment

SPC's process for this conformity determination for the 2023-2026 TIP and the 2045 Plan called for use of five Cube Voyager-based transportation networks. Each transportation network consists of separate highway and transit components covering SPC's entire ten county planning area which includes Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland counties.

This section provides an overview of the facilities included in each of the networks and how the networks were used in the conformity determination. An overview of the Cube Voyager transportation modeling software and SPC's modeling process is presented in Section IV. Figure 1 presents a synopsis of the five networks and the major new facilities each includes.

EPA's Transportation Conformity Rule cites a number of project types which may be excluded from the regional emissions analyses required to determine conformity of transportation plans and programs. These "exempt" project types generally include projects such as resurfacing, minor widening, intersection channelization, transit vehicle replacement, and roadway lighting improvements. "Exempt" projects were excluded from the regional emissions analysis. Appendix A identifies the project types listed as "exempt" in the Transportation Conformity Rule.

The five networks developed specifically for use in this conformity process were: 1). 2023 network – representing the base year for the conformity tests; 2). 2025 network – a $PM_{2.5}$ NAAQS budget year; 3). 2026 network – the horizon year for the 2023-2026 TIP, 4). 2035 network – an interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart, and 5). 2045 network – the horizon year for the Long Range Plan.

The 2023-2026 TIP is the fiscally constrained program of projects for federal fiscal years 2023 through 2026 (October 1, 2022 through September 30, 2026) that reflect the region's transportation priorities. It was adopted by SPC on June 27, 2022. The SPC report *2023-2026 Transportation Improvement Program for Southwestern Pennsylvania* (July 2022) provides more information about the projects programmed on the TIP. For purposes of this conformity assessment it was presumed that all projects programmed on the 2023-2026 TIP for construction would be completed by 2026. Appendix A lists all of the projects included on the draft 2023-2026 TIP.

The adopted 2045 Long Range Plan (2045 Plan) is the region's fiscally constrained long-range transportation plan. The SPC report *SmartMoves for a Changing Region* (SPC, amended July, 2022), identifies the specific projects included in the Plan for SPC's 10-county planning area. It was initially adopted by SPC on June 24, 2019. Amendments were approved with the adoption of the 2021-2024 TIP in June, 2020. Additional amendments were approved in January and August 2021. Additional significant changes to the Plan were proposed in early 2022 to address changes to fiscal projections that resulted in substantial reductions to estimates of funding

available through 2045. The modified Plan was adopted by SPC on June 27, 2022. Appendix C lists the projects included on the modified 2045 Plan.

"Non-exempt" projects and facilities listed in Figure 1 were coded into the Cube Voyager-based transportation networks to define the transportation system for the 2023 network. The projects and facilities are those listed as completed from 1990 through 2023. The network was used to develop 2021 emissions estimates for the "existing" (2023) transportation system.

"Non-exempt" projects and facilities listed in Figure 1 for completion by 2025 were added to the 2023 network to define the transportation system for the 2025 network. The 2025 ($PM_{2.5}$ Budget Year) network is a Cube Voyager-based representation of the region's highway and transit system as it will appear upon completion of the projects programmed for construction on the 2023-2026 TIP by 2025. This network was used to develop emissions estimates for the $PM_{2.5}$ NAAQS 2025 budget year.

"Non-exempt" projects and facilities listed in Figure 1 for completion by 2026 were added to the 2025 network to define the transportation system for the 2026 network. The 2026 (TIP Year) network is a Cube Voyager-based representation of the region's highway and transit system as it will appear upon completion of every project programmed for construction on the 2023-2026 TIP. This network was used in the conformity analysis to develop emissions estimates for the TIP year (2026).

"Non-exempt" projects and facilities listed in Figure 1 for completion between 2026 and 2035 were added to the 2026 network to define the 2035 "interim year" network. The 2035 network was used to develop emissions estimates for the 2035 "interim year" analysis scenario.

"Non-exempt" projects and facilities listed in Figure 1 for completion between 2035 and 2045 were added to the 2035 network to define the 2045 Long Range Plan network. The 2045 network was used to develop emissions estimates for the Long Range Plan.

Of all the highway and transit projects programmed on the 2023-2026 TIP and 2045 Transportation Plan, only those identified in Figure 1 were coded into the travel demand model for the conformity analysis as "non-exempt", regionally significant projects subject to regional emissions analysis. A number of additional "non-exempt" projects are programmed for completion in that time period. Due to their nature (small isolated park-n-ride lots, roadway relocation with no capacity increase, traffic signal coordination, etc.), they could not be coded on the travel model networks. These projects are addressed in Section VII.

Appendix A contains a one-line summary of every highway, transit, and Pennsylvania Turnpike project identified on the amended 2023-2026 TIP within SPC's 10-county region. Appendix B contains a brief summary of every highway, transit, and Pennsylvania Turnpike project identified on the fiscally constrained portion of the 2045 Plan within SPC's 10-county region. The project summaries in Appendices A and B identify whether the projects have been categorized as "exempt". The "non-exempt", regionally significant projects which could be coded on highway

and transit networks are also listed on Figure 1. The effect of highway and transit projects which cannot be reflected on coded transportation networks is discussed in Section VII.

Figure 1. Facilities Included on Highway and Transit Networks

1. Base Year (2002) Transportation System

- 1990 Transportation System plus:
  Facilities completed between 1990 and 2002

Allegheny County:

1. West Busway (Downtown Pittsburgh to Carnegie)
2. First Avenue Station – (New Light Rail Transit Station) – [Downtown Pittsburgh]
3. Ohio River Boulevard Extension / West End Bridge Interchange
4. Airport Southern Expressway
5. I-279 Southbound Widening to 3 lanes (McKnight Road to North Avenue)
6. Coraopolis Bridge – (Replace 2-lane bridge with 3-lane bridge on new alignment)
7. Smithfield St. Bridge Widening (Convert trolley right-of-way to third traffic lane)
8. North Fayette/Robinson Interchange (Parkway West)
9. West Main Street Widening to 4 lanes – [Carnegie Borough]
10. West End Bypass Widening to 5 lanes – [City of Pittsburgh]
11. West End Bridge ramp to Route 65 – (Widen to 2 lanes) – [City of Pittsburgh]
12. Hookstown Grade/Ewing Road @ Business Route 60 (Construct interchange)
13. Banksville Road/Parkway West Interchange Improvements
14. Liberty Tunnel South Portal Grade Separation (Route 51 @ West Liberty Avenue)
15. Hot Metal Bridge Reconstruction (East Carson St. to Second Ave.) – [City of Pittsburgh]

Armstrong County:

16. Kittanning Bypass (Route 66 to Route 28)

Beaver County:

17. Beaver Valley Expressway

Butler County:

18. Route 228 Bridge over I-79 (New structure with additional lanes)
19. I-79/Route 228 Interchange (Construct missing ramps)

Fayette County:

20. Uniontown Bypass (Hopwood to Route 119 South)
21. Mon-Fayette Expressway (Uniontown to Fairchance)
22. TR 51 Star Junction Intersection
23. Route 982 / 31 Intersection and Approaches (Laurelville)
24. Mon-Fayette Expressway (Fairchance to West Virginia)

Indiana County:

25. Route 422 Indiana Bypass (SR 119 to SR 286)
26. Route 422 Indiana Bypass (SR 286 to Business 422)

Lawrence County:

27. New Castle Area Transit Authority (NCATA) – Bus Replacements / Fleet Expansion (16 Transit Vehicles)
28. NCATA – Service Expansion (New Route between New Castle and Pittsburgh)
29. NCATA – Construction of New Maintenance Facility / Administration Building (New Castle)
30. Beaver Valley Expressway (Toll 60) – Beaver County Line to Route 422 Bypass
31. Route 422 / 388 Intersection – Traffic Signal Upgrade

Washington County:

32. I-79 Interchange - Western Center (Southpointe)
33. Donora Industrial Access Road - Phase 1 (Route 837 to Industrial Park)

Figure 1. Facilities Included On Highway and Transit Networks (cont.)

2 Westmoreland County:

34. Greensburg Bypass – (New Stanton to Delmont)
35. Route 22 Reconstruction/widening to 4 lanes (Delmont to Route 819)
36. Route 22 Reconstruction/widening to 4 lanes (Route 819 to Shieldsburg)

2008 Transportation System

- 2002 Transportation System plus:

Facilities completed between 2002 and 2008

Allegheny County:

1. East Busway Extension - (Wilkinsburg to Rankin)
2. Wilkinsburg Park-N-Ride Facility
3. South Hills Light Rail Transit - (Stage II – Overbrook Line)
4. Wabash Tunnel HOV Facility - (Woodruff Street to East Carson Street)
5. I-279 / I-376 Connector – (Direct ramp from Fort Duquesne Bridge to Parkway East)
6. Mon Fayette Expressway (I-70 to Route 51)
7. Duncan Avenue Extension (East) – [McCandless Twp.]
8. Cargo Road @ Business Route 60 (New interchange) – [Moon Twp.]
9. Frazer (Pgh) Mills Interchange (Rt.28 @ Tawney Run Rd. /Galleria Blvd.) – [Frazer Twp.]
10. Settlers Cabin Interchange (Rt. 22/30 Parkway West @ Ridge Rd.) – [Robinson Twp.]
11. Industry Drive Extension (Phase 1) – [Findlay Twp.]
12. Moon-Clinton Interchange completion - (Add missing ramps north of SR 3089)
13. Southern Beltway (Findlay Connector) – 4 lanes (Airport Southern Expressway to Route 22)
14. Rt. 8 Widening to 4 lanes (Kittanning St. to Saxonburg Blvd.) – [Etna]
15. Route 28 Widening to 3 lanes northbound (Harmar to Creighton)
16. Rt.28 Southbound to I-279 Southbound Connector (Construct new ramp) – [City of Pittsburgh]
17. Cherrington Parkway Extension – (2 Lane Access Road) – [Moon Twp.]

Butler County:

18. I-79/Route 19/Turnpike Exit 28 Interchange (Cranberry Connector)

Fayette County:

19. Route 119 / Walnut Hill Interchange – (Construct two missing ramps to complete interchange)
20. Wayland Smith Drive – New 2-lane Connector (Route 40 to Matthew Dr. Extension)
21. Matthew Drive Extension (Route 40 to New Salem Road [SR 4006])

Greene County:

22. Kiwi Road Extension (Near Greene County Airport [Route 21 to Rolling Meadows Road])

Indiana County:

23. Route 22 @ Route 119 Interchange Completion
24. Route 22 Gas Center – Widen to 4 lanes (Armagh Bypass to Cambria County Line)
25. Route 22 Penn View Summit – Widen to 4 lanes (Route 119 Interchange to Mount Taber Church)
26. Route 119 South – Widen to 4 lanes (SR 22 to SR 56 [Homer City])

Washington County:

27. Donora Industrial Access Road - Phase 2 (Industrial Park to 14th Street)

Westmoreland County:

28. Route 22 Reconstruction/widening to 4 lanes (Shieldsburg to New Alexandria)
29. Route 22 Reconstruction/widening to 4 lanes (Murrysville to Export)
30. Rt. 366 Widening to 4 lanes (Tarentum Bridge to Leechburg Road)
31. I-76 PA.Turnpike Mainline Widen to 3 lanes (Eastbound only) – New Stanton Int. to Somerset Co.
32. Center Avenue - Relocation (near New Stanton)
33. Route 119 @ Sony Corp. – Construct new interchange (near New Stanton)

Figure 1. Facilities Included On Highway and Transit Networks (cont.)

34. Route 22 Reconstruction/widening to 4 lanes (Export to Delmont)
35. Route 31 - Widen to 4 lanes (3 Mile Hill - Laurelville to Laurel Summit)

3. Existing (2023) Transportation System

- 2008 Transportation System plus:

Facilities completed between 2008 and 2023

Allegheny County:

1. North Shore Connector Project (LRT) Gateway Line – [City of Pittsburgh]
2. I-79 @ I-376 (Parkway West) Interchange - (Construct missing ramps and widen US 22/30 (Parkway West) to 6 lanes – I-79 @ I-376 Interchange to Campbell's Run Road Interchange
3. West End Circle Reconstruct/Realign – (South approach to W. End Bridge) – [City of Pittsburgh]
4. East Carson Street - widened to 4 lanes (25th St. to 33rd St.) – [City of Pittsburgh]
5. Allegheny Circle Improvement – Convert from single direction traffic flow to bi-directional traffic flow – [City of Pittsburgh]
6. Etna Interchange Bridges Phase 4 – (SR 28 NB mainline widened to 2 lanes)
7. Brighton Road Ext. – New 2 lane Connector (General Robinson to N. Shore Dr.) – [City of PGH]
8. Penn Circle Improvement – Convert from multi-lane, single directional traffic flow to bi-directional traffic flow – [City of Pittsburgh]
9. Route 28 Widening (I-579 to Millvale) – [City of Pittsburgh]
10. Hulton Bridge Replacement (New 4 lane bridge over Allegheny River) – [Oakmont to Harmar]
11. Corrigan Drive Upgrade/Road Diet (Reduce from 4 to 2 lanes through South Park)
12. I-76 PA.Turnpike Mainline (Construct New Bridge over Allegheny River) 6 lanes
13. I-76 PA.Turnpike Mainline Widen to 6 lanes (Pine Twp. to Route 8 Interchange)
14. I-76 PA. Turnpike Mainline Widen to 6 lanes (SR 8 Interchange to Allegheny Valley Interchange)
15. I-79 widening to 3 lanes northbound (Southpointe to Alpine Road)

Beaver County:

16. I-76 PA. Turnpike Mainline Widened to 6 lanes (Ohio State Line to I-376 Interchange)
17. Freedom Road Upgrade (Crows Run) -Route 65 to Route 989

Butler County:

18. I-79 Exit 88 Interchange Completion (SR 3025 at Seneca Valley High School)
19. SR 228 Mars Railroad Bridge - Replace existing 2 lane bridge with 4 lane bridge (SR 228 over CSX RR and Breakneck Creek) – [Adams Twp.]
20. Moraine State Park North Shore Access - Interchange Completion (SR 422 @ West Park Road)
21. Freedom Road (SR 3020) Bridge Replacement (Widened to 6 lanes) – Over I-76 PA. Turnpike
22. SR 228 Corridor Improvements (Widening to 3 lanes Eastbound only) I-79 - SR 3021 Franklin Rd

Fayette County:

23. Matthew Drive - Widen to 4 lanes (Uniontown)
24. Mon-Fayette Expressway (MFE) (Uniontown to Brownsville) – Phase 1
25. SR 4049 Northgate Highway – New 4 lane Connector (Rt.40 to Rt.51) – Part of MFE Plan Phase 1
26. Mon-Fayette Expressway (Uniontown to Brownsville) – Phase 2
27. Mon-Fayette Expressway (Fairchance to I-68 – West Virginia)
28. Masontown Bridge - Replace existing 2 lane bridge with 4 lane bridge (Rt.21 over Mon. River)
29. Route 21 (Sec. J10) - Widen to 4 lanes (Thompson Crossroads to Rt.119)

Greene County:

30. US 19 Safety Improvements – Widen to 4 lanes (Morrisville Corridor Ph-1– Waynesburg [High St to SR2026])

Indiana County:

31. Route 22 Clyde – Widen to 4 lanes (Mount Taber Church to Armagh Bypass)
32. SR 286 – Widening to 4 Lanes (US 422 Interchange to Rustic Lodge Road)

Figure 1. Facilities Included On Highway and Transit Networks (cont.)

Washington County:

33. Union Twp. Park-N-Ride facility (MMVTA - 100-space commuter parking lot)
34. I-79 Meadowlands Interchange - (Construct missing ramps)
35. I-70 Widening to 6 lanes (I-79 North Junction to SR 136 Interchange [Beau St.])
36. I-70 Widening to 6 lanes (SR 136 Interchange [Beau St.] to I-79 South Junction)
37. Southern Beltway - New 4-lane limited-access toll Expressway (Route 22 to I-79)

Westmoreland County:

38. Route 22 Reconstruction/widening to 4 lanes (New Alexandria to Route 982)
39. Route 22 Reconstruction/widening to 4 lanes (Route 982 to Westinghouse)
40. Route 22 Reconstruction/widening to 4 lanes (Westinghouse to Indiana Co.)
41. Route 30 Widening (St. Vincent's College to Mt. Laurel Shopping Ctr.)
42. Route 981 Widening (North and south approaches to Route 30 intersection)
43. Parnassus Triangle Phase 2 - SR 366 widening to 4 lanes – (Bridge St. to 7th St.)
44. I-76 PA. Turnpike Mainline Widened to 6 lanes (Irwin Interchange to New Stanton Interchange)
45. New Stanton Interchange Improvements (I-70)

4. Budget Year (2025) Transportation System

- 2023 Transportation System plus:

Facilities on 2023-2026 TIP for Construction by 2025

Allegheny County:

1. Bus Rapid Transit (BRT) Project (Downtown – Oakland – East End) [City of Pittsburgh]
2. PA 28 Highland Park Bridge Interchange Improvements
3. Stevenson Mill Connector [Moon Twp.]
4. Rouser Road Connector [Moon Twp.]
5. MTA-Stevenson Mill/Rouser Road Offsites [Moon Twp.]
6. Market Place District Improvements-Montour Run Rd.-add through lane between FedEx Dr. and Market Place Blvd. [Moon Twp.]
7. I-76 PA. Turnpike Mainline Widened to 6 lanes (Cranberry Int. to Pine Twp.)

Beaver County:

8. I-76 PA. Turnpike Mainline (Construct New Bridge over Beaver River) 6 lanes

Butler County:

9. Freedom Road Improvements – Widen to 4 lanes (Haine School Rd. to Commonwealth Drive)
10. Freedom Road Improvements - Widen to 4 lanes (Powell Rd. to Haine School Rd.)
11. SR 228 Balls Bend - Widening to 4 lanes (Three Degree Rd. to SR 8).

5. TIP Year (2026) Transportation System

- 2025 Transportation System plus:

Facilities on 2023-2026 TIP for Construction between 2025 and 2026

Allegheny County:

1. I-79 Widening – (Widen to 6 lanes) – Alpine Rd. to Prestley Rd. [South Fayette Twp.]

6. Interim Year (2035) Transportation System

- 2026 Transportation System plus:

Facilities on 2045 Long Range Plan for Construction between 2026 and 2035

Allegheny County:

1. Beaver Avenue Conversion to bi-directional traffic flow [City of Pittsburgh]
2. Painter's Run Road - Widening to 4 lanes (Bower Hill Road to Rob Hollow Road)
3. Bates Street Improvements – Widen to 4 lanes (2nd Ave. to Blvd. of Allies) [City of Pittsburgh]
4. Route 286 Improvements (Phase 2) – Widening to 4 lanes (Sagamore Hill Dr. to Sandune Dr.)

Figure 1. Facilities Included On Highway and Transit Networks (cont.)

5. I-79 @ SR 910 Interchange - Widening of ramps, and construction of new travel lane on SR 910.
6. Campbell's Run Road Improvements - Widen to 4 lanes - [Robinson Twp.]
7. I-376 Parkway West @ Banksville Interchange improvements
8. Pa Turnpike – Mon Fayette Project – New 4-lane toll Freeway (Large to Duquesne)
9. Pa Turnpike – Mon Fayette Project – New 4 lane toll Freeway (E. Pittsburgh to Monroeville)

Butler County:

10. SR 228 Mars RR Bridge West - Widening to 4 lanes (SR 3015 [Mars-Valencia Road] to SR 3021[Franklin Road])
11. Freedom Road (SR 3020) Improvements - Widening to 4 lanes (Lovi Rd. to Powell Rd.)
12. SR 228 Three Degree Road – Widen Sr 228 to 4 lanes; Intersection Improvements
13. SR 356 Improvements – Widen 1.1 -mile section to 5 lanes, including center turn lane, Harbison Road to north of Bear Creek Rd. intersection [Buffalo Twp.]
14. I-79 Widening to 6 lanes (SR 228 to SR 528)

Fayette County:

15. PA21 Widening to 4 lanes (Masontown Bridge to Village of Revere)
16. SR 119 McClure/Kingview Rd. Interchange

7. Long Range Plan Horizon Year (2045) Transportation System

- 2035 Transportation System plus:

  <u>Facilities on 2045 Long Range Plan for Construction between 2035 and 2045</u>

Allegheny County:

1. Pa Turnpike – Mon Fayette Project – New 4-lane toll Freeway (East Pittsburgh to Duquesne)

All "non-exempt" projects on TIP or Long Range Plan and not listed above could not be coded. Their effect on emissions and conformity determination is qualitatively described in Section VII.

IV. Travel Estimation Process

The travel demand estimates that were used in this conformity analysis are the end result of a model chain that begins by forecasting and distributing population, households and employment for the SPC region. The model chain is iterative in nature. Estimates from the travel demand models are periodically cycled back as inputs to the socio-economic forecasting models.

SPC completed its eleventh cycle of population, household and employment forecasts in the spring of 2019 (Cycle 11 forecast). The Cycle 11 forecast was adopted with the 2045 Plan on June 24, 2019. The Cycle 11 forecast replaced the Cycle 10a forecast which was adopted in 2016. The base year for the Cycle 11 forecast is 2015. The horizon year is 2045. The Cycle 11 forecast was the basis for the highway and transit trip forecasts used in the travel demand model for this conformity assessment. With each cycle, models are revised to take advantage of the latest data and to incorporate evolving modeling techniques.

SPC uses an integrated economic-demographic forecasting model to develop regional estimates of future population and employment. That model, known as REMI (Regional Economic Models, Inc.), integrates an economic forecast with a demographic forecast for economic sub-regions of the United States. An updated REMI model is provided annually. SPC first used the REMI model for forecasting in 1992, when the Cycle 4a forecasts were produced.

Based on historical analysis of the regional economy and a forecast of the U.S. economy, REMI forecasts regional employment, production, and other regional economic variables. REMI also utilizes historical data on population to forecast regional population growth or decline based on a traditional cohort-survival model. Then, based on the economic forecast, REMI determines the amount of migration in or out of the region for workers and their dependents to produce a complete population forecast. The model is recursive in nature. The population forecast is used to revise the employment estimate. The new employment estimate is then used to allow for further changes in economic migration. This cycle continues until the economic and demographic forecasts balance out.

In 1992-93, SPC initially developed its Mature Economic Region Land Use Allocation Model (MERLAM) to allocate regional forecasts of population, households and employment to the traffic analysis zones in the region. The allocation model uses simple algorithms and an extensive database to allocate population and employment. The model's algorithms include a number of policy-sensitive variables. The database includes land use and attractiveness measures. The land use database provides essential baseline information on each traffic analysis zone.

REGIONAL POPULATION

COUNTY	2015	2045	CHANGE 2015-2045	% CHANGE 2015-2045
Allegheny	1,231,145	1,400,888	+169,743	+13.8%
Pittsburgh City	*305,928*	*357,154*	*+51,226*	*+16.7%*
non-Pittsburgh	*925,217*	*1,043,734*	*+118,517*	*+12.8%*
Armstrong	67,979	64,156	-3,823	-5.6%
Beaver	169,785	180,383	+10,598	+6.2%
Butler	185,689	222,117	+36,428	+19.6%
Fayette	134,851	128,468	-6,383	-4.7%
Greene	37,938	38,341	+403	+1.1%
Indiana	87,895	95,804	+7,909	+9.0%
Lawrence	89,162	90,583	+1,421	+1.6%
Washington	208,226	241,574	+33,348	+16.0%
Westmoreland	361,251	394,643	+33,392	+9.2%
TOTAL	2,573,921	2,856,957	+283,036	+11.0%

TABLE 1 **SPC July 2022**

2015 and 2045 population estimates based on REMI forecast.

REGIONAL HOUSEHOLDS

COUNTY	2015	2045	CHANGE 2015-2045	% CHANGE 2015-2045
Allegheny	529,534	617,503	+87,969	+16.6%
Pittsburgh City	*132,468*	*159,173*	*+26,705*	*+20.2%*
non-Pittsburgh	*397,066*	*458,330*	*+61,264*	*+15.4%*
Armstrong	28,524	27,651	-873	-3.1%
Beaver	70,079	76,453	+6,374	+9.1%
Butler	74,476	93,322	+18,846	+25.3%
Fayette	53,997	52,019	-1,978	-3.7%
Greene	14,394	15,318	+924	+6.4%
Indiana	34,061	38,684	+4,623	+13.6%
Lawrence	36,435	38,221	+1,786	+4.9%
Washington	83,739	98,910	+15,171	+18.1%
Westmoreland	151,173	170,375	+19,202	+12.7%
TOTAL	1,076,412	1,228,456	+152,044	+14.1%

TABLE 2 **SPC July 2022**

2015 and 2045 household estimates based on REMI forecast.

REGIONAL EMPLOYMENT

	2015				
COUNTY	RETAIL	MANU-FACTURING	SERVICES	OTHER	TOTAL
Allegheny	136,973	38,145	639,453	74,778	889,349
Pittsburgh City	*30,694*	*7,656*	*299,568*	*16,778*	*354,696*
non-Pittsburgh	*106,279*	*30,489*	*339,885*	*58,000*	*534,653*
Armstrong	4,071	2,210	13,611	5,052	24,944
Beaver	13,374	6,957	44,256	7,058	71,645
Butler	20,488	12,830	66,232	15,922	115,472
Fayette	10,817	3,995	33,348	7,177	55,337
Greene	2,650	396	8,802	7,692	19,540
Indiana	7,921	2,416	25,331	10,145	45,813
Lawrence	6,814	3,921	25,248	5,239	41,222
Washington	19,051	9,478	69,515	23,173	121,217
Westmoreland	36,817	18,488	102,926	23,936	182,167
TOTAL	258,976	98,836	1,028,722	180,172	1,566,706

	2045				
COUNTY	RETAIL	MANU-FACTURING	SERVICES	OTHER	TOTAL
Allegheny	149,849	29,670	776,944	80,771	1,037,234
Pittsburgh City	*35,092*	*6,020*	*363,751*	*18,746*	*423,609*
non-Pittsburgh	*114,757*	*23,650*	*413,193*	*62,025*	*613,625*
Armstrong	3,993	1,537	15,215	4,538	25,283
Beaver	13,147	4,830	49,164	6,949	74,090
Butler	22,436	9,219	78,674	15,765	126,094
Fayette	10,177	2,973	37,415	6,682	57,247
Greene	2,491	290	9,405	6,750	18,936
Indiana	8,125	1,801	28,598	10,715	49,239
Lawrence	6,669	3,088	28,582	4,722	43,061
Washington	20,650	7,177	84,430	26,085	138,342
Westmoreland	37,705	13,608	121,626	23,891	196,830
TOTAL	275,242	74,193	1,230,053	186,868	1,766,356

	PERCENT CHANGE 2015-2045				
COUNTY	RETAIL	MANU-FACTURING	SERVICES	OTHER	TOTAL
Allegheny	9.4%	-22.2%	21.5%	8.0%	16.6%
Pittsburgh City	*14.3%*	*-21.4%*	*21.4%*	*11.7%*	*19.4%*
non-Pittsburgh	*8.0%*	*-22.4%*	*21.6%*	*6.9%*	*14.8%*
Armstrong	-1.9%	-30.5%	11.8%	-10.2%	1.4%
Beaver	-1.7%	-30.6%	11.1%	-1.5%	3.4%
Butler	9.5%	-28.1%	18.8%	-1.0%	9.2%
Fayette	-5.9%	-25.6%	12.2%	-6.9%	3.5%
Greene	-6.0%	-26.8%	6.9%	-12.2%	-3.1%
Indiana	2.6%	-25.5%	12.9%	5.6%	7.5%
Lawrence	-2.1%	-21.2%	13.2%	-9.9%	4.5%
Washington	8.4%	-24.3%	21.5%	12.6%	14.1%
Westmoreland	2.4%	-26.4%	18.2%	-0.2%	8.0%
TOTAL	6.3%	-24.9%	19.6%	3.7%	12.7%

TABLE 3 **SPC July 2022**

2015 and 2045 employment estimates based on REMI forecast.

The attractiveness measures are used to determine each zone's relative attractiveness for different types of development. By varying the attractiveness measures and by altering the values of the model's policy variables, MERLAM is able to estimate the impact of various regional land use and development scenarios. SPC updated the databases and streamlined the MERLAM allocation process late in 2018 during development of the Cycle 11 forecasts. The regional population and employment estimates that are output from the latest REMI model serve as the basis for the Cycle 11 forecasts. These REMI outputs were then allocated to traffic zones through the use of MERLAM.

SPC's Cycle 11 2015 base year estimates and 2045 forecasts of population, employment, and households were used to estimate regional travel demand for this conformity assessment. SPC developed its travel estimation models to take full advantage of the capabilities of the Cube Voyager software package. Cube Voyager is a library of programs used for transportation planning and travel demand modeling.

Travel simulations for the ten-county SPC travel model region are produced with a standard four-step chain of transportation models developed by SPC and adapted for Cube Voyager processing. The four steps include trip generation, trip distribution, modal split and travel assignment models. Travel was simulated for 2015 and 2045 based on socio-economic data from SPC's Cycle 11 forecasts. County-level socio-economic data is shown in Table 1 (population), Table 2 (households), and Table 3 (employment). The travel model was validated in the spring of 2020 during development of the conformity assessment that was completed for adoption of the 2021-2024 TIP in June 2020. Simulated 2020 travel was validated with 2018 Census data; and 2018 and 2019 traffic counts, VMT, and 2019 transit ridership data.

SPC routinely revalidates the travel demand model during development of each new TIP. The revalidation step was not done for this TIP Cycle. The 2022 base year validation would have been based on 2020 and 2021 data. Travel patterns in those two years were severely disrupted due to the Covid-19 pandemic. The model validation discussion on the following pages is from the work done in the spring of 2020 during development of the 2021-2014 TIP, and is based on 2018 and 2019 (pre-Covid) data.

SPC's trip generation model estimates person trip productions and attractions for three trip purposes (home-based work, home-based other, and non-home based) and truck trip productions and attractions for three truck classes (light, medium and heavy). Person trip productions are estimated by applying household trip rates to Cycle 11 household data in a cross-classification model stratified by household size and auto ownership. Person trip attractions are estimated by applying trip rates stratified by households and by three employment categories. In some instances, attraction trip rates are further stratified by area. Home-based work trip control totals are averaged production and attraction totals. Home-based other attractions were balanced to match productions. Non-home based person trips and truck trips are estimated by applying trip rates stratified by employment category. These rates are applied to Cycle 11 employment data.

Gravity models were calibrated to distribute person trips and truck trips by each trip generation category. Impedances are a weighted sum of highway travel time and distance to reflect out-of-

pocket trip cost. Travel time includes running time, terminal time, and a penalty for major river crossings. Home-based work trips were distributed with peak-period impedances; all other trips were distributed with off-peak impedances.

A control total of average daily air passenger-related travel to and from the Pittsburgh International Airport was derived from historic data available from USDOT and the Bureau of Transportation Statistics. A gravity model to distribute these trips was calibrated with air enplanement data reported for 2018. These trips were then added to home-based other trips.

The home-based work component of the mode split model was initially developed by SPC in 1995 when calibration of a home-based work trip auto occupancy and mode split model was completed. In addition to estimating the number of person trips using transit, the home-based work mode split model also stratifies non-transit trips by four levels of auto occupancy (drive alone, two person carpools, three person carpools, and vehicles with four or more occupants). Based on those stratifications the model then converts home-based highway person trips into vehicle trips for use in highway assignment. The model is sensitive to the presence of high-occupancy vehicle (HOV) facilities in the highway network. The 2014-2018 Census American Community Survey (ACS) Journey-to-Work (JTW) data reported that, regionwide, 9.7 percent of persons traveling to work were in HOVs (vehicles with two or more occupants). Table 4 compares actual JTW percentages with the model simulation by trip attraction districts. Actual numbers of trips, while shown in the table, should not be compared because JTW data only represents persons working at their primary job rather than all home-based work trips. The SPC model estimates that 10.5 percent of 2020 work trips travel in HOVs.

The auto occupancy component of the mode split model could not be used for non-work trips because the Census JTW survey data includes only work trips. There are no available data sources for calibration of non-work trips. Non-work highway person trips were converted to vehicle trips by applying vehicle occupancy rates developed by SPC and stratified by trip purpose and attraction district.

Three components of travel impedance by auto and transit modes are included in the mode split model. These are run time (total in-vehicle time), "excess" time (total out-of-vehicle time), and cost (out-of-pocket cost). For home-based work trips the impedances are based on restrained highway travel times and peak period transit service. For home-based other and non-home based trips, impedances are based on free-flow highway times and mid-day transit service.

Table 5 compares observed and simulated transit route trips. Simulated network assignment summaries for 2020 and observed data for an average month (May) in 2019 were used for the comparisons. The route trip data and corridor definitions were obtained from Port Authority of Allegheny County (PAAC – dba as Pittsburgh Regional Transit) and other transit providers in the region. Table 5 shows that, regionally, simulated 2020 route trips are within two percent of observed data.

Overall, it was determined that transit mode split and transit assignment results were reasonably close to observed data.

HOV MODEL VALIDATION
Auto Person Trip Attractions

County	2014-2018 Census ACS		2020 SPC Simulated		Percent HOV	
	SOV	HOV	SOV	HOV	ACS	SPC
ALLEGHENY	512,459	60,555	680,913	87,958	10.6%	11.4%
ARMSTRONG	14,657	1,422	45,744	6,776	8.8%	12.9%
BEAVER	47,077	5,323	112,513	13,708	10.2%	10.9%
BUTLER	79,357	7,266	136,073	13,889	8.4%	9.3%
FAYETTE	33,663	2,927	85,299	8,426	8.0%	9.0%
GREENE	12,649	1,120	23,931	2,505	8.1%	9.5%
INDIANA	28,786	3,273	56,261	5,297	10.2%	8.6%
LAWRENCE	25,640	2,870	59,617	5,460	10.1%	8.4%
WASHINGTON	78,021	7,478	141,618	16,387	8.7%	10.4%
WESTMORELAND	123,014	10,914	250,051	27,032	8.1%	9.8%
OUTSIDE ALLEG	442,864	42,593	911,107	99,480	8.8%	9.8%
GRAND TOTAL	955,323	103,148	1,592,020	187,438	9.7%	10.5%

TABLE 4 **SPC July 2022**

TRANSIT ROUTE TRIP VALIDATION BY CORRIDOR

SUB-CORRIDOR NAME	ACTUAL May 2019	ASSIGNMENT 2020	ASSIGN / ACTUAL
ALLEGHENY VALLEY	2,506	1,502	0.60
NORTH HILLS	18,110	16,539	0.91
HOV LANE EXPRESS	2,823	5,981	2.12
OHIO VALLEY	6,270	7,534	1.20
TOTAL NORTH HILLS	29,709	31,556	1.06
WEST END - CARNEGIE	9,676	10,177	1.05
BANKSVILLE - GREENTREE	4,037	6,794	1.68
SOUTH HILLS LRV	26,514	25,173	0.95
AIRPORT SERVICE	3,058	3,356	1.10
WEST LIBERTY AVENUE	3,398	4,148	1.22
MT. WASHINGTON - HILLTOP	1,323	213	0.16
SAW MILL RUN - SOUTH BUSWAY	5,319	7,903	1.49
SOUTHSIDE	12,440	8,696	0.70
TOTAL SOUTH HILLS - WEST END	65,765	66,460	1.01
SECOND AVENUE	4,073	3,680	0.90
MON VALLEY EXPRESS	704	923	1.31
HOMESTEAD LOCAL AND EXPRESS	5,906	6,216	1.05
MCKEESPORT LOCAL	608	338	0.56
MONROEVILLE - EAST PITTSBURGH	0	0	----
TOTAL SOUTHEAST	11,291	11,157	0.99
FIFTH AVENUE	22,271	32,551	1.46
FORBES AVENUE - SQUIRREL HILL	23,109	15,876	0.69
EAST SUBURBAN - BLVD OF ALLIES	9,771	5,252	0.54
EAST BUSWAY	15,202	25,651	1.69
BIGELOW BLVD - PENN HILLS	7,504	7,476	1.00
HILL DISTRICT - CENTER AVENUE	8,826	3,079	0.35
BUTLER STREET - EAST LIBERTY	4,965	2,498	0.50
HOMEWOOD - PENN / LIBERTY	7,142	3,114	0.44
TOTAL EAST END	98,790	95,497	0.97
INCLINES	809	1,436	1.78
OTHER PORT AUTHORITY	5,644	7,813	1.38
TOTAL PORT AUTHORITY SYSTEM	212,008	213,919	1.01
NON-PORT AUTHORITY ROUTES	9,918	11,761	1.19
TOTAL TRANSIT NETWORK	221,926	225,680	1.02

TABLE 5 **SPC July 2022**

A gravity model was calibrated for distributing internal/external vehicle trips (trips with one end inside and one end outside the region). To generate the internal/external trips, relationships were initially developed between internal person trip ends by county and census 2010 journey to work data for work trips destined to the region from the external area. These trip patterns were factored to match PennDOT and SPC traffic count data by external cordon segment as shown on Map 4. Table 6 compares simulated external cordon segment volumes to PennDOT and SPC traffic count data from various years and factored to a 2019 value using factors supplied by PennDOT. The total simulated 2020 volume regionwide is about two percent higher than the observed volume.

An estimate of through trips (vehicle trips with both ends outside the region) is the final component of trips needed for the regional trip matrices. Results from SPC's 2006 External Cordon Survey provided traffic volume estimates for the major travel corridors crossing the region's boundary. These traffic volumes were factored to a 2019 value using factors supplied by PennDOT. The growth in through trips for forecast years is based on the increase in trips in the modeled area for the counties that make up the region boundary (all counties except Allegheny) for the appropriate time period.

SPC assigns vehicle trips to the Cube Voyager-based highway networks with a multi-iteration equilibrium assignment process which includes capacity restraint after each iteration. The impedances used for capacity restraint are highway based costs which include weighted values of time and distance. Through trips and medium and heavy-duty truck trips are pre-loaded on the network with a one pass assignment that attracts these vehicles to high-level facilities in the network and keeps them there through iterations of capacity restraint. Also, the highway assignment procedure permits only HOV trips to use HOV facilities. The accuracy of the travel estimation process was validated with 2018 traffic counts at PennDOT's permanent traffic count stations in the region and 2018 highway VMT data.

SPC initially collected traffic counts on the bridges crossing the Allegheny, Monongahela, and Ohio rivers in 2007. More recent traffic counts were collected for some of the bridges in 2017, 2018 and 2019. All of the traffic counts were factored to 2018 values using factors supplied by PennDOT. Table 7 compares simulated river crossing volumes to the factored SPC traffic count data. Map 6 illustrates the river crossing segments reported in Table 7. The total simulated 2020 volume regionwide is about ten percent higher than the factored 2018 volume.

PennDOT maintains eleven permanent traffic count stations in the region as shown on Map 4. Table 8 compares 2018 traffic counts at each location to assigned 2020 link volumes. The total simulated volume for the eleven stations is about fifteen percent lower than the observed volume.

VMT, stratified by functional class and county, from a 2020 traffic assignment was compared to 2018 PennDOT estimates. Regionwide, there was a five percent difference between observed and simulated VMT. That comparison is shown in Table 9.

Overall, it was determined that highway assignment results were reasonably close to the observed data.

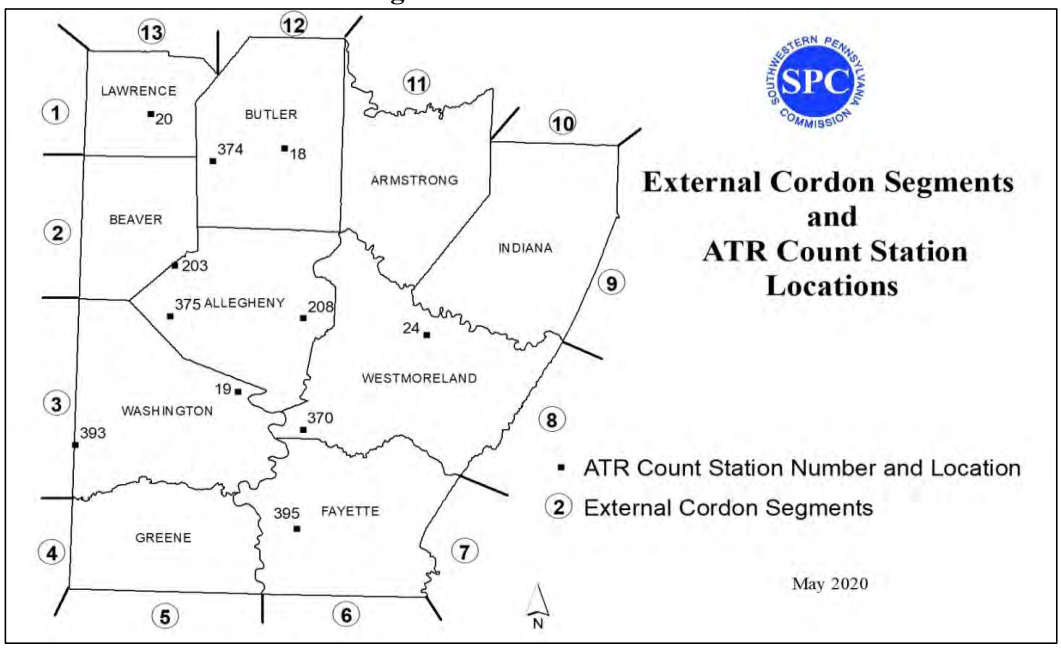
TRAVEL MODEL VALIDATION
External Cordon Volume Comparisons

CORDON SEGMENT	COUNTY	OBSERVED VOLUME	SIMULATED VOLUME	SIMULATED / OBSERVED
1	Lawrence	38,615	37,463	0.97
2	Beaver	23,164	29,527	1.27
3	Washington	63,225	62,973	1.00
4	Greene	1,267	2,384	1.88
Western Boundary Total		**126,271**	**132,347**	**1.05**
5	Greene	34,890	28,308	0.81
6	Fayette	18,518	18,526	1.00
Southern Boundary Total		**53,408**	**46,834**	**0.88**
7	Fayette	8,207	11,460	1.40
8	Westmoreland	48,420	35,592	0.74
9	Indiana	27,264	27,551	1.01
Eastern Boundary Total		**83,891**	**74,603**	**0.89**
10	Indiana	11,125	11,433	1.03
11	Armstrong	13,312	19,200	1.44
12	Butler	20,466	27,804	1.36
13	Lawrence	53,720	57,135	1.06
Northern Boundary Total		**98,623**	**115,572**	**1.17**
TOTAL		**362,193**	**369,356**	**1.02**

Table 6 **SPC July 2022**

Observed volume is from SPC 2005 - 2006 external cordon counts, factored to 2019 values, and from factored PennDOT data.
Simulated volume from SPC assigned 2020 trips.

TRAVEL MODEL VALIDATION
External Cordon Segments and ATR Count Station Locations



Map 4 **SPC July 2022**

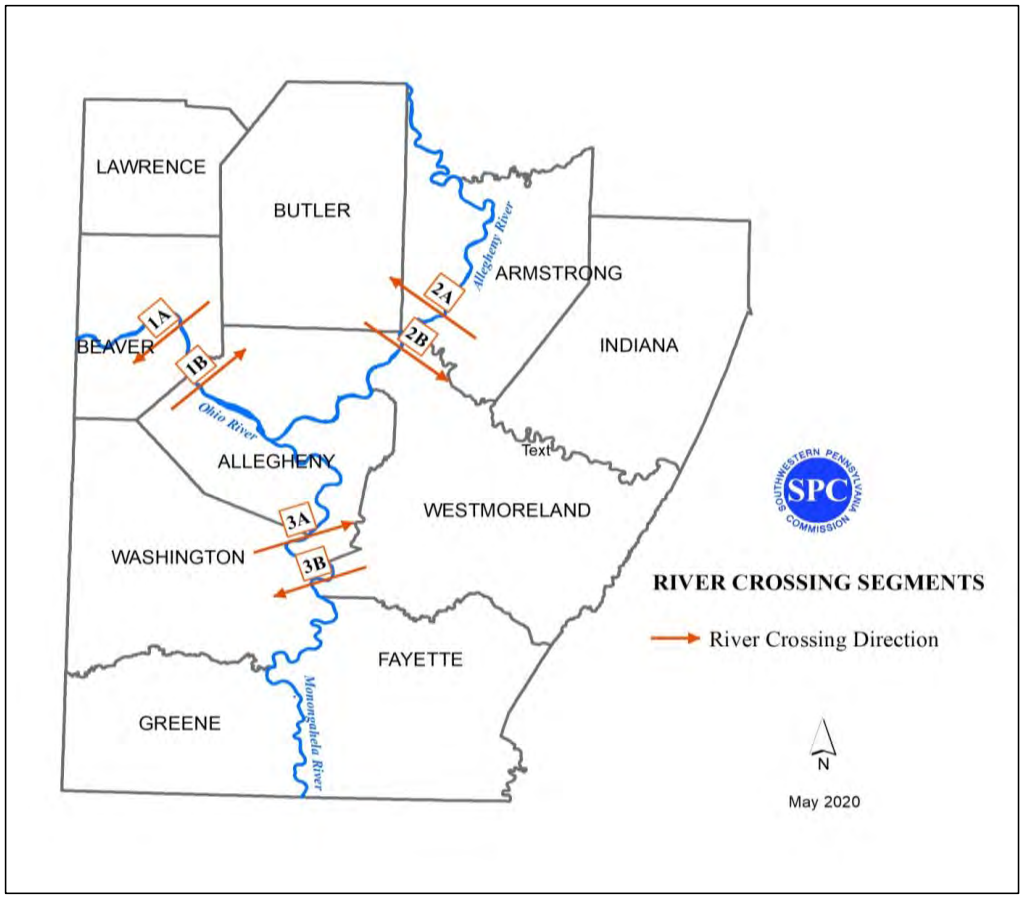
TRAVEL MODEL VALIDATION
River Crossing Volume Comparisons

RIVER CROSSING SEGMENT	OBSERVED VOLUME	SIMULATED VOLUME	SIMULATED / OBSERVED
1A	122,427	133,405	1.09
1B	115,607	125,625	1.09
Ohio River Total	**238,034**	**259,030**	**1.09**
2A	221,708	236,189	1.07
2B	230,885	232,535	1.01
Allegheny River Total	**452,593**	**468,724**	**1.04**
3A	252,006	293,827	1.17
3B	248,689	290,669	1.17
Monongahela River Total	**500,695**	**584,496**	**1.17**
TOTAL	**1,191,322**	**1,312,250**	**1.10**

Table 7 **SPC July 2022**

Observed volume is from SPC 2007 Bridge count, factored to 2018 values,
and from more recent SPC and PennDOT counts factored to 2018 volumes.
Simulated volume from SPC assigned 2020 trips.

TRAVEL MODEL VALIDATION
River Crossing Segments



Map 5 **SPC July 2022**

TRAVEL MODEL VALIDATION
Traffic Volume Comparisons - ATR Stations

COUNT STATION	COUNTY	ROUTE	OBSERVED VOLUME	SIMULATED VOLUME	SIM/ OBS
18	Butler	PA 38	6,172	7,380	1.20
19	Washington	PA 88	5,656	8,468	1.50
20	Lawrence	PA 65	6,947	9,160	1.32
24	Westmoreland	US 22	21,787	20,519	0.94
203	Allegheny	PA 65	20,299	19,562	0.96
208	Allegheny	I-376	94,814	75,740	0.80
370	Westmoreland	I-70	31,294	14,595	0.47
374	Butler	I-79	30,731	20,471	0.67
375	Allegheny	US 22/30	26,285	30,857	1.17
393	Washington	I-70	35,219	32,727	0.93
395	Fayette	PA 21	10,088	4,980	0.49
		TOTAL	289,292	244,459	0.85

Table 8 **SPC July 2022**

Observed volume is "Average Weekday Traffic" from 2018 PennDOT data.
Simulated volume from SPC assigned 2020 trips.

TRAVEL MODEL VALIDATION
VMT Comparisons

COUNTY	INTERSTATE	ARTERIAL	COLLECTOR LOCAL	TOTAL
	Observed VMT (000)			
Allegheny	6,440	11,804	4,764	23,008
Armstrong	0	1,043	426	1,469
Beaver	970	1,586	994	3,549
Butler	1,190	2,490	1,737	5,416
Fayette	0	1,736	1,085	2,821
Greene	621	417	472	1,510
Indiana	0	1,235	739	1,974
Lawrence	583	717	694	1,993
Washington	2,677	2,272	1,252	6,201
Westmoreland	2,177	4,145	2,496	8,818
TOTAL	14,657	27,444	14,659	56,761
	Simulated VMT (000)			
Allegheny	4,179	13,940	4,540	22,660
Armstrong	0	930	608	1,538
Beaver	323	2,390	1,079	3,791
Butler	753	2,353	1,767	4,874
Fayette	0	1,521	853	2,374
Greene	343	335	600	1,279
Indiana	0	1,369	842	2,211
Lawrence	248	1,203	666	2,118
Washington	1,454	2,056	1,714	5,225
Westmoreland	1,352	3,706	2,613	7,670
TOTAL	8,653	29,804	15,282	53,739
	Simulated/Observed VMT			
Allegheny	0.65	1.18	0.95	0.98
Armstrong	---	0.89	1.43	1.05
Beaver	0.33	1.51	1.09	1.07
Butler	0.63	0.95	1.02	0.90
Fayette	---	0.88	0.79	0.84
Greene	0.55	0.81	1.27	0.85
Indiana	---	1.11	1.14	1.12
Lawrence	0.43	1.68	0.96	1.06
Washington	0.54	0.91	1.37	0.84
Westmoreland	0.62	0.89	1.05	0.87
TOTAL	0.59	1.09	1.04	0.95

TABLE 9 **SPC July 2022**

Observed VMT from 2018 PennDOT data.
Simulated VMT from SPC-assigned 2020 link VMT.

SPC's travel models were used in this conformity assessment to produce regional person trip matrices for 2020 from the Cycle 11 base year estimates. In addition, trip productions and attractions were generated for 2045 from the Cycle 11 2045 forecast. Prior to trip distribution, productions and attractions for 2023, 2025, 2026, and 2035 were developed by interpolating between 2020 and 2045. Trip distribution for each scenario was based on the characteristics of the transportation network defined for the scenario.

Free-flow highway speeds and link capacities are selected from a look-up table that is stratified by roadway facility type and area type. SPC has developed a model to calculate area type based on population and employment densities. In general, free-flow speed and capacity will decrease with increased development density. The area type model provides an automated procedure for updating area type codes in the network based on changes in existing and future development densities. The area type model was applied for each scenario using Cycle 11 population and employment densities estimated for the scenario year.

Modal split model runs were made for each scenario using appropriate combinations of trip tables and transportation networks. Modal split results for the 2023 network are presented in Table 10. The 2045 network modal split results are shown in Table 11. Table 12 summarizes regional trips by purpose and mode for each of the five scenarios defined for this conformity assessment of the 2023-2026 TIP and updated 2045 Plan. Table 13 summarizes modeled HOV trips for each scenario.

2023 MODAL SPLIT SUMMARY

	2023 Person Trip Attractions				2023 Auto Trip Attractions				2023 Transit Trip Attractions				2023 Transit/2023 Total Person			
DISTRICT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT
CBD	138502	80263	34924	253689	62863	43427	25192	131482	60041	13336	4047	77424	43.35%	16.62%	11.59%	30.52%
PGH E	170165	286790	110046	567001	135961	170092	78025	384078	25779	18438	7854	52071	15.15%	6.43%	7.14%	9.18%
PGH S	40731	61995	23231	125957	36768	38517	17366	92651	1794	1305	376	3475	4.40%	2.11%	1.62%	2.76%
PGH N	50883	107875	47194	205952	46083	71748	36923	154754	2263	1835	809	4907	4.45%	1.70%	1.71%	2.38%
PGH TOT	261779	456660	180471	898910	218812	280357	132314	631483	29836	21578	9039	60453	11.40%	4.73%	5.01%	6.73%
ALG E	135983	423730	119873	679586	127560	275478	82593	485631	1783	2376	702	4861	1.31%	0.56%	0.59%	0.72%
ALG N	199287	579681	166906	945874	187444	374727	114780	676951	2175	2622	516	5313	1.09%	0.45%	0.31%	0.56%
ALG S	148113	470055	136968	755136	139068	302922	94205	536195	2629	3555	997	7181	1.77%	0.76%	0.73%	0.95%
ALG W	137140	390797	109298	637235	128116	265982	78946	473044	1563	2586	464	4613	1.14%	0.66%	0.42%	0.72%
ALG TOT	620523	1864263	533045	3017831	582188	1219109	370524	2171821	8150	11139	2679	21968	1.31%	0.60%	0.50%	0.73%
OUTSIDE ALG	884539	2371193	637345	3893077	841540	1582336	455763	2879639	3008	3900	1207	8115	0.34%	0.16%	0.19%	0.21%
GRAND TOTAL	1905343	4772379	1385785	8063507	1705403	3125229	983793	5814425	101035	49953	16972	167960	5.30%	1.05%	1.22%	2.08%

TABLE 10 **SPC July 2022**

2045 MODAL SPLIT SUMMARY

	2045 Person Trip Attractions				2045 Auto Trip Attractions				2045 Transit Trip Attractions				2045 Transit/2045 Total Person			
DISTRICT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT
CBD	159280	93589	40330	293199	71649	49369	23851	144869	69599	17408	11093	98100	43.70%	18.60%	27.51%	33.46%
PGH E	197637	331062	125180	653879	150738	195682	80147	426567	37454	22200	20216	79870	18.95%	6.71%	16.15%	12.21%
PGH S	42821	66773	24698	134292	38677	41496	18358	98531	1841	1407	518	3766	4.30%	2.11%	2.10%	2.80%
PGH N	56609	121171	52247	230027	51189	80639	40647	172475	2625	2095	1132	5852	4.64%	1.73%	2.17%	2.54%
PGH TOT	297067	519006	202125	1018198	240604	317817	139152	697573	41920	25702	21866	89488	14.11%	4.95%	10.82%	8.79%
ALG E	144831	453748	125958	724537	135765	294959	86538	517262	1803	2525	1094	5422	1.24%	0.56%	0.87%	0.75%
ALG N	221760	655103	182817	1059680	208871	423657	125614	758142	2138	2643	705	5486	0.96%	0.40%	0.39%	0.52%
ALG S	164094	519222	148580	831896	154132	334486	102094	590712	2820	4025	1289	8134	1.72%	0.78%	0.87%	0.98%
ALG W	158800	451302	123675	733777	148583	307734	89437	545754	1581	2762	593	4936	1.00%	0.61%	0.48%	0.67%
ALG TOT	689485	2079375	581030	3349890	647351	1360836	403683	2411870	8342	11955	3681	23978	1.21%	0.57%	0.63%	0.72%
OUTSIDE ALG	940139	2563228	671173	4174540	895297	1709918	479562	3084777	3049	4010	1206	8265	0.32%	0.16%	0.18%	0.20%
GRAND TOTAL	2085971	5255198	1494658	8835827	1854901	3437940	1046248	6339089	122910	59075	37846	219831	5.89%	1.12%	2.53%	2.49%

TABLE 11

SPC July 2022

TRAVEL MODEL RESULTS
Trips By Purpose and Mode

YEAR	SCENARIO	- - - Total Person Trip Attractions - - - HBW	HBO	NHB	TOTAL
2023	2023 Existing Year	1,905,343	4,772,379	1,385,785	8,063,507
2025	2025 Budget Year - PM 2.5 NAAQS	1,921,770	4,816,151	1,395,687	8,133,608
2026	2026 TIP Year	1,930,006	4,838,099	1,400,656	8,168,761
2035	2035 Interim Year #1	2,003,872	5,035,638	1,445,164	8,484,674
2045	2045 Long Range Plan Year	2,085,971	5,255,198	1,494,658	8,835,827
YEAR	SCENARIO	--- Auto Vehicle Trip Attractions --- HBW	HBO	NHB	TOTAL
2023	2023 Existing Year	1,705,403	3,125,229	983,793	5,814,425
2025	2025 Budget Year - PM 2.5 NAAQS	1,710,049	3,152,241	977,531	5,839,821
2026	2026 TIP Year	1,718,917	3,166,515	981,004	5,866,436
2035	2035 Interim Year #1	1,783,221	3,295,023	1,011,869	6,090,113
2045	2045 Long Range Plan Year	1,854,901	3,437,940	1,046,248	6,339,089
YEAR	SCENARIO	--- Transit Person Trip Attractions --- HBW	HBO	NHB	TOTAL
2023	2023 Existing Year	101,035	49,953	16,972	167,960
2025	2025 Budget Year - PM 2.5 NAAQS	112,086	52,804	34,245	199,135
2026	2026 TIP Year	110,893	53,124	34,399	198,416
2035	2035 Interim Year #1	116,862	56,028	36,066	208,956
2045	2045 Long Range Plan Year	122,910	59,075	37,846	219,831
YEAR	SCENARIO	--- Transit / Total Person Trips --- HBW	HBO	NHB	TOTAL
2023	2023 Existing Year	5.30%	1.05%	1.22%	2.08%
2025	2025 Budget Year - PM 2.5 NAAQS	5.83%	1.10%	2.45%	2.45%
2026	2026 TIP Year	5.75%	1.10%	2.46%	2.43%
2035	2035 Interim Year #1	5.83%	1.11%	2.50%	2.46%
2045	2045 Long Range Plan Year	5.89%	1.12%	2.53%	2.49%

TABLE 12 **SPC July 2022**

HOV MODEL RESULTS

Vehicle Trips By Auto Occupancy Level

(Home-Based Work Trips Only)

YEAR	SCENARIO	- - - HBW Vehicle Trips by Vehicle Occupancy - - -				
		1	2	3	4+	TOTAL
2023	2023 Existing Year	1,614,835	83,865	5,379	1,320	1,705,399
2025	2025 Budget Year - PM 2.5 NAAQS	1,618,900	84,355	5,444	1,323	1,710,022
2026	2026 TIP Year	1,627,266	84,827	5,468	1,338	1,718,899
2035	2035 Interim Year #1	1,688,305	87,847	5,661	1,390	1,783,203
2045	2045 Long Range Plan Year	1,755,970	91,532	5,921	1,458	1,854,881

TABLE 13 **SPC July 2022**

V. Development of Emission Factors

This section summarizes how EPA's MOVES 2014a emissions model was used to develop emission factors for this conformity determination.

MOVES 2014a (Motor Vehicle Emissions Simulator) is the latest version of EPA's emissions model. It is EPA's official model for estimating emissions from highway vehicles for SIP emission inventories and transportation conformity. The methodologies incorporated into MOVES for estimating emissions are based on methods and research conducted by EPA.

The analysis methodology and data inputs for this analysis were developed through interagency consultation and are based on information from available EPA guidance documents including: *Policy Guidance on the Use of MOVES 2014 and Subsequent Minor Revisions for State Implementation Plan Development, Transportation Conformity, and Other Purposes*, US EPA Office of Transportation and Air Quality, EPA-420-B-14-008, July 2014; *MOVES 2014 and MOVES 2014a Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity.* US EPA Office of Transportation and Air Quality, EPA-420-B-15-093, November 2015; *MOVES 2014a User Guide*, US EPA Office of Transportation and Air Quality, EPA-420-B-14-095; November 2014.

MOVES emission estimates depend on a mix of local and default (internal to MOVES) data that are used in the analysis. Local data is used for data items that have a significant impact on emissions, including: vehicle miles of travel (VMT), vehicle population, congested speeds, and vehicle type mix, as well as environmental and fuel assumptions. Local data inputs to the analysis process reflect the latest available planning assumptions using information obtained from PennDOT, DEP and other local and national sources.

The methodology used for this analysis includes the use of custom software (PPSUITE) to calculate hourly speeds and prepare key traffic input files from outputs of SPC's travel model, for input to the MOVES emission model. PPSUITE consists of a set of programs that analyzes highway operating conditions, calculates highway speeds, compiles VMT and vehicle type mix data, and prepares MOVES runs and processes MOVES outputs. PPSUITE is a widely used and accepted tool for estimating speeds and processing emissions rates. The PPSUITE tool has been used to develop on-road highway mobile source inventories in SIP revisions, control strategy analyses, and conformity analyses in other states. The software was developed to utilize accepted transportation engineering methodologies. The PPSUITE process is integral to SPC's conformity analysis to produce traffic-related input files for the MOVES emission model, based on the outputs from SPC's travel demand model.

A large number of additional inputs to MOVES are needed to fully account for the numerous vehicle and environmental parameters that affect emissions. These inputs are prepared externally to the PPSUITE software and include traffic flow characteristics, vehicle population, vehicle age, fuel parameters, I/M program parameters and environmental variables. MOVES includes a default national database of meteorology, vehicle fleet, vehicle activity, fuel, and emission control program data for every county. EPA, however, cannot certify that the default

data is the most current or best available information for any specific area. As a result, local data, where available, is recommended for use when conducting a regional conformity analysis. A mix of local and default data is used for this analysis.

The PPSUITE and MOVES processes are executed in batch mode through a menu-driven software platform (CENTRAL). The CENTRAL software allows users to execute runs for a variety of input options and integrates custom MYSQL steps into the process. CENTRAL provides important quality assurance and quality control (QA/QC) steps, including file naming conventions and file storage automation.

Emission rates within MOVES vary significantly by vehicle type. MOVES produces emission rates for thirteen vehicle source input types. The emissions estimation process includes a method to disaggregate the traffic volumes output from SPC's travel demand model to the thirteen vehicle source types. Vehicle type pattern data is used by PPSUITE to distribute the hourly roadway segment volumes among the thirteen vehicle source types. Similar to the 24-hour pattern data, this data contains percentage splits to each source type for every hour of the day. The vehicle type pattern data is developed from several sources including PennDOT truck percentages from PennDOT's statewide Roadway Management System (RMS) database, hourly distributions for trucks and total traffic compiled by PennDOT's Bureau of Planning and Research (BPR), transit data from PennDOT and the National Transit Database Transit Profiles, and school bus registration data from PennDOT's Bureau of Motor Vehicles Registration Database.

Vehicle type percentages are also input into the capacity analysis section of PPSUITE to adjust the speeds in response to truck volume. Larger trucks take up more roadway space compared to an equal number of cars and light trucks, which is accounted for in the speed estimation process by adjusting capacity using information from the Transportation Research Board's fifth edition of the *Highway Capacity Manual*.

Vehicle age distributions are input to MOVES for each of the thirteen source types. These distributions reflect the percentage of the vehicle fleet falling under each vehicle model year (MY), to a maximum age of 31 years. The vehicle age distributions by county were prepared from the most recently available registration download from PennDOT's Bureau of Motor Vehicles Registration Database. Information for light duty vehicles from those sources was used as local data for MOVES inputs. Due to local source data limitations, the internal MOVES national default data information for heavy-duty vehicle characteristics was used for this analysis.

The vehicle population information, including the number and age of vehicles, impacts the forecasted vehicle start and evaporative emissions within MOVES. Similar to vehicle ages, MOVES requires vehicle populations for each of the thirteen source type categories. County vehicle registration data was used to estimate vehicle population for light-duty vehicles, transit buses, and school buses. Other heavy-duty vehicle population values were based on VMT for each source type using the vehicle mix and pattern data discussed previously. PPSUITE automatically applies MOVES default ratios of VMT and source type population (e.g. the

number of miles per vehicle by source type) to the local VMT estimates to produce vehicle population.

Average monthly humidity values as well as monthly minimum and maximum temperature values are consistent with the regional State Implementation Plan (SIP) modeling conducted by DEP.

The MOVES default fuel formulation and fuel supply data was reviewed and updated based on available local volumetric fuel property information. Values were updated for the market penetration rates for gasoline/ethanol blends and for fuel Reid Vapor Pressure (RVP). MOVES default data was used for the remaining parameters.

The default vehicle emissions inspection and maintenance (I/M) program parameters included in MOVES were examined for each county in the SPC region. Necessary changes were made to the MOVES default parameters to match the actual local program. A basic I/M program was begun by Pennsylvania in 1984 and applied to virtually all light-duty gasoline powered cars and trucks newer than the 1967 model year that were registered within designated areas of the state. A computerized analysis of vehicle tailpipe exhaust emissions with the engine idling (idle test) was performed annually. The test was conducted by licensed inspection facilities where repairs on inspected vehicles could also be performed. Within the Southwestern Pennsylvania region, the basic I/M program applies only to pre-1981 model year vehicles registered in four counties (Allegheny, Beaver, Washington and Westmoreland). Estimates of failure rates, test waiver rates, and compliance rates for the basic I/M program are also are specified in the I/M program parameters.

Pennsylvania implemented an enhanced I/M program in 1997 for the Southwestern Pennsylvania region. That program applies to virtually all gasoline powered cars and trucks between model years 1981 and 1995 that are registered in Allegheny, Beaver, Washington and Westmoreland counties. The enhanced I/M program employs a more precise emissions test. As with basic I/M, the test is conducted annually by licensed inspection facilities where repairs to inspected vehicles can also be performed. The test measures tailpipe emissions at two engine speeds. One test is made while the engine is idling and the second test occurs after completion of a 30 second, 2,500 rpm cycle. Estimates of failure rates, test waiver rates and compliance rates for the enhanced I/M program are also specified.

Further enhancements to the I/M program were implemented in 2003 for the Southwestern Pennsylvania region. That new program utilizes On-Board Diagnostics (OBD) technology and applies to 1996 model year and newer gasoline powered cars and light trucks. This annual test is conducted by licensed inspection facilities where repairs to inspected vehicles can also be performed. When a vehicle is taken to a service center or repair shop, the diagnostic trouble codes stored in the vehicle's computer memory are retrieved. The diagnostic trouble codes identify failures, malfunctions, or deterioration of the vehicle's emissions control components. Estimates of failure rates, test waiver rates, and compliance rates for the OBD I/M program are also specified.

Scenarios that specify the enhanced or OBD I/M programs also include an anti-tampering program consisting of a visual inspection of the emissions control system components to detect tampering and other damage. The program mandates the repair or replacement of defective or missing components.

The Pennsylvania Clean Vehicles (PCV) Program, adopted in 1998, incorporates the California Low Emission Vehicle Program (CA LEV, as amended) by reference although it allowed automakers to comply with the National Low Emission Vehicle (NLEV) program as an alternative to this Pennsylvania program until model year (MY) 2006. Beginning with MY 2008, "new" passenger cars and light-duty trucks with a gross vehicle weight rating (GVWR) of 8,500 pounds or less that are sold or leased and titled in Pennsylvania must be certified by the California Air Resources Board (CARB) or be certified for sale in all 50 states. For this program, a "new" vehicle is a qualified vehicle with an odometer reading less than 7,500 miles. DEP and PennDOT worked with the automobile manufacturers, dealers, and other interested business partners and finalized procedures for complying with these requirements. DEP is focusing on its outreach with the manufacturers and dealers on what they can offer for sale and how to certify that the vehicles are compliant. PennDOT's role is to ensure paperwork procedures for title and registrations include these certifications of compliance or that the vehicle owner qualifies for an exemption to the requirements. In all cases, DEP will use information obtained during PennDOT's title and registration process to oversee and audit, as needed, certain vehicle title transactions to determine compliance to the program. The impacts of this program are modeled for all analysis years beyond 2008.

After computing speeds and aggregating VMT and VHT, PPSUITE prepares traffic-related inputs needed to run EPA's MOVES software. Additional required MOVES inputs are prepared externally from the processing software and include temperatures, I/M program parameters, fuel characteristics, vehicle fleet age distributions, and source type population. The MOVES county importer file (movesimporter.xml) is created and run in batch mode. This program converts all data files into the MYSQL format used by the MOVES model. At that point, a MOVES run specification file (*.mrs) is created which specifies options and key data locations for the run. The MOVES run is then executed by PPSUITE in batch mode. MOVES can be executed using either an inventory or rate-based approach. For this analysis, MOVES is applied using the inventory-based approach. Using this approach, actual VMT and vehicle population are provided as inputs to the model; MOVES is responsible for producing the total emissions for the region.

Sample MOVES 2014a data importer files (*.xml) and run specification files (*.mrs) are provided in Appendix C.

VI. Transportation Model Application and Results

Five scenarios were defined by selectively assigning the 2023, 2025, 2026, 2035, and 2045 trip tables described in Section IV to the transportation networks defined in Section III. The highway and transit assignment results were used to develop an emission level for each scenario. The five scenarios included:

1. Existing Year (2023 network, 2023 trips)
2. $PM_{2.5}$ NAAQS Budget Year (2025 network, 2025 trips)
3. TIP Build Year (2026 network, 2026 trips)
4. Interim Year #1 (2035 network, 2035 trips)
5. Long Range Plan (2045 network, 2045 trips)

Highway and transit assignments for each scenario were produced using the methodology described in Section IV. For each scenario, highway assignment summaries were developed and stratified by county and functional class. Separate summaries were developed for each nonattainment area. These summaries include vehicle miles of travel (VMT) and weighted average speed. For purposes of the conformity process, assignment summaries for the network centroid connectors served as a partial surrogate for local (non-network) travel characteristics. An estimate of intrazonal travel was also developed from each highway assignment and included in the local travel summary. Transit assignment summaries were used to estimate bus vehicle miles and bus average speed for peak and off-peak conditions. Peak and off-peak vehicle miles and speed of automobile trips to park-and-ride facilities were also estimated from transit assignments. The VMT that was output from highway assignments was seasonally adjusted, using adjustment factors developed by PennDOT, to appropriately represent a typical day for each analysis month.

While not explicitly addressed in the conformity assessment, implementation of the Transportation Demand Management (TDM) strategies defined in Figure 2 can produce modest reductions (2 to 3 percent) in forecasted regional VMT. Funding for TDM strategies is included as a line item in the 2045 Plan under the Traffic Operations and Safety Investment Strategy.

Funding in the draft 2023-2026 TIP is programmed for the specific TDM projects listed below:

- Transportation Management Association Funding (2023-2024) –ACTA, OTMA, PDP, $1,500,000 (MPMS#28172)
- TMA TDM Programming & Outreach – SPC, $1,500,000 (MPMS#117268)
- Pittsburgh Bus Rapid Transit – PAAC, $119,500,000 (MPMS#110895)
- Pittsburgh BRT Establish Bus & Bike Lanes – PAAC, $2,919,000 (MPMS#114280)
- Pittsburgh BRT Downtown Improvements – PAAC, $6,423,000 (MPMS#114283)
- Park-N-Ride Space Availability System – PAAC, $293,750 (MPMS#115279)
- Ross Park-N-Ride Expansion – PAAC, $9,660,000 (MPMS#100307)
- Carnegie Park-N-Ride Expansion – PAAC, $3,588,390 (MPMS#106594)
- Allegheny River Green Boulevard – City of Pittsburgh, $3,500,000 (MPMS#114290)
- Bus Shelters/Mobility Hubs – City of Pittsburgh, $3,240,000 (MPMS#114294)
- Pittsburgh Safe Routes to School Coordinator – City of Pittsburgh, $$220,000 (MPMS#111422)
- Rt.68 Park and Ride Program - BTA, $3,750,000 (MPMS#114742)
- SR 356 Park-N-Ride – PennDOT District 10-0, $280,000 (MPMS#116127)
- Bus Shelters – Washington Co. Transportation Authority, $250,000 (MPMS#118156)

The total cost identified in the 2023-2026 TIP for these fourteen projects is $156,624,140. A similar level of funding for TDM projects is available for programming on future TIPs from the Traffic Operations and Safety line item in the 2045 Plan.

The TDM strategies in Figure 2 include regional transit and ridesharing promotional programs, compressed work week and telecommuting, as well as direct subsidies by employers to employees who commute by transit, carpool or vanpool.

Information from SPC's travel model was input into the MOVES 2014a model and used in the calculation of emissions for each nonattainment and maintenance area for each analysis year. The resulting VMT, average speed, and emissions are presented in Section VII (Tables 14 through 17).

Summaries of VMT and emissions by county and roadway type appear in Appendix D for each $PM_{2.5}$ and 8-hour ozone nonattainment and maintenance area. The summaries were compiled from MOVES model outputs.

Travel Demand Management Strategies

Strategy	Example
Increased efforts to promote ridesharing and transit	- Ride matching services - Preferential (more convenient) parking - Flexible work schedules
Programs to deter single occupant vehicle work trips	- Employer-sponsored commuter benefit programs for employees who carpool, vanpool, and/or ride transit to work
Flexible Work Hours, Staggered Work Hours, Compressed Work Weeks	- Aggressive promotion with region's employers
Telecommuting	- Work with employers and government agencies to promote concept and infrastructure
Intelligent Transportation Systems (ITS)	- Work to implement projects that provide transportation system users with better information on existing system conditions, congestion and travel choices

Figure 2 **SPC July 2022**

VII. Conformity Determination

$PM_{2.5}$ Nonattainment Areas

Conformity determinations for transportation plans and programs under the $PM_{2.5}$ NAAQS are based, as appropriate, on build/no-build analyses, comparisons to an emissions budget, and/or comparison to emissions levels from a base year.

As described in Section II, quantitative analysis of emissions under the 1997 Annual $PM_{2.5}$ NAAQS and the 2006 daily $PM_{2.5}$ NAAQS is not required for the Liberty-Clairton nonattainment area.

The appropriate conformity test for the Indiana County portion of the Johnstown nonattainment area under the 1997 Annual $PM_{2.5}$ NAAQS and the 2006 daily $PM_{2.5}$ NAAQS is a comparison of future year emissions to approved $PM_{2.5}$ and NOx MVEBs. This analysis should demonstrate reduced emissions in a future year under the build condition when compared with the appropriate emissions budget.

The appropriate conformity test for the Pittsburgh – Beaver Valley nonattainment area under the 1997 Annual $PM_{2.5}$ NAAQS and the 2006 daily $PM_{2.5}$ NAAQS is a comparison of future year emissions to approved $PM_{2.5}$ and NOx MVEBs. This analysis should demonstrate reduced emissions in a future year under the build condition when compared with the appropriate emissions budget.

The appropriate conformity test for the Allegheny County nonattainment area under the 2012 Annual $PM_{2.5}$ NAAQS is a comparison of future year emissions to approved $PM_{2.5}$ and NOx MVEBs. This analysis should demonstrate reduced emissions in a future year under the build condition when compared with the Allegheny County inventory emissions.

Pittsburgh – Beaver Valley $PM_{2.5}$ Nonattainment Area

As noted in Section II, MVEBs have been established for use in conformity assessments for the 1997 Annual $PM_{2.5}$ and 2006 daily $PM_{2.5}$ NAAQS for the Pittsburgh – Beaver Valley $PM_{2.5}$ nonattainment area. The $PM_{2.5}$ and NOx emission factors from the MOVES model, in combination with the highway and transit assignment results from the five scenarios described in Section III, were used to develop the annual emission levels for the nonattainment area.

The total **annual** VMT, and the $PM_{2.5}$ and NOx emission estimates and MVEB values for the nonattainment area are presented in Table 14 for each analysis year. The estimated emissions and MVEB values are plotted on Figures 3 ($PM_{2.5}$) and 4 (NOx). VMT and emissions by county and facility type for each scenario are presented in Appendix D.

Conformity for the Pittsburgh – Beaver Valley nonattainment area under the 1997 Annual $PM_{2.5}$ and 2006 daily $PM_{2.5}$ standard is demonstrated if future **annual** emissions are less than MVEB levels. In all analysis years, as Table 14 and Figures 3 and 4 demonstrate, future annual

emissions are less than the MVEB. The analysis shows that the criteria for conformity under the 1997 Annual $PM_{2.5}$ and 2006 daily $PM_{2.5}$ standard have been satisfied.

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 2045 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan.

Indiana County Portion of the Johnstown $PM_{2.5}$ Nonattainment Area

As noted in Section II, emission budgets have been established for use in conformity assessments for the 1997 Annual $PM_{2.5}$ and 2006 daily $PM_{2.5}$ NAAQS for the Indiana County portion of the Johnstown $PM_{2.5}$ nonattainment area. The $PM_{2.5}$ and NOx emission factors from the MOVES model, in combination with the highway and transit assignment results from the five scenarios described in Section III, were used to develop the annual emission levels for the nonattainment area.

The total **annual** VMT, and the $PM_{2.5}$ and NOx emission estimates and MVEB values for the nonattainment area are presented in Table 15 for each analysis year. The estimated emissions and MVEB values are plotted on Figures 5 ($PM_{2.5}$) and 6 (NOx). VMT and emissions by facility type within the nonattainment portion of the county for each scenario are presented in Appendix D.

Conformity for the Indiana County portion of the Johnstown $PM_{2.5}$ nonattainment area is demonstrated if future **annual** emissions are less than MVEB levels. In all analysis years, as Table 15 and Figures 5 and 6 demonstrate, future annual emissions are less than the MVEB. The analysis shows that the criteria for conformity under the 1997 Annual $PM_{2.5}$ and 2006 daily $PM_{2.5}$ standard have been satisfied.

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 2045 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan.

Allegheny County $PM_{2.5}$ Nonattainment Area

As noted in Section II, MVEBs have been established for use in conformity assessments for the 2012 Annual $PM_{2.5}$ NAAQS for the Allegheny County $PM_{2.5}$ nonattainment area. The VOC and NOx emission factors from the MOVES model, in combination with the highway and transit assignment results from the five scenarios described in Section III, were used to develop the annual emission levels for the nonattainment area.

The total **annual** VMT, and the $PM_{2.5}$ and NOx emission estimates, and MVEB values for the nonattainment area are presented in Table 16 for each analysis year; and emission estimates and MVEB values are plotted on Figures 7 ($PM_{2.5}$) and 8 (NOx). VMT and emissions by facility type for each scenario are presented in Appendix D.

Conformity for the Allegheny County nonattainment area under the 2012 Annual $PM_{2.5}$ standard is demonstrated if future **annual** emissions are less than the MVEB values. In all analysis years, as Table 16 and Figures 7 and 8 demonstrate, future annual emissions are less than the MVEBs. The analysis shows that the criteria for conformity under the 2012 Annual $PM_{2.5}$ standard have been satisfied.

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 2045 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan.

8-Hour Ozone Nonattainment and Maintenance Areas

Conformity determinations for transportation plans and programs under the 8-hour ozone NAAQS are based, as appropriate, on build/no-build analyses, comparisons to an emissions budget, and/or comparison to emissions levels from a base year.

The appropriate test for the Pittsburgh – Beaver Valley 8-hour ozone nonattainment area is a comparison of future year emissions to established VOC and NOx emissions budgets. The analysis should demonstrate reduced emissions in a future year under the build condition when compared with the appropriate emissions budget.

As described in Section II, EPA guidance does not require regional emissions modeling in the conformity demonstration for the Greene County 8-hour ozone nonattainment area and the Indiana County portion of the Clearfield and Indiana counties 8-hour ozone nonattainment area.

Pittsburgh – Beaver Valley 8-Hour Ozone Nonattainment Area

As noted in Section II, MVEBs have been established for use in conformity assessments for the 2008 8-hour ozone NAAQS for the Pittsburgh – Beaver Valley ozone nonattainment area. The VOC and NOx emission factors from the MOVES model, in combination with the highway and transit assignment results from the five scenarios described in Section III, were used to develop the annual emission levels for the nonattainment area.

The daily VMT, and the daily VOC and NOx emission estimates and MVEB values for the nonattainment area are presented in Table 17 for each analysis year. The estimated emissions and MVEB values are plotted on Figures 9 (VOC) and 10 (NOx). VMT and emissions by county and facility type for each scenario are presented in Appendix D.

Conformity for the Pittsburgh – Beaver Valley nonattainment area under the 2008 8-hour ozone NAAQS is demonstrated if future daily emissions are less than MVEB levels. In all analysis years, as Table 17 and Figures 9 and 10 demonstrate, future annual emissions are lower than the MVEB. The analysis shows that the criteria for conformity under the 2008 8-hour ozone NAAQS have been satisfied.

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 2045 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan.

Indiana and Greene Counties 8-Hour Ozone Nonattainment Areas

As noted in Sections I and II, the Greene County 8-hour ozone nonattainment area and the Indiana County portion of the Clearfield and Indiana counties 8-hour ozone nonattainment area were designated as nonattainment areas under the 1997 8-hour ozone NAAQS, but were designated as attainment areas under the 2008 8-hour ozone NAAQS. Under those circumstances, EPA's November, 2018 guidance does not require regional emissions modeling as part of the conformity demonstration. Other conformity criteria still must be satisfied, including demonstration of fiscal constraint, public review, and implementation of TCMs in the SIP. This report demonstrates that the applicable conformity criteria for these two areas have been satisfied.

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 2045 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan.

Allegheny County Carbon Monoxide Maintenance Area

As noted in Section II, EPA approved a second limited carbon monoxide maintenance plan for this area which demonstrates that the Pittsburgh area will continue to maintain the 1971 CO NAAQS. Under limited maintenance plans, EPA policy does not require a carbon monoxide

emission budget test for conformity determinations. Emission budgets in limited carbon monoxide maintenance plan areas are considered to be not constraining during the maintenance period. The applicable conformity criteria for carbon monoxide have, therefore, been satisfied.

Liberty – Clairton PM_{10} and $PM_{2.5}$ Maintenance Areas

As noted in Section II, EPA has determined that PM_{10} and $PM_{2.5}$ nonattainment in the Liberty – Clairton area stems primarily from industrial sources in the area and not from mobile sources. This nonattainment area was not required to have PM_{10} or $PM_{2.5}$ transportation conformity budgets. Because the PM_{10} and $PM_{2.5}$ violations were primarily caused by industrial stationary sources and motor vehicles were not an important contributor to the nonattainment problem, no additional quantitative analysis for transportation-related PM_{10} or $PM_{2.5}$ impacts is required for conformity purposes. Other conformity criteria still must be satisfied, including demonstration of fiscal constraint, public review, and implementation of TCMs in the SIP. This report demonstrates that the applicable conformity criteria for the Liberty – Clairton PM_{10} and $PM_{2.5}$ Maintenance Areas have been satisfied.

Qualitative Analysis of Non-Codable Regionally Significant Projects

Due to their nature, a number of regionally significant projects in the 2023-2026 TIP and 2045 Plan could not be coded on Cube Voyager-based transportation networks and were therefore not included in the quantitative assessment which was used to develop the information in Tables 14 through 17. Those excluded projects fall into two general categories: 1) highway/bridge relocations with no increase in capacity; and 2) projects like small, isolated park-and-ride lots, Intermodal Transportation Centers, and traffic signal coordination projects. To include the non-codable, regionally significant projects in the conformity assessment required a separate, qualitative assessment of their impacts on regional air quality.

Some of the regionally significant projects identified in the 2023-2026 TIP and the 2045 Plan involve new highway facilities on new right-of-way. For most of the projects of that type there was enough of a difference between the build and no-build conditions that the difference (change in capacity, miles of highway, etc.) could be reflected, and coded, onto the Cube Voyager-based highway networks. A few of the highway projects that involve new right-of-way would simply replace a deficient or unsafe facility with a comparable facility (no change in length or capacity) constructed to current design standards in a new location. The design of those new facilities would include features such as easier grades and curves, wider lanes, better sight distance and wider shoulders. Those design improvements cannot be reflected in the quantitative analysis. Those design elements would, nevertheless, tend to result in fewer accidents, reduce delay and promote a more uniform travel speed on the facility. Those kinds of improvements in traffic operations generally have a positive effect on emissions. Implementation of the "non-codable" highway and bridge relocation projects should not worsen the region's air quality.

A number of small, isolated park-and-ride lots, Intermodal Transportation Centers, and traffic signal coordination projects are identified in the 2045 Plan and the 2023-2026 TIP. The 2045 Plan also includes strategies to implement projects of these types. The identified TIP projects

were assessed by SPC for their emissions reduction potential. An approved evaluation methodology, developed by PennDOT for determining eligibility for CMAQ (Congestion Mitigation and Air Quality Program) funding, was used by SPC in those project-level assessments. Regionally significant projects assessed with the CMAQ model which could not be coded on Cube Voyager-based transportation networks are listed below. The CMAQ model assessments were conducted with project information provided by the project sponsors. Each of the projects tested with the CMAQ model demonstrated a potential to reduce ozone and $PM_{2.5}$ precursor emissions. The effect on regional emissions from implementation of these projects was not included in the quantitative analysis detailed on Tables 14 through 17 and Figures 3 through 10. Nevertheless, implementation of the regionally significant, non-codable projects identified in the 2045 Plan and the 2023-2026 TIP will not worsen the region's air quality.

Non-Codable Regionally Significant Projects

A. Programmed on 2023-2026 TIP for Completion by 2026

Liberty Avenue Safety Improvements - MPMS#106773 [City of Pittsburgh – Allegheny Co.]
Smart Spines (ATCMTD) – MPMS#109691 [City of Pittsburgh - Allegheny Co.]
I-376 Parkway East Active Traffic Management – MPMS#94651 [Allegheny Co.]
CBD Signal Upgrade Phase-4 – MPMS#63378 [City of Pittsburgh –Allegheny Co.]
Penn Avenue Signal Improvements – MPMS#114288 {City of Pittsburgh - Allegheny Co.]
PAAC-Transit Signals BRT - MPMS#100316 [City of Pittsburgh – Allegheny Co.]
PAAC-Carnegie Park-N-Ride - MPMS#106594 [Allegheny Co.]
PAAC-Ross Park-N-Ride - MPMS#100307 [Allegheny Co.]
Pittsburgh BRT-Establish Bus and Bike Lanes – MPMS#114280 [City of Pittsburgh – Allegheny Co.]
Pittsburgh BRT-Downtown Improvements – MPMS#114283 [City of Pittsburgh – Allegheny Co.]
SR 3003 Washington Pike Improvements – MPMS#114287 [Allegheny Co.]
SR 51 Clairton Blvd. Adaptive Traffic Signal System – MPMS#110369 [Allegheny Co.]
SR 3069 Washington Rd. Adaptive Traffic Signal System – MPMS#110374 [Allegheny Co.]
D11 4c SINC-UP Project – MPMS#100382 [Allegheny Co.]
SR 30 @ SR 48 Signal Improvement w/D12 – MPMS#116655 [Allegheny Co.]
PAAC – Wilkinsburg Transit Center – MPMS#117269 [Allegheny Co.]
PAAC – Transit Access Improvements – MPMS#117275 [Allegheny Co.]
PPC – Marine & Landside Equipment Repower Program – MPMS#117270 [Allegheny Co.]
SR 50 Signal Upgrades – MPMS#117271 [Allegheny Co.]
Frankstown Avenue Signal Improvement – MPMS#117272 [Allegheny Co.]
SR 8 Signal Upgrades – MPMS#117273 [Allegheny Co.]
SR 286 Signal Upgrades – MPMS#117274 [Allegheny Co.]
Monaca Gateway MTF-TIIF-Smart – MPMS#112022 [Beaver Co.]
SR 68 Park-N-Ride Program - MPMS#114742 [Butler Co.]
SR 68 Corridor Improvements - MPMS#106568 [Butler Co.]
SR 356 Park-N-Ride – MPMS#116127 [Butler Co.]
SR 356 Moraine Pt. Signals – MPMS#110462 [Butler Co.]
D10 4c SINC-UP Project – MPMS#112713 [Butler Co.]
Jefferson-Cunningham Streets Signal Improvements-MPMS#117264 [Butler Co.]
Sugar Run Road Intersection – MPMS#96659 [Greene Co.]
SR 119 Connellsville Signals – MPMS#110402 [Fayette Co.]
SR 88 Charleroi – MPMS#110399 [Washington Co.]
PA 18 – Main St. to Third St. – MPMS#114561 [Washington Co.]
SR 19 Corridor Signal & Safety Upgrades – MPMS#107432 [Washington Co.]
Valleybrook Rd. @ Bebout Rd. Intersection – MPMS#109242 [Washington Co.]
Bebout Rd. @ E. McMurray Rd. Intersection – MPMS#109025 [Washington Co.]
119 SW Greensburg CMAQ – MPMS#114560 [Westmoreland Co.]

30 Hempfield on Corridor 95 – MPMS#114563 [Westmoreland Co.]
D12 4c SINC-UP Project – MPMS#114210 [Westmoreland Co.]
US 19 Adaptive Signals CMAQ Supplement – MPMS#117943 [Washington Co.]

B. Listed on 2045 Long Range Plan for Completion after 2026

SR 286 Improvements Ph-3 Widening (Sandune Dr. to SR 380) – MPMS#27505 [Allegheny Co.]
PA 50–I-79 to Thoms Run Road – MPMS#109640 [Allegheny Co.]
SR 50 Upgrades - Thom's Run Road to Mayer St. - MPMS#28010 [Allegheny Co.]
City of Pittsburgh Traffic Signal Updates Phase-5 – No MPMS# [City of Pittsburgh – Allegheny Co.]
SR 21 Operations & Safety – No MPMS# [Fayette Co.]
SR 119 Operations & Safety – No MPMS# [Fayette Co.]
SR 19 Corridor and Intersection Improvements – No MPMS# [Washington Co.]
I-70 Interstate Detour Improvement Plan & Implementation – No MPMS# [Washington Co.]
I-79 Interstate Detour Improvement Plan & Implementation – No MPMS# [Washington Co.]
SR 1002 McMurray Road (SR19 to Morganza Road) – No MPMS# [Washington Co.]
SR 1025 Weavertown Road Corridor (SR 19 to Morganza Road) – No MPMS# [Washington Co.]
SR 1032 Southpoint Blvd. (I-79 to Morganza Road) – No MPMS# [Washington Co.]
SPC Regional Traffic Signal Program Cycle V – MPMS#106593 [10-County Region]

Conclusion

In conclusion, the region's 2023-2026 TIP and amended 2045 Plan are in conformance with the federal Clean Air Act, as amended. This finding of conformity is based upon both quantitative and qualitative analyses designed to address the conformity criteria outlined in EPA's Transportation Conformity Rule for the nonattainment and maintenance areas within SPC's planning region designated under the 1997 8-hour ozone NAAQS, the 2008 8-hour ozone NAAQS, the 2006 daily $PM_{2.5}$ NAAQS, the 1997 Annual $PM_{2.5}$ NAAQS, the 2012 Annual $PM_{2.5}$ NAAQS, the 1987 PM_{10} NAAQS, and the 1971 carbon monoxide NAAQS. This report has documented the process used by SPC in the fall of 2020 to make its finding of conformity for amendments to the 2023-2026 Transportation Improvement Program and the 2045 Plan.

SPC's conformity process demonstrates that the 2023-2026 TIP and the amended 2045 Plan satisfy all applicable conformity criteria under the 1997 8-hour ozone NAAQS, the 2008 8-hour ozone NAAQS, the 2006 daily $PM_{2.5}$ NAAQS, the 1997 Annual $PM_{2.5}$ NAAQS, the 2012 Annual $PM_{2.5}$ NAAQS, the 1987 PM_{10} NAAQS, and the 1971 carbon monoxide NAAQS.

Conformity Assessment

Pittsburgh-Beaver Valley PM2.5 Nonattainment Area

Annual VMT and Emissions (Tons/Year)

Entire Nonattainment Area

	2023	2025	2026	2035	2045
Annual VMT	17,209,308,117	17,386,430,504	17,459,292,754	17,961,831,285	18,681,514,664
PM 2.5 MVEB	700.000	537.000	537.000	537.000	537.000
PM 2.5	434.959	381.939	360.401	251.732	222.061
NOx MVEB	17,584.000	10,709.000	10,709.000	10,709.000	10,709.000
NOx	8,561.893	6,941.118	6,222.638	3,549.807	3,159.998

TABLE 14 **SPC July 2022**

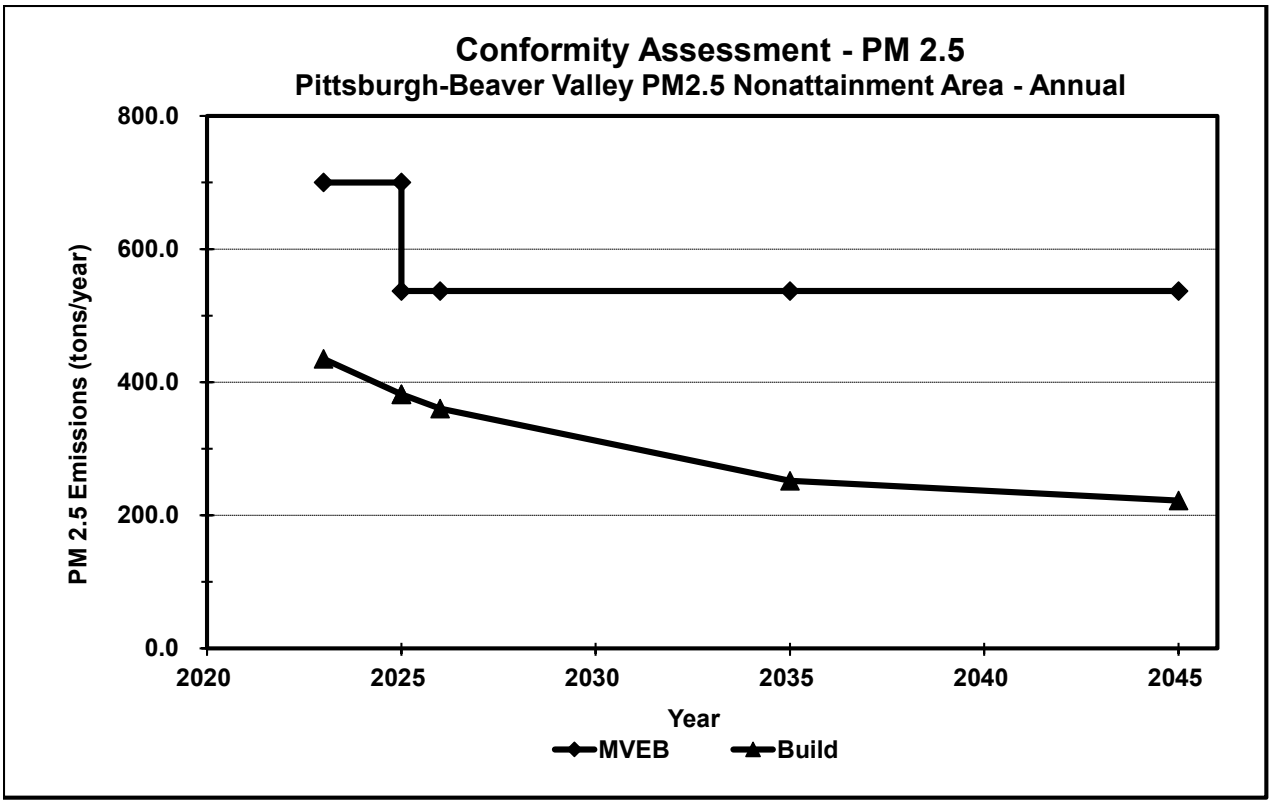


Figure 3 SPC July 2022

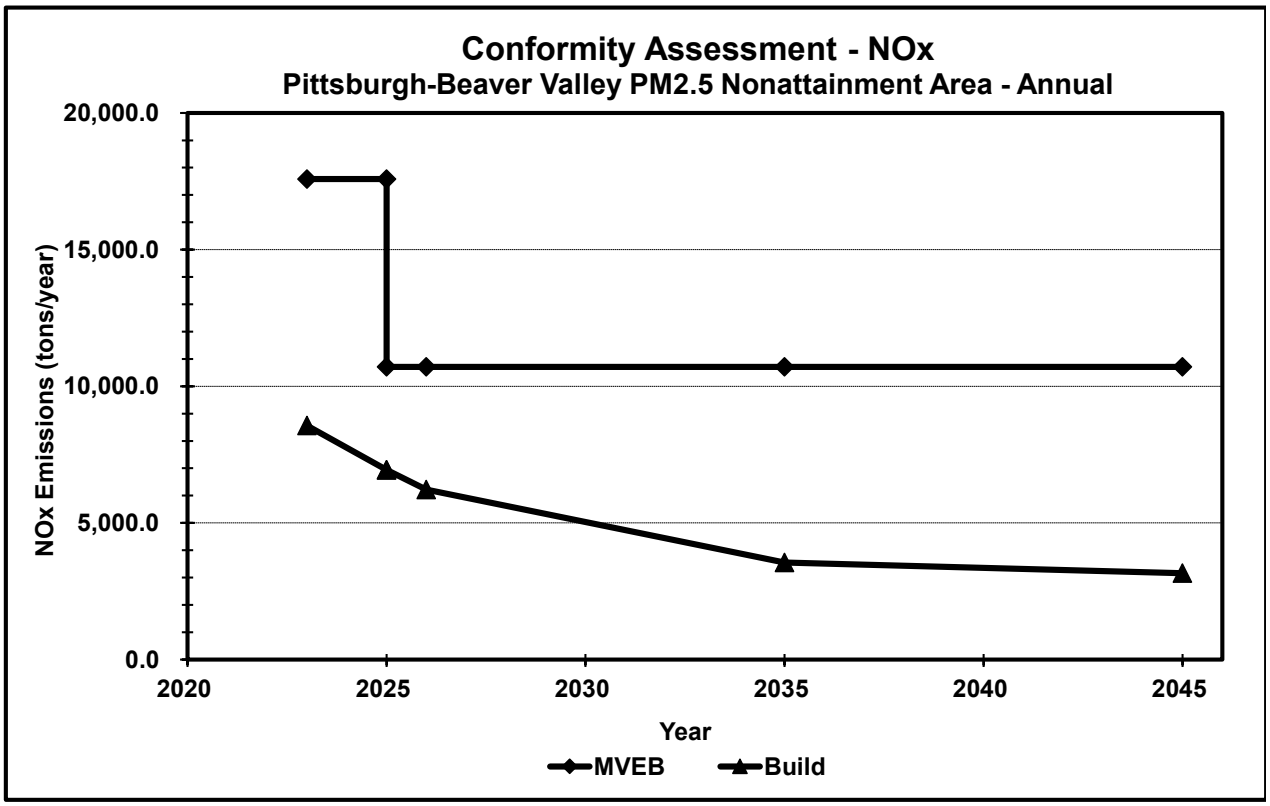


Figure 4 SPC July 2022

Conformity Assessment

Indiana County Portion of Johnstown PM2.5 Nonattainment Area

Annual VMT and Emissions (Tons/Year)

Indiana County Portion of Nonattainmnet Area

	2023	2025	2026	2035	2045
Annual VMT	150,396,805	148,892,549	149,051,067	153,279,723	156,245,918
PM 2.5 MVEB	7.950	4.380	4.380	4.380	4.380
PM 2.5	3.219	2.708	2.520	1.584	1.315
NOx MVEB	238.500	120.980	120.980	120.980	120.980
NOx	88.521	69.234	61.316	32.522	27.450

TABLE 15 **SPC July 2022**

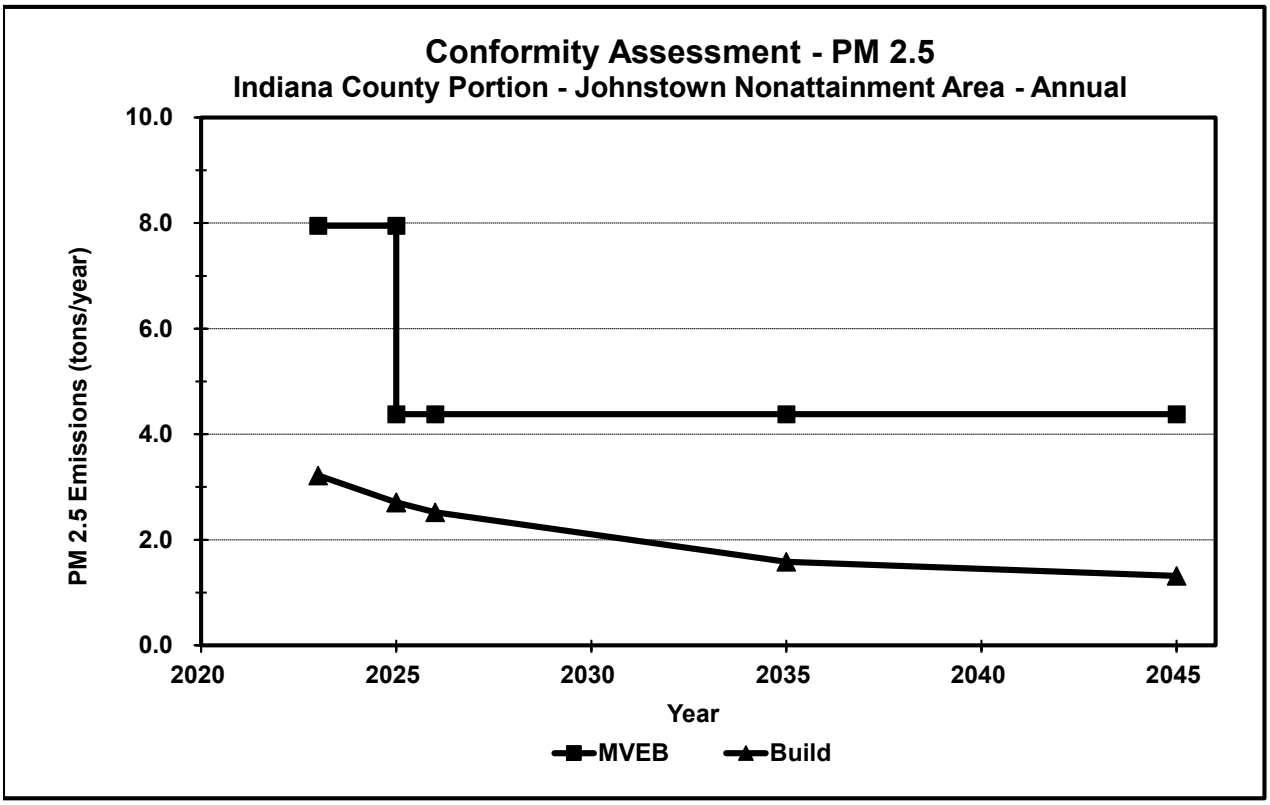


Figure 5 SPC July 2022

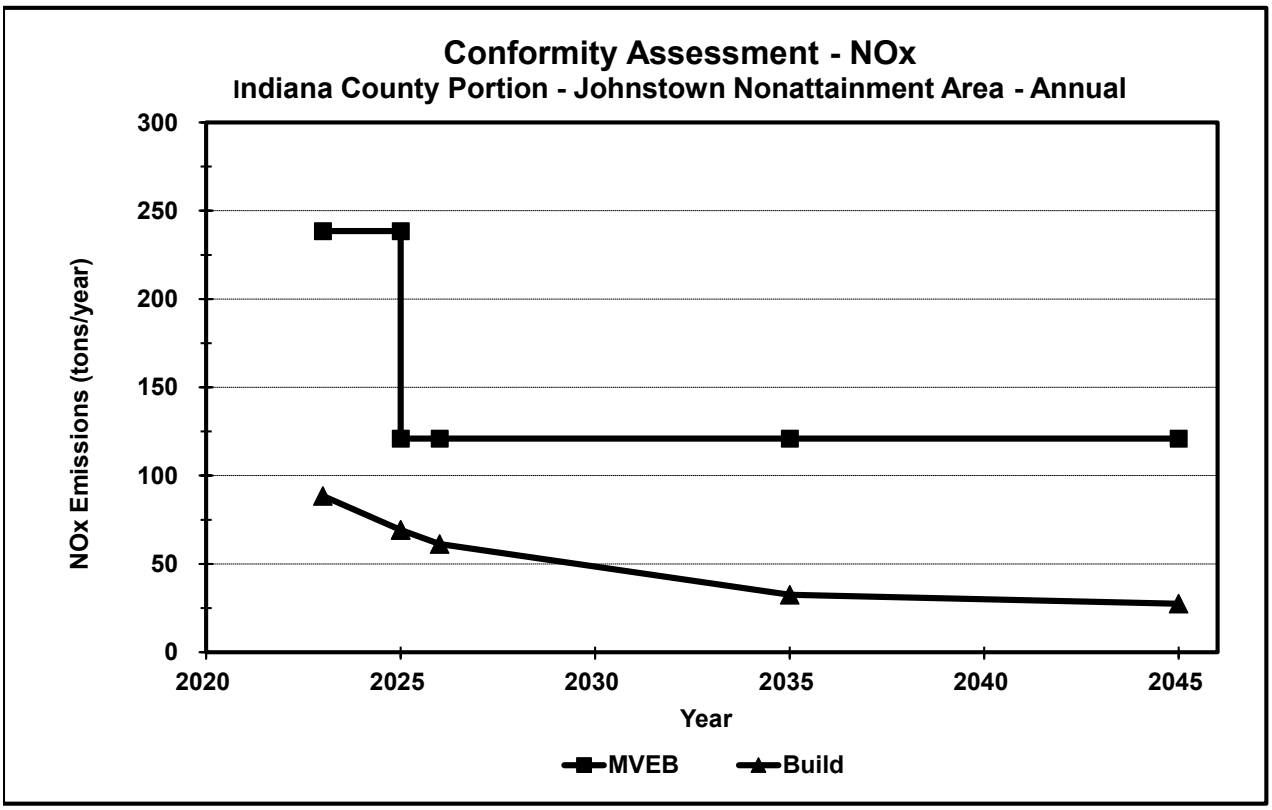


Figure 6 SPC July 2022

Conformity Assessment

Allegheny County PM2.5 Nonattainment Area

Annual VMT and Emissions (Tons/Year)

Entire Nonattainment Area

	2023	2025	2026	2035	2045
Annual VMT	8,393,024,912	8,506,118,411	8,551,769,869	8,823,148,711	9,251,826,225
PM 2.5 MVEB	266.000	266.000	266.000	266.000	266.000
PM 2.5	221.287	196.122	185.816	133.643	118.930
NOx MVEB	5,708.000	5,708.000	5,708.000	5,708.000	5,708.000
NOx	3,958.228	3,208.618	2,865.064	1,610.123	1,430.343

TABLE 16 **SPC July 2022**

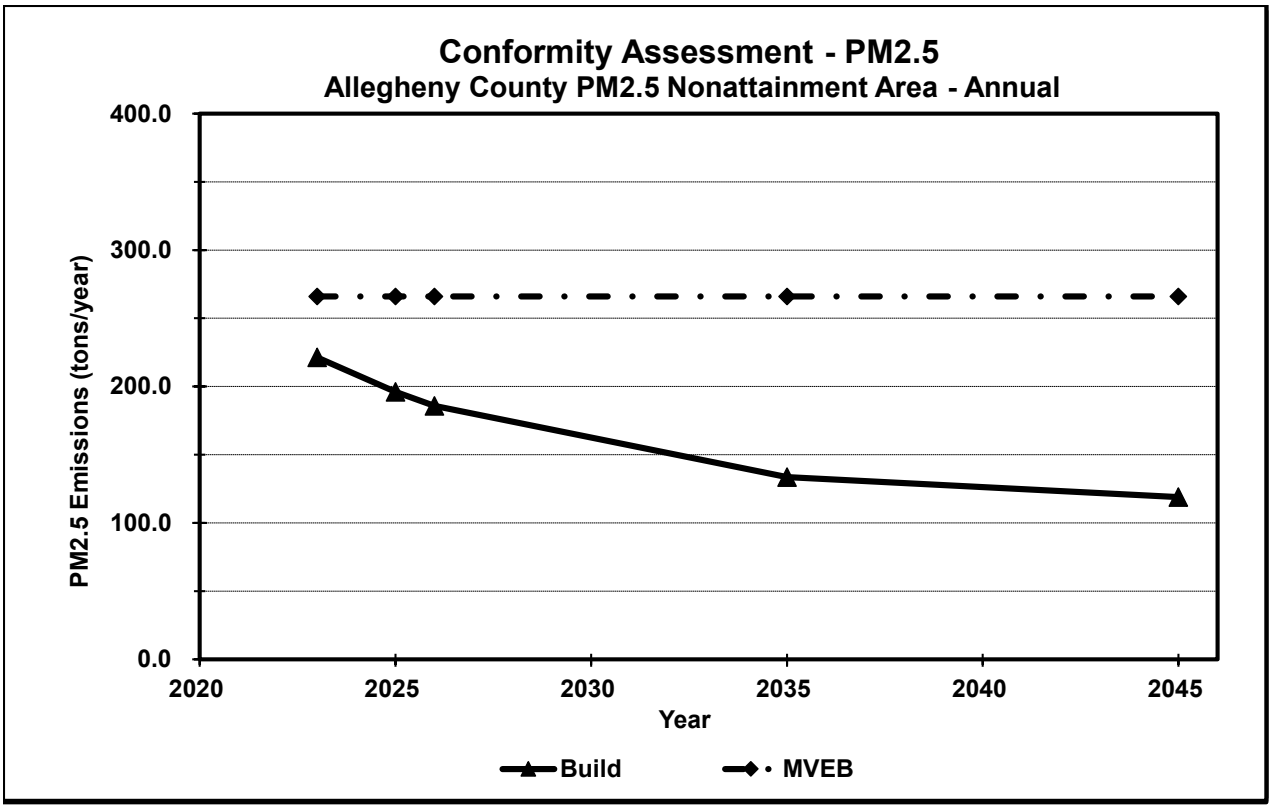


Figure 7 SPC July 2022

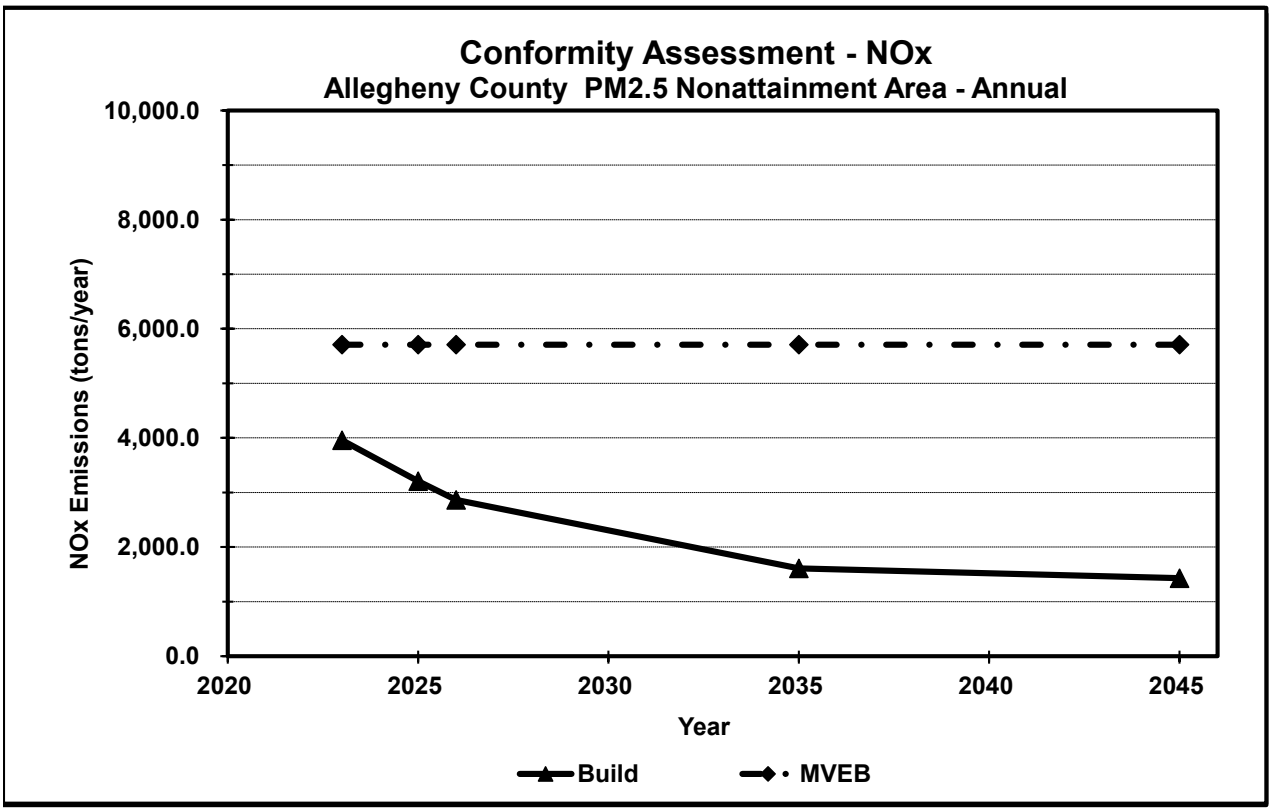


Figure 8 SPC July 2022

8-Hour Ozone Conformity Assessment

Pittsburgh-Beaver Valley

Daily VMT and Emissions (Tons/Day)

	2023	2025	2026	2035	2045
Daily VMT	61,918,801	62,503,488	62,750,926	64,437,247	66,871,499
VOC MVEB	45.680	45.680	45.680	45.680	45.680
VOC	17.828	15.373	13.957	9.724	8.090
NOx MVEB	77.090	77.090	77.090	77.090	77.090
NOx	26.615	21.430	19.122	10.404	9.022

TABLE 17 **SPC July 2022**

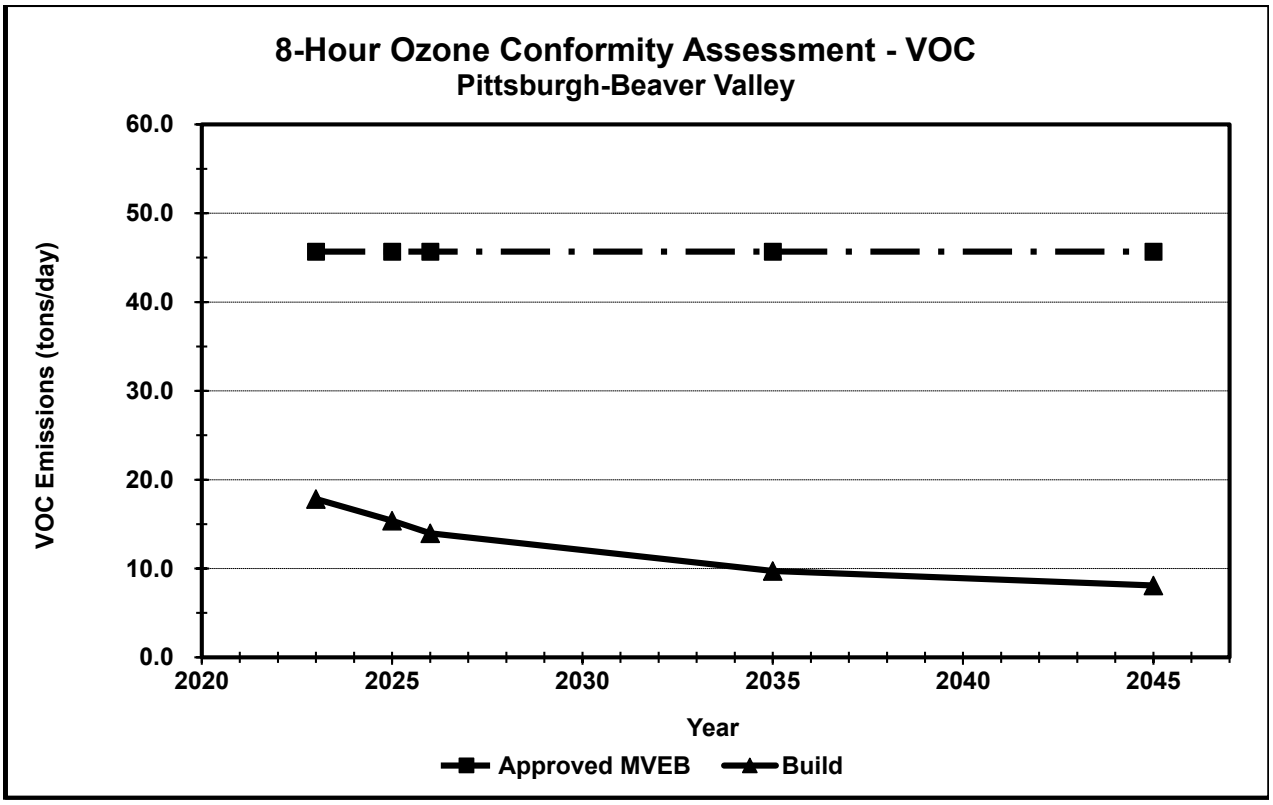


Figure 9 SPC July 2022

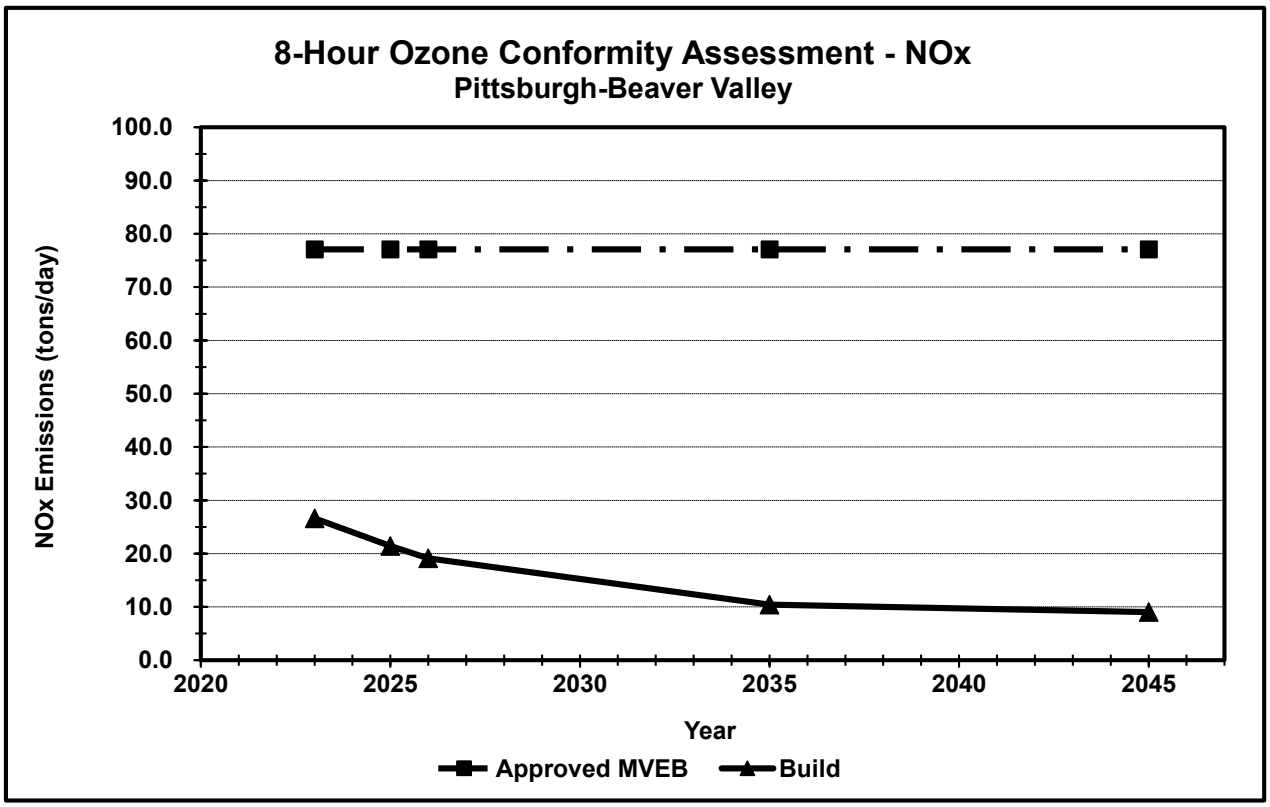


Figure 10 SPC July 2022

VIII. Public Review and Comment

The draft *Air Quality Conformity Determination for the Pittsburgh Transportation Management Area* was available for public review and comment from May 9, 2022 through June 7, 2022, concurrent with the public comment period for the region's draft *2023-2026 Transportation Improvement Program (TIP)*, updates to the 2045 Long Range Transportation Plan *SmartMoves For a Changing Region*, and the draft report – *Environmental Justice Benefits and Burdens Assessment*. Electronic versions of these documents were available online at www.spcregion.org.

Three virtual public meetings, and one in-person meeting were held that provided an overview of the draft documents, updates on project advancement, and opportunities for the public to ask questions and submit comments. A recording of each meeting was posted to SPC's website following the meeting.

Written comments were accepted at the SPC offices during the public review and comment period. Comments were also accepted via an online comment form, e-mail, and fax. For individuals without access to the internet, paper copies of draft materials were mailed upon request.

Full documentation of the public review and comment period is on file at the SPC offices, including copies of legal notices, newspaper advertisements, SPC webpage text, public meeting recordings and summaries, all written testimony received by SPC, a summary of all comments received during the public review period, and SPC's responses to those comments.

SPC did not receive any public comment on the conformity assessment.

Minor modifications were made to the 2023-2026 TIP and Long Range Plan Update as a result of public comment. No revisions to the conformity process or the conformity findings were needed as a result of those TIP and Plan modifications.

SPC, as the MPO for the Southwestern Pennsylvania region, formally acted at its June 27, 2022 meeting to make the finding of conformity, required under EPA's Transportation Conformity Rule, for the 2023-2026 Transportation Improvement Program for Southwestern Pennsylvania and for the updated 2045 Transportation Plan for Southwestern Pennsylvania.

Copies of SPC Resolutions 5-22 and 7-22 are included as Appendix F. Resolution 5-22 finds that the 2023-2026 TIP and the updated 2045 Transportation Plan conform with the requirements of the Clean Air Act (as amended), with the finding of conformity based upon the criteria outlined in EPA's Transportation Conformity Rule. Through Resolution 7-22, SPC adopted the 2023-2026 TIP and the region's updated fiscally constrained 2045 Long Range Transportation Plan.

APPENDIX A

Identification of Exempt and Regionally Significant Projects
Included in the 2023-2026 TIP

Project Exempt Codes and Classification Codes

The EPA Transportation Conformity Rule (40 CFR Part 93) cites a number of project types which may be excluded from the regional emissions analysis required to determine conformity. Because of their nature, the exempt projects will not affect the outcome of regional emissions analysis, nor will they add substance to the analysis.

A standardized system of codes was cooperatively developed by Pennsylvania's MPOs and PennDOT to document a project's exempt status and to classify regionally significant projects. The exempt project types are listed in the Transportation Conformity Rule (40 CFR 93 Section 126 Tables 2 and 3) The exempt codes and project classification codes are defined on pages A–2 and A–3 of this report.

The remainder of Appendix A contains a one-line summary of every highway, transit, and Pennsylvania Turnpike project identified on the 2023-2026 TIP within SPC's 10-county region. Up to two codes appear for each project under the Exempt Codes heading. The code on the left is the project's exempt code. The code on the right is the project's classification status code. The projects for which no codes appear are the non-exempt, regionally significant TIP projects which were assessed for this conformity determination. These projects are described more fully in the 2023-2026 TIP. They are also listed in Figure 1 along with the non-exempt, regionally significant projects that appear on the 2045 Long Range Plan Update.

Appendix B contains a brief summary and exempt codes for every highway, transit, and Pennsylvania Turnpike project identified on the fiscally constrained portion of the 2045 Plan Update within SPC's 10-county region.

Project Exempt Codes and Classification Codes

Project Exempt Code

Blank	Project is not exempt
——	Project is in an attainment area

Project Classification Code

Blank	Regionally significant
EX	Exempt
NA	Project is in an attainment area
NS	Not exempt, but not regionally significant

Safety

S1	Railroad/Highway Crossing
S2	Projects that correct, improve, or eliminate a hazardous location or feature
S3	Safer non-Federal-aid system roads
S4	Shoulder improvements
S5	Increasing sight distance
S6	Highway safety improvement program implementation
S7	Traffic control devices and operating assistance other than signalization projects
S8	Railroad/highway crossing warning devices
S9	Guardrails, median barriers, crash cushions
S10	Pavement resurfacing and/or rehabilitation
S11	Pavement marking
S12	Emergency relief (23 U.S.C. 125)
S13	Fencing
S14	Skid treatments
S15	Safety roadside rest areas
S16	Adding medians
S17	Truck climbing lanes outside of urbanized area
S18	Lighting improvements
S19	Widening narrow pavements or reconstructing/rehabilitating bridges (no additional travel lanes)
S20	Emergency truck pullovers

Mass Transit

M1	Operating assistance to transit agencies
M2	Purchase of transit support vehicles
M3	Rehabilitation of transit vehicles
M4	Purchase of office, shop, and operating equipment for existing transit facilities
M5	Purchase of operating equipment for transit vehicles (e.g., radios, fareboxes, lifts, etc.)
M6	Construction or renovation of power, signal, and communications systems
M7	Construction of small transit passenger shelters and information kiosks
M8	Reconstruction or renovation of transit buildings and structures
M9	Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way
M10	Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet
M11	Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR Part 771

Project Exempt Codes and Classification Codes

Project Exempt Code

Air Quality

A1 Continuation of ride-sharing and van-pooling promotion activities at current levels
A2 Bicycle facilities
A2 Pedestrian facilities

Other

X1 Specific activities which do not involve or lead directly to construction, such as: federal-aid systems revisions, planning and technical studies; grants for training and research programs; planning activities conducted pursuant to Title 23 and Title 49 U.S.C.
X2 Grants for training and research programs
X3 Planning activities conducted pursuant to Title 23 and 49 U.S.C.
X4 Federal-aid systems revisions
X5 Engineering to assess social, economic, and environmental effects of the proposed action or alternatives
X6 Noise attenuation
X7 Emergency or hardship advance land acquisitions (23 CFR 712.204(d))
X8 Acquisition of scenic easements
X9 Plantings, landscaping, etc.
X10 Sign removal
X11 Directional and informational signs
X12 Transportation enhancement activities (except for rehabilitation and operation of historic transportation buildings, structures, or facilities)
X13 Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational, or capacity changes

Exempt From Regional Emissions Analysis

R1 Intersection improvements and channelization projects
R2 Intersection signalization projects at individual intersections
R3 Interchange reconfiguration projects
R4 Changes in vertical and horizontal alignment
R5 Truck size and weight inspection stations
R6 Bus terminals and transfer points

2023-2026 TIP
Projects Funded Through FAST-Act Title I Programs

COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	75341	Betterment Reserve Allegheny		E C	PADOT	S10	EX
ALCO	75669	Slide Line Item		C	PADOT	S2	EX
ALCO	76430	SPC Reg. Safety Line Item		C	PADOT	S6	EX
ALCO	76458	Bridge - Allegheny County		E C	PADOT	S19	EX
ALCO	77273	PAAC Bus Procurement		C	TRANS	M10	EX
ALCO	82754	SPC Region TAU Line Item		C	PADOT	X12	EX
ALCO	87777	Allegheny Co Loc Br Pres.		C	COUNTY	S19	EX
ALCO	94698	SPC Smart Tr. Initiative		C	SPC	X1	EX
ALCO	106080	Smart Transportation/TAP Admin		E	SPC	X12	EX
ALCO	106593	SPC - Traffic Signal 5		E C	SPC		
ALCO	107435	Traffic Services Support		E	PADOT	X2	EX
ALCO	109519	AWPM 2023		C	PADOT	S11	EX
ALCO	109520	AWPM 2024		C	PADOT	S11	EX
ALCO	112948	Bridge Wash 2023		C	PADOT	S19	EX
ALCO	112949	Bridge Wash 2024		C	PADOT	S19	EX
ALCO	113342	2024 ADA Curb Ramp Project		E C	PADOT	A2	EX
ALCO	114214	MTA Stevenson Mill/Rouser Road Offsites		RC	MUNIC		
ALCO	114242	Guiderail Upgrades		C	PADOT	S9	EX
ALCO	115277	Western Regional TMC Upgrade		E	PADOT	S7	EX
ALCO	115555	MTA Market Place District Improvements Phase 1		RC	MUNIC		
ALCO	116170	Homestead-Duquesne Rd Betterment 2		C	COUNTY	S10	EX
ALCO	117268	TMA TDM Programming & Outreach			SPC	A1	EX
ALCO	117269	PAAC Wilkinsburg Transit Center		C	TRANS		
ALCO	117270	PPC - Marine & Landside Equipment Re-Power Progr		C	OTHER		
ALCO	117275	PAAC Transit Access Improvement Program		C	TRANS		
ALCO	115053	SR 8, Butler Plank to Wildwood	8	C	PADOT	S10	EX
ALCO	116590	SR 8, Northtowne Square to Butler	8	C	PADOT	S10	EX
ALCO	117273	SR 8 Signal Upgrades	8	E C	PADOT		
ALCO	27445	22/30 over the Parkway West	22	ERC	PADOT	S19	EX
ALCO	74255	PA 28 over Yutes Run	28	E	PADOT	S19	EX
ALCO	91845	PA 28/Highland Park Br Interchange	28	C	PADOT		
ALCO	116655	SR 30/SR48 Intersection Improvement with D12	30	RC	PADOT	S10	EX
ALCO	100606	Jacks Run Rd Br ov Jacks R	48	C	PADOT	S19	EX
ALCO	100782	Mosside Blvd-PA 130 to Haymaker	48	E C	PADOT	S10	EX
ALCO	28010	PA 50 -I79-Vanadium	50	RC	PADOT		
ALCO	100382	SPC - Traffic Signal 4	50	C	SPC		
ALCO	109640	PA 50: I-79 to Thoms Run	50	ER	PADOT		
ALCO	117271	SR 50 Signal Upgrades	50	E C	PADOT		
ALCO	110369	PA 51-Clairton Blvd-Adaptive Traffic Signal System	51	C	PADOT		
ALCO	111571	SR 51, Clairton Boulevard	51	C	PADOT	S10	EX
ALCO	104328	I-79 at PA 910 Interchange	79	ERC	PADOT		
ALCO	100618	PA 136 Rainbow Run ov Beckets	136	C	PADOT	S19	EX
ALCO	117274	SR 286 Signal Upgrades	286	E C	PADOT		
ALCO	63306	Tarentum Bridge Ramp 'A'	366	C	PADOT	S19	EX
ALCO	100624	Tarentum Bridge ov NS RR	366	ERC	PADOT	S19	EX
ALCO	78441	Eighth Ave ov Homestead Run	837	C	PADOT	S19	EX
ALCO	96559	Seventh Ave/W. Eighth Ave.	837	C	PADOT	S10	EX
ALCO	114193	PA 837 Slide Remediation	837	ERC	PADOT	S2	EX
ALCO	109558	PA 910 over Deer Creek 2	910	C	PADOT	S19	EX
ALCO	63330	Bateman Road Bridge	978	ER	PADOT	S19	EX

NOTE: Projects without "exempt codes" are the non-exempt projects included in the Conformity Assessment for the 2023-2026 TIP. The assessment of the non-exempt projects is described in Section VII.

2023-2026 TIP
Projects Funded Through FAST-Act Title I Programs

COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	100636	Millers Run ov Dolphin Rn	978	RC	PADOT	S19	EX
ALCO	100637	Clinton Rd ov NB Robinson	978	ER	PADOT	S19	EX
ALCO	113514	D11 Traffic Signal Intersection Projects	1001	C	PADOT	S6	EX
ALCO	116096	Kittanning St Flood Control	1004	E	PADOT	S2	EX
ALCO	109549	Highland Park Bridge	1005	ER	PADOT	S19	EX
ALCO	63515	New Kensington Bridge	1038	C	PADOT	S19	EX
ALCO	74319	Lovedale Rd Br/Wylie Rn	2010	ERC	PADOT	S19	EX
ALCO	114194	SR 2010, Lovedale Road Wall Remediation	2010	ERC	PADOT	S2	EX
ALCO	89129	SR 2031 ov Long Run	2031	C	PADOT	S19	EX
ALCO	28025	2040/Ceco Dr to Brownsville Rd	2040	C	PADOT	S10	EX
ALCO	91796	Streets Run Road	2046	E	PADOT	S10	EX
ALCO	27225	2048 Wm Penn Hwy/I-376 Ramp to PA 48	2048	C	PADOT	S10	EX
ALCO	89077	Verona Road Bridge	2058	ER	PADOT	S19	EX
ALCO	78231	Indiana Drive Culvert	2070	E C	PADOT	S19	EX
ALCO	115774	SR 2084, Milltown Road Slide	2084	C	PADOT	S2	EX
ALCO	78232	Electric Ave ov Falls Run	2112	ER	PADOT	S19	EX
ALCO	63583	McKeesport Duquesne Bridge	2114	C	PADOT	S19	EX
ALCO	114287	SR 3003 (Washington Pike) Improvements	3003	ERC	PADOT		
ALCO	63558	McLaughlin Run Rd #2	3004	ERC	PADOT	S19	EX
ALCO	105451	SR 3015 ov Lick Run Creek	3015	ERC	PADOT	S19	EX
ALCO	109548	Presto Sygan Road Bridge	3028	E	PADOT	S19	EX
ALCO	114195	SR 3034, Chartiers St Slide Remediation	3034	RC	PADOT	S2	EX
ALCO	73051	SR 3035/Weyman Br ov Saw Mill Rn	3035	C	PADOT	S19	EX
ALCO	27219	Campbell's Run Road	3041	C	COUNTY		
ALCO	110374	West Liberty Ave ATSPM	3069	C	PADOT		
ALCO	111516	MTA Stevenson Mill Connector	3088	RC	MUNIC		
ALCO	100701	McKees Rocks Bridge Phase 3	3104	E	PADOT	S19	EX
ALCO	111517	MTA Rouser Road Connector	3109	RC	MUNIC		
ALCO	89155	Rochester Road Culvert	4011	ERC	PADOT	S19	EX
ALCO	115772	SR 4019, Mt. Royal Blvd Slide	4019	C	PADOT	S2	EX
ALCO	113629	Babcock Boulevard Culvert	4031	E	PADOT	S19	EX
ALCO	113631	Bakerstown Road Bridge	4068	E	PADOT	S19	EX
ALCO	78427	Wildwood Rd over BP RR	4070	C	PADOT	S19	EX
ALCO	109570	Glenfield Viaduct Bridge	4165	ER	PADOT	S19	EX
ALCO	117473	Steen Road Bridge	7102	E	MUNIC	S19	EX
ALCO	27322	Days Run Bridge No. 3 (DY03)	7104	C	COUNTY	S19	EX
ALCO	27316	AL Local BPRS Group 2	7113	C	COUNTY	S19	EX
ALCO	88414	PA03 - Painters Run No. 3	7123	E C	COUNTY	S19	EX
ALCO	79894	MC07 McClarens Run #7	7203	C	COUNTY	S19	EX
ALCO	83833	Deer Creek Bridge No.4	7208	C	COUNTY	S19	EX
ALCO	88398	CM03 - Campbells Run No. 3	7415	E C	COUNTY	S19	EX
ALCO	28426	AL Local BPRS Group 5	7420	E C	COUNTY	S19	EX
ALCO	93915	Talbot Ave Ramp Bridge	7456	E C	COUNTY	S19	EX
ALCO	93917	Kenmawr Ave Ramp	7456	C	COUNTY	S19	EX
ALCO	93371	Patton St Bridge (TL13)	7479	ERC	COUNTY	S19	EX
PGH	27491	Beck's Run Road		ERC	COUNTY	S10	EX
PGH	27493	Smithfield St Reconstruct, Ph 1		ERC	PGH	S10	EX
PGH	63378	CBD Signalization Upgrade- Ph 4		C	PGH		
PGH	68252	Pittsburgh City BPRSF Line Item		C	PGH	S19	EX

NOTE: Projects without "exempt codes" are the non-exempt projects included in the Conformity Assessment for the 2023-2026 TIP. The assessment of the non-exempt projects is described in Section VII.

2023-2026 TIP
Projects Funded Through FAST-Act Title I Programs

COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
PGH	69839	Alleg. Co Local Br. (S/L)		C	COUNTY	S19	EX
PGH	83136	Penn Ave Reconstruction, Ph 2		C	PGH	S10	EX
PGH	106773	Liberty Ave		E C	PGH		
PGH	109691	Smart Spines (ATCMTD)		ER	PGH		
PGH	111408	Critical Sidewalk Gap TAP		C	PGH	A2	EX
PGH	111410	Pittsburgh Pedestrian Wayfinding TAP		C	PGH		NS
PGH	111422	Pittsburgh SRTS Coordinator TAP		C	PGH		NS
PGH	114288	Penn Avenue Signal Improvements		E C	PGH		
PGH	114290	Allegheny River Green Boulevard		ERC	PGH	S6	EX
PGH	114294	City of Pittsburgh Bus Shelters/Mobility Hubs		RC	PGH	M7	EX
PGH	116300	Smart Spines - Phase 1		E C	PGH	S8	EX
PGH	116301	Smart Spines - Phase 2		E C	PGH	S8	EX
PGH	116303	Smart Spines - Phase 3		E C	PGH	S8	EX
PGH	117272	Frankstown Avenue Signal Improvement Project		E C	PGH		
PGH	100956	West End Bridge	19	ER	PADOT	S19	EX
PGH	110357	2023 ADA Curb Ramp Project	19	E C	PADOT	A2	EX
PGH	117911	Wrong Way Detection System	28	E C	PADOT	X11	EX
PGH	28309	SR 65 Ramps to Ft. Duq	65	ER	PADOT	S19	EX
PGH	115515	North Shore Expressway	279	ER	PADOT	S19	EX
PGH	94651	I-376/Parkway East A.T.M	376	ERC	PADOT		
PGH	97028	I-376/Banksville Interchange	376	ERC	PADOT		
PGH	93419	MA08 - Glenwood Bridge	885	C	COUNTY	S19	EX
PGH	98125	Bates Street Improvement	885	E	PADOT		
PGH	81750	Tenth Street Bypass	2128	C	PADOT	S10	EX
PGH	110353	SR 4003 - East Street to Babcock Blvd	4003	E C	PADOT	S10	EX
PGH	27144	28th Street Bridge	7301	E C	PGH	S19	EX
PGH	27747	Swinburne Bridge	7301	ERC	PGH	S19	EX
PGH	83137	South Negley Ave. Bridge	7301	C	PGH	S19	EX
PGH	91907	Charles Anderson Bridge	7301	ER	PGH	S19	EX
PGH	93394	AL Local BPRS Group 4	7301	E C	COUNTY	S19	EX
PGH	93922	AR01 - Armstrong Tunnel	7301	C	COUNTY		NS
PGH	106386	Larimer Avenue Bridge	7301	ERC	PGH	S19	EX
PGH	114150	Swindell Bridge	7301	E	PGH	S19	EX
PGH	117365	Maple Ave Bridge Preservation	7301	E	PGH	S19	EX
PGH	117366	Herron Ave Bridge Preservation	7301	E	PGH	S19	EX
PGH	117367	Elizabeth St Bridge Rehabilitation	7301	E	PGH	S19	EX
PGH	117368	Corley St Bridge Preservation	7301	E	PGH	S19	EX
PGH	117369	Calera St Bridge Replacement	7301	E	PGH	S19	EX
PGH	117472	Bridge over Route 51 Near Woodruff Street	7301	E	PGH	S19	EX
PGH	113632	Ramp B to I-279 NB	8055	E	PADOT	S19	EX
ARCO	69141	Goheenville Dip	28	C	PADOT	R4	EX
ARCO	109624	PA 28 Allegheny Valley Expressway PM	28	C	PADOT	S10	EX
ARCO	117243	Armstrong Latex Group Bridges	28	E C	PADOT	S19	EX
ARCO	109622	1/112th Infantry Bridge/Graff Ramp Rehabilitation	66	ERC	PADOT	S19	EX
ARCO	111826	Armstrong Co. Department Force Bridge Maintenance	68	C	PADOT	S19	EX
ARCO	117907	SR 85/SR 2001 Intersection ITS	85	E C	PADOT	x11	EX
ARCO	23978	Graff Bridge Preservation	422	ERC	PADOT	S19	EX
ARCO	85574	Margaret Rd Intersection	422	C	PADOT	R4	EX
ARCO	98689	Dunbar Dip	422	E	PADOT	S19	EX

NOTE: Projects without "exempt codes" are the non-exempt projects included in the Conformity Assessment for the 2023-2026 TIP. The assessment of the non-exempt projects is described in Section VII.

2023-2026 TIP
Projects Funded Through FAST-Act Title I Programs

COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ARCO	113645	US 422 A-15 Concrete Preservation	422	C	PADOT	S10	EX
ARCO	114936	US 422 County Line East PM	422	C	PADOT	S10	EX
ARCO	83245	Rural Valley Bridge #4	2001	C	PADOT	S19	EX
ARCO	24135	Pyra Road Bridge	2005	ERC	PADOT	S19	EX
ARCO	24136	Brick Church Bridge #2	2005	ERC	PADOT	S19	EX
ARCO	91794	Fagley Run Bridge #2	2027	C	PADOT	S19	EX
BECO	28974	Loughheads Bridge (CB #9)		E	COUNTY	S19	EX
BECO	106494	Beaver Local Bridge Line Item		C	COUNTY	S19	EX
BECO	101165	Frankfort Road Bridge	18	C	PADOT	S19	EX
BECO	105441	PA 18 Bridge ov Beaver River	18	ERC	PADOT	S19	EX
BECO	109376	Rochester - Monaca Bridge	18	C	PADOT	S19	EX
BECO	102661	Aliquippa East End Gateway, Ph 1 TIIF	51	ERC	OTHER	X1	EX
BECO	112022	Monaca Gateway MTF-TIIF-Smart	51	ERC	MUNIC		
BECO	35156	PA 65, Country Club Bridge	65	ERC	PADOT	S19	EX
BECO	109390	Mercer Road Bridge	65	C	PADOT	S19	EX
BECO	110356	PA 65 - Eighth Street to Mercer Rd	65	C	PADOT	S10	EX
BECO	109356	Midland Beaver Road	68	E	PADOT	S10	EX
BECO	101173	PA 168 over Jordan Run	168	RC	PADOT	S19	EX
BECO	113607	I-376, ITS Installation - Beaver County	376	C	PADOT	X11	EX
BECO	108473	GRP 112-22-7135-1	588	C	PADOT	S10	EX
BECO	99795	Brush Ck Br/BrBrush Ck	1019	E	PADOT	S19	EX
BECO	115780	SR 1019, Brush Creek Road Slide	1019	C	PADOT	S2	EX
BECO	93770	Pine Run Road Culvert	1021	E C	PADOT	S19	EX
BECO	89157	Grange Road Culvert	1037	E C	PADOT	S19	EX
BECO	117332	SR 2004 Freedom Crider Rd at Lovi Rd	2004	ERC	PADOT	S2	EX
BECO	112403	SR 2006, Lovi Road Slide	2006	C	PADOT	S2	EX
BECO	105453	SR 3007/Frankfort Rd - Allegheny Co Line	3007	C	PADOT	S10	EX
BECO	113630	Century Farm Road Culvert	3034	ERC	PADOT	S19	EX
BECO	109391	Brady Run Road Bridge	4012	ER	PADOT	S19	EX
BECO	101198	Shenango Road Bridge	4021	E	PADOT	S19	EX
BECO	78314	Wolf Run Rd ov Wolf Run	4034	E C	PADOT	S19	EX
BECO	28918	SR 4042, Old Rochester-Bridgewater Rd Bridge	4042	ER	PADOT	S19	EX
BECO	101200	West Madison Street Bridge	4042	ER	PADOT	S19	EX
BECO	70793	Georgetown Br over PA 51	4053	ER	PADOT	S19	EX
BUCO	109385	Slippery Rock Group Crossings		C	PADOT	S8	EX
BUCO	110766	Maple Avenue Crossing		C	PADOT	S8	EX
BUCO	110768	Evans City Corridor Crossings		C	PADOT	S8	EX
BUCO	111827	Butler Co. Department Force Bridge Maintenance	8	C	PADOT	S19	EX
BUCO	113652	General Butler Bridge PM	8	E	PADOT	S19	EX
BUCO	114789	SR 8 Butler City to SR 308	8	C	PADOT	S10	EX
BUCO	117903	SR 8/SR 4010 Intersection ITS	8	E C	PADOT	X11	EX
BUCO	117244	Zelienople Bridge #1 Latex Overlay	19	E C	PADOT	S19	EX
BUCO	117846	Upgrades to the PA 38 Crash Avoidance Systems 2	38	E C	PADOT	R2	EX
BUCO	86105	Karns Crossing Bridge	68	RC	PADOT	S19	EX
BUCO	106568	PA 68 Corridor Improvements	68	C	PADOT		
BUCO	117264	Jefferson - Cunningham Streets Signal Improvements	68	ERC	PADOT		
BUCO	116661	I-79 Seneca Ramps - TSMO	79	E C	PADOT	X11	EX
BUCO	24682	Southwest of Euclid Bridge	138	ERC	PADOT	S19	EX

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2023-2026 TIP
Projects Funded Through FAST-Act Title I Programs

COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
BUCO	91286	Three Degree Rd Intersection	228	C	PADOT		
BUCO	91288	Balls Bend	228	C	PADOT		
BUCO	92908	Mars RR Bridge West Expansion	228	R	PADOT		
BUCO	105900	Ekastown West 3R	228	C	PADOT	S19	EX
BUCO	83317	PA 268 ovTrib.S.Br. Bear Ck	268	ER	PADOT	S19	EX
BUCO	105574	Zelienople Railroad Corridor	288	C	PADOT	S8	EX
BUCO	117245	Boyers Bridge #1 Epoxy	308	C	PADOT	S19	EX
BUCO	24759	PA 356 over Tributary to Coal Run	356	C	PADOT	S19	EX
BUCO	106486	PA 356 Corridor Improvements	356	RC	PADOT		
BUCO	116127	SR 356 Park-and-Ride	356	C	PADOT		NS
BUCO	117246	Wayne Street Viaduct Epoxy	356	C	PADOT	S19	EX
BUCO	24663	US 422 over PA 356	422	ER	PADOT	S19	EX
BUCO	98028	Shearer Bridge Pres.	422	ERC	PADOT	S19	EX
BUCO	114188	Butler Bypass Phase 2	422	C	PADOT	S10	EX
BUCO	117334	US 422 County Line West PM	422	C	PADOT	S10	EX
BUCO	98730	Portersville Bridge	488	C	PADOT	S19	EX
BUCO	24819	Rattigan Bridge #1	1021	C	PADOT	S19	EX
BUCO	24827	Renfrew Bridge	3007	ERC	PADOT	S19	EX
BUCO	89972	SR 3014 Callery Bridge	3014	C	PADOT	S19	EX
BUCO	83336	SR 3015 over Trib. to Breakneck Creek	3015	C	PADOT	S19	EX
BUCO	110783	10-2 SR 3021 Corridor Improvements	3021	C	PADOT	S6	EX
BUCO	24793	SR 3031 Lions Road Bridge	3031	C	PADOT	S19	EX
BUCO	117905	SR 4010/Harmony Intersection ITS	4010	E C	PADOT	X11	EX
BUCO	56592	T-584 Geibel Road Bridge	7228	ERC	PADOT	S19	EX
BUCO	24471	CO #24 Kelly Bridge	7232	ERC	PADOT	S19	EX
GRCO	30207	Greene Co Bridge # 35		ER	PADOT	S19	EX
GRCO	116235	12-23-RPM		C	PADOT	S11	EX
GRCO	116236	12-24-RPM		C	PADOT	S11	EX
GRCO	117551	D12 Betterment Line Item		C	PADOT	S10	EX
GRCO	105839	PA 18 ov Trib Enlow Fork Wheeling Ck- DFB	18	RC	PADOT	S19	EX
GRCO	117422	2025 Slide Repairs	18	C	PADOT	S2	EX
GRCO	113683	Waynesburg Betterment	19	RC	PADOT	S10	EX
GRCO	116238	2024 Slide Repairs	19	C	PADOT	S2	EX
GRCO	105306	PA 21 over Toll Gate Run	21	C	PADOT	S19	EX
GRCO	117441	PA 21 East of Waynesburg	21	C	PADOT	S10	EX
GRCO	118003	D12 Waynesburg Corridor	21	RC	PADOT	S10	EX
GRCO	90646	PA 88 over Whiteley Creek	88	C	PADOT	S19	EX
GRCO	116175	PA 188 Jefferson Rd Preservation	188	C	PADOT	S10	EX
GRCO	116237	2023 Slide Repairs	188	C	PADOT	S2	EX
GRCO	81849	PA 218 ov Br Smith Ck	218	ERC	PADOT	S19	EX
GRCO	105401	SR 1008 over Neel Run - DFB	1008	RC	PADOT	S19	EX
GRCO	76038	SR 1009 over Bacon Run-DFB	1009	RC	PADOT	S19	EX
GRCO	79347	SR 1009 over Castile Run-DFB	1009	RC	PADOT	S19	EX
GRCO	81842	SR 1010 over Pumpkin Run	1010	C	PADOT	S19	EX
GRCO	96659	Sugar Run Road Intersect	2003	ERC	PADOT		NS
GRCO	98856	SR 2008 ov Dunkard Crk	2008	ERC	PADOT	S19	EX
GRCO	30134	SR 3001 over Wheeling Ck	3001	C	PADOT	S19	EX
GRCO	113599	SR 3007 over Webster Run-DFB	3007	RC	PADOT	S19	EX
GRCO	116468	SR 3007 over White Thorn Run-DFB	3007	RC	PADOT	S19	EX

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COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
GRCO	116456	SR 3009 over Branch of Toms Run-DFB	3009	RC	PADOT	S19	EX
GRCO	74220	SR 3011 over Hargus Creek	3011	ERC	PADOT	S19	EX
GRCO	105402	SR 3011 over Br of Hargus Ck - DFB	3011	RC	PADOT	S19	EX
GRCO	81796	SR 3018 over Br Blacks Ck - DFB	3018	RC	PADOT	S19	EX
GRCO	81798	SR 4007 over Owens Run - DFB	4007	RC	PADOT	S19	EX
GRCO	116469	SR 4031 over Dillie Run-DFB	4031	RC	PADOT	S19	EX
GRCO	105394	SR 4033 over Garners Run - DFB	4033	RC	PADOT	S19	EX
GRCO	106407	Greene Co Bridge #105	7202	ER	PADOT	S19	EX
GRCO	86225	Greene County #75	7214	ERC	PADOT	S19	EX
GRCO	112595	Greene County #73	7214	ER	PADOT	S19	EX
FACO	76508	Dist12 Hwy/Brdg Line Item		C	PADOT	S10	EX
FACO	81229	D12 Bridge Preservation Design		E C	PADOT	S19	EX
FACO	96657	Bruceton Mills Rd. T-311		C	PADOT	S10	EX
FACO	101968	D12 Pvmt Presv Design		E	PADOT	S10	EX
FACO	105858	Districtwide DFB Line Item		E	PADOT	S19	EX
FACO	107625	Sheepskin Trail - Southern Extension		C	PADOT	X12	EX
FACO	114628	D12 BOF Local Bridge Reserve		C	PADOT	S19	EX
FACO	117112	District 12 Support Services		E	PADOT	X1	EX
FACO	117429	2025 RPM Contract		C	PADOT	S11	EX
FACO	117430	2026 RPM Contract		C	PADOT	S11	EX
FACO	117530	D12 Slide Design		E	PADOT	S2	EX
FACO	118001	D12 Intersection Warning Signals 2021		C	PADOT	S7	EX
FACO	116500	2023 EDAM Preservation	21	C	PADOT	S19	EX
FACO	116775	Fayette County Bridge Preservation Phase 2	21	C	PADOT	S19	EX
FACO	116772	Fayette County Bridge Preservation Phase 1	40	C	PADOT	S19	EX
FACO	118002	D12 Turn Lanes	40	C	PADOT		
FACO	96661	McClure/Kingview Road Interchange	119	ERC	PADOT		
FACO	110402	US 119 Connellsville CMAQ	119	C	PADOT		
FACO	118000	D12 Flashing Beacon 2021	201	RC	PADOT	S7	EX
FACO	113781	PA 653 over Indian Creek	653	C	PADOT	S19	EX
FACO	74342	PA 711 Crawford Ave Bridge	711	C	PADOT	S19	EX
FACO	76006	PA 819 over Br Jacobs Ck	819	ER	PADOT	S19	EX
FACO	105387	SR 1005 over Br Back Ck - DFB	1005	RC	PADOT	S19	EX
FACO	105820	SR 1019 ov Breakneck Run-DFB	1019	RC	PADOT	S19	EX
FACO	116189	SR 1020 Gallatin Avenue Betterment	1020	C	PADOT	S10	EX
FACO	81951	SR 1039 ov Br Dickerson Run-DFB	1039	RC	PADOT	S19	EX
FACO	29966	SR 1051 over Mounts Creek-DFB	1051	RC	PADOT	S19	EX
FACO	98325	SR 1051 ov Br Mounts Ck-DFB	1051	RC	PADOT	S19	EX
FACO	29824	SR 2003 over Chaney Run-DFB	2003	RC	PADOT	S19	EX
FACO	91126	SR 2011 over Little Sandy Ck - DFB	2011	RC	PADOT	S19	EX
FACO	93507	SR 2040 over Redstone Ck	2040	C	PADOT	S19	EX
FACO	74186	SR 3008 over Jacobs Creek- DFB	3008	RC	PADOT	S19	EX
FACO	116773	2024 Edam Preservation	3027	C	PADOT	S19	EX
FACO	76016	SR 4001 over Rush Run 0050-2 - DFB	4001	RC	PADOT	S19	EX
FACO	88878	SR 4001 over Rush Run 0050 - DFB	4001	RC	PADOT	S19	EX
FACO	74344	Cast Iron Bridge	4003	RC	PADOT	S19	EX
FACO	81994	SR 4011 over Washwater Run - DFB	4011	RC	PADOT	S19	EX
FACO	76017	SR 4016 over Redstone Ck	4016	ER	PADOT	S19	EX
FACO	117423	2026 Slide Repairs	4022	C	PADOT	S2	EX

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COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
FACO	113595	SR 4032 over Bolden Run- DFB	4032	RC	PADOT	S19	EX
FACO	81192	Layton Bridge	4038	ERC	PADOT	S19	EX
FACO	76137	Moyer Road Bridges	7202	C	COUNTY	S19	EX
FACO	113210	Fayette County Bridge #15	7206	ER	PADOT	S19	EX
FACO	95837	North Gallatin Ave Bridge	7302	ERC	PADOT	S19	EX
FACO	111776	Jefferson Street Bridge	7302	ER	PADOT	S19	EX
INCO	105582	Olson Road Crossing		C	PADOT	S8	EX
INCO	25621	US 119 over SR 8001 (Northbound and Southbound)	119	E C	PADOT	S19	EX
INCO	83227	US 119 over Pine Run	119	ERC	PADOT	S19	EX
INCO	95852	US 119 over Two Lick Ck.	119	ERC	PADOT	S19	EX
INCO	101113	Stoney Run Bridge #1	119	ERC	PADOT	S19	EX
INCO	117248	US 119 over Crooked Creek	119	ERC	PADOT	S19	EX
INCO	25596	PA 286 ovTrib to Cherry Rn	286	ERC	PADOT	S19	EX
INCO	114423	Jacksonville Bridge #1	286	ER	PADOT	S19	EX
INCO	109638	Marion Center Bridge #1	403	C	PADOT	S19	EX
INCO	78101	Mentch Bridge EB/WB	422	C	PADOT	S19	EX
INCO	88615	Indiana Bypass Repair	422	C	PADOT	S10	EX
INCO	98811	Bridge to Nowhere EB PM	422	ER	PADOT	S19	EX
INCO	98827	Bridge to Nowhere WB PM	422	ER	PADOT	S19	EX
INCO	117247	Indiana Latex Group	422	C	PADOT	S19	EX
INCO	117909	SR 422/SR 403 Intersection ITS	422	E C	PADOT	X11	EX
INCO	111829	Indiana Co. Department Force Bridge Maintenance	553	C	PADOT	S19	EX
INCO	25411	Yellow Creek #2 Bridge	954	ERC	PADOT	S19	EX
INCO	117379	Indiana Epoxy Group Bridges	954	C	PADOT	S19	EX
INCO	83364	Ramsey Run Bridge #1	1002	C	PADOT	S19	EX
INCO	25587	Broadhead Run Bridge #2	1045	ERC	PADOT	S19	EX
INCO	25791	Straight Run Bridge #2	1046	C	PADOT	S19	EX
INCO	83370	Dilltown Bridge No.3	2012	ERC	PADOT	S19	EX
INCO	117493	Pleasant Valley Bridge	2012	ERC	PADOT	S19	EX
INCO	25795	Clarksburg Bridge #1	3007	ERC	PADOT	S19	EX
INCO	83382	SR 3007 over Marshall Run #1	3007	C	PADOT	S19	EX
INCO	78117	Rearick Road Bridge #1	3010	ERC	PADOT	S19	EX
INCO	25799	SR 3016 over Two Lick Creek	3016	C	PADOT	S19	EX
INCO	25602	Green Valley Bridge #1	3031	RC	PADOT	---	NA
INCO	25802	Anthony Run Bridge #2	3039	ERC	PADOT	S19	EX
INCO	100122	SR4005-PA954 to Oakland Ave	4005	C	PADOT	S10	EX
INCO	105300	SR 4005 Mack Park Bridge	4005	C	PADOT	S19	EX
INCO	78122	SR 4030 Carter Avenue Bridge	4030	C	PADOT	S19	EX
INCO	111796	Indian Springs Road/Rustic Lodge Road Intersection	4422	RC	PADOT	R2	EX
LACO	78396	PA 18 ov Abandoned Plant Access Rd	18	E	PADOT	---	NA
LACO	88284	Liberty St., Jefferson St., Wilmi	18	E C	PADOT	---	NA
LACO	109386	Perry Hwy	19	E	PADOT	---	NA
LACO	109389	Perry Highway	19	E	PADOT	---	NA
LACO	91768	PA 65/East Washington Street	65	C	PADOT	---	NA
LACO	78397	Eastbrook Road Bridge	168	C	PADOT	---	NA
LACO	92282	SR 422, Benjamin Franklin Highway	422	C	PADOT	S10	EX
LACO	81639	Frew Mill Road Bridge	1012	E C	PADOT	---	NA
LACO	29468	Liberty Road Over Branch Of Jamison Run	1015	ER	PADOT	---	NA

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COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
LACO	100743	East Washington Street Br	2006	ERC	PADOT	---	NA
LACO	29394	S. Main Street Bridge	3001	C	PADOT	---	NA
LACO	117475	Pulaski Road Culvert	4005	E C	PADOT	---	NA
LACO	29327	Wallace Road Bridge T356	7203	C	COUNTY	---	NA
LACO	29528	Graceland Rd Br T464	7205	ERC	MUNIC	---	NA
LACO	88721	Hickory View Drive Bridge	7206	ERC	MUNIC	---	NA
LACO	78357	Barkley Road Bridge #3	7207	ERC	MUNIC	---	NA
LACO	105601	McCartney Hollow Road Bridge T311	7207	ERC	MUNIC	---	NA
WACO	30989	Gabby Bridge #64		ERC	PADOT	S19	EX
WACO	102154	D12 Construction Mgt		C	PADOT	X1	EX
WACO	114584	Charleroi Coorridor RRX		C	PADOT	S8	EX
WACO	114630	Bus Replacement - MMVTA			PADOT	M10	EX
WACO	117949	MMVTA 2022 Bus Replacement		C	PADOT	M10	EX
WACO	79365	PA 18 over Chartiers Ck-1	18	ER	PADOT	S19	EX
WACO	90685	PA 18 over Chartiers Creek-2	18	C	PADOT	S19	EX
WACO	110065	PA 18: PA 844 to PA 50	18	C	PADOT	S10	EX
WACO	114561	PA 18: Main Street to Third Sreet	18	C	PADOT		
WACO	117943	US 19 Adaptive Signal CMAQ Supplement	19	C	PADOT		
WACO	117444	US 22 Concrete Repair - Washington	22	C	PADOT	S10	EX
WACO	113722	US 40 over Catfish Run	40	ER	PADOT	S19	EX
WACO	115214	D12 I-70 Cameras Exit 39-43	70	C	PADOT	S7	EX
WACO	115218	D12 I-70 Fiber Installation-1	70	C	PADOT	S7	EX
WACO	115220	D12 I-70 Fiber Installation-2	70	C	PADOT	S7	EX
WACO	89131	I79 ov Br Chartiers Ck #1	79	ERC	PADOT	S19	EX
WACO	105426	Charleroi Betterment	88	RC	PADOT	S10	EX
WACO	110399	PA 88 Charleroi CMAQ	88	C	PADOT		
WACO	116178	PA 88 Fredericktown Preservation	88	C	PADOT	S10	EX
WACO	116204	PA 88 over Peters Creek	88	ER	PADOT	S19	EX
WACO	30882	PA 221 ov Br Ten Mile Ck-DFB	221	RC	PADOT	S19	EX
WACO	105914	PA 231 over Br Templeton Run - DFB	231	RC	PADOT	S19	EX
WACO	81943	PA 331 over Br Brush Run #2-DFB	331	RC	PADOT	S19	EX
WACO	90691	PA 331 over Br Brush Run-DFB	331	RC	PADOT	S19	EX
WACO	76063	PA 519 ov Br Chartiers Run	519	ER	PADOT	S19	EX
WACO	31088	PA 917 over Br Pigeon Creek	917	ER	PADOT	S19	EX
WACO	109025	Bebout Rd/ E McMurray Rd Intersection	1002	RC	PADOT		
WACO	109242	Valleybrook/Bebout Rd Intersection	1010	C	PADOT		
WACO	31152	SR 1016 ov Br Mingo Ck	1016	C	PADOT	S19	EX
WACO	76070	SR 1053 Ltl Chartiers Ck 2-DFB	1053	RC	PADOT	S19	EX
WACO	89068	SR 1055 ov Br Ltl Chartiers Ck-DFB	1055	RC	PADOT	S19	EX
WACO	90690	SR 1061 over Froman Run- DFB	1061	RC	PADOT	S19	EX
WACO	116370	SR 2005 over Smith Run-DFB	2005	RC	PADOT	S19	EX
WACO	83438	SR 2041 ov West Pike Run- DFB	2041	RC	PADOT	S19	EX
WACO	113597	SR 2047 over Little Tenmile Creek	2047	ERC	PADOT	S19	EX
WACO	89081	SR 2053 ov Br Daniels Run 2-DFB	2053	RC	PADOT	S19	EX
WACO	118280	West Brownsville RRX Corridor	2067	C	PADOT	S8	EX
WACO	74234	SR 3009 over Buffalo Creek #1	3009	ER	PADOT	S19	EX
WACO	116368	SR 3009 over Branch of Buffalo Creek-DFB	3009	RC	PADOT	S19	EX
WACO	105406	SR 3021 ov Br Mid Wheel Creek - DFB	3021	RC	PADOT	S19	EX
WACO	30709	SR 4022 ov Br Buffalo Ck	4022	C	PADOT	S19	EX

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WACO	89052	SR 4057 over Brush Run	4057	C	PADOT	S19	EX
WACO	51404	Pike Run #1	7401	ERC	COUNTY	S19	EX
WACO	31074	Raccoon Bridge #23	7404	ER	PADOT	S19	EX
WECO	31669	Fairwood Manor Bridge		C	PADOT	S19	EX
WECO	31689	Ladysmith Road T-470		ER	PADOT	S19	EX
WECO	31927	Possum Hollow Road		E	PADOT	S19	EX
WECO	110900	US 30 Corridor Impvmts - Western Section	30	ERC	PADOT	S6	EX
WECO	113784	US 30 over Loyalhanna Creek	30	C	PADOT	S19	EX
WECO	114390	US 30 @ Georges Station Road	30		PADOT		
WECO	114563	30 Hempfield on Corridor 95	30	C	PADOT		
WECO	117945	US 30 Adaptive Signal Corridor	30	C	PADOT		
WECO	116179	PA 66 Pavement Preservation	66	C	PADOT	S10	EX
WECO	115909	Rostraver Township Pedestrian Bridge	70	C	PADOT	S19	EX
WECO	117516	I-70 Fiber Installation (Segments 404-434)	70	C	PADOT	S7	EX
WECO	117519	I-70 Fiber Installation Segment 0474-0494	70	C	PADOT	S7	EX
WECO	117520	I-70 Fiber Installation Segment 0554-0570	70	C	PADOT	S7	EX
WECO	76105	US 119 over Crabtree Creek 2	119	C	PADOT	S19	EX
WECO	114560	119 SW Greensburg CMAQ	119	C	PADOT		
WECO	69248	PA 136 over Pollock Run	136	ERC	PADOT	S19	EX
WECO	98869	West Newton Bridge	136	ERC	PADOT	S19	EX
WECO	116186	PA 136 Pavement Preservation	136	C	PADOT	S10	EX
WECO	81751	PA 356 over Pine Run	356	C	PADOT	S19	EX
WECO	116790	Freeport Bridge Truss Preservation	356	C	PADOT	S19	EX
WECO	76123	PA 711 ov Br of Tubmill Ck	711	C	PADOT	S19	EX
WECO	32084	PA 906 ov Webster Hollow	906	C	PADOT	S19	EX
WECO	108010	LVTIP: Norvelt to Pleasant Unity	981	RC	PADOT	R4	EX
WECO	108140	LVTIP: Pleasant Unity to Airport	981	RC	PADOT	R4	EX
WECO	98860	PA 982 ov Br Stony Run	982	C	PADOT	S19	EX
WECO	105414	SR 1005 over Br Shannon Run - DFB	1005	RC	PADOT	S19	EX
WECO	113823	Donohoe Road/Georges Station Intersection	1026	RC	PADOT		
WECO	111650	Roseytown Road RR Tunnel Repairs	1030	C	PADOT	S10	EX
WECO	105818	SR 1049 ov Br Ltl Crabtree Ck-DFB	1049	RC	PADOT	S19	EX
WECO	116465	SR 1049 over Br Little Crabtree Creek (Seg 40)-DFB	1049	RC	PADOT	S19	EX
WECO	116467	SR 1049 over Br Little Crabtree Creek (Seg 20)-DFB	1049	RC	PADOT	S19	EX
WECO	81747	Salina Bridge	1060	RC	PADOT	S19	EX
WECO	105415	SR 1071 over Br Hypocrite Creek (Seg 10) - DFB	1071	C	PADOT	S19	EX
WECO	106047	SR 1071 over Br Hypocrite Creek (Seg 30) - DFB	1071	C	PADOT	S19	EX
WECO	116463	SR 1071 over Hypocrite Creek (Seg 16)-DFB	1071	C	PADOT	S19	EX
WECO	89043	SR 2025 over Welty Run	2025	C	PADOT	S19	EX
WECO	98800	SR2037 ov Branch Four Mile Run-2 DBF	2037	RC	PADOT	S19	EX
WECO	32097	SR 3009 over Speers Run - DFB	3009	RC	PADOT	S19	EX
WECO	105416	SR 3010 over Br Sewickley Creek - DFB	3010	RC	PADOT	S19	EX
WECO	81991	SR 3016 over Br Sewickley Creek - DFB	3016	RC	PADOT	S19	EX
WECO	112623	MS4 PRP Stream Bank Stabilization	3023	E	PADOT	X9	EX
WECO	90834	SR 3030 over US 30	3030	C	PADOT	S19	EX
WECO	116470	SR 3063 over Andrews Run-DFB	3063	RC	PADOT	S19	EX
WECO	81960	SR 4012 over Brush Creek	4012	C	PADOT	S19	EX
WECO	89066	SR 4019 over Brush Creek	4019	ERC	PADOT	S19	EX
WECO	112554	SR 4041 over Haymakers Run	4041	C	PADOT	S19	EX

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WECO	116471	SR 4041 over Br of Brush Run-DFB	4041	RC	PADOT	S19 EX
WECO	83686	SR 4073 over PA 56	4073	ER	PADOT	S19 EX
WECO	113267	New Kensington Corridor	4087	C	PADOT	S8 EX
WECO	74265	SR 4089 over Br Chartiers Run - DFB	4089	RC	PADOT	S19 EX
WECO	67722	T-479 Fry Hollow Rd Br	7209	ER	PADOT	S19 EX
WECO	73028	Brewery Street Bridge	7302	ER	PADOT	S19 EX

NOTE: Projects without "exempt codes" are the non-exempt projects included in the Conformity Assessment for the 2023-2026 TIP. The assessment of the non-exempt projects is described in Section VII.

2023-2026 TIP
Projects Funded Through FAST-Act Title I Programs
Interstate Maintenance Projects

COUNTY	MPMS NUMBER		PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	74454	I-376	- PResurface – Boyce Road to I-79	376	ERC	PADOT	S10	EX
ALCO	81931	I-79	- Pavement Restoration – Campbells Run - Moon Run	79	RC	PADOT	S10	EX
ALCO	87767	I-376	- Pavement Restoration – Edgewood to Churchill	376	RC	PADOT	S10	EX
ALCO	87778	I-376	- Resurface – Churchill to Monroeville	376	RC	PADOT	S10	EX
ALCO	91565	I-79	- Reconstruct – Moon Run to Neville Island	79	C	PADOT	S10	EX
ALCO	94812	I-79	- Pavement Restoration – Neville Island to I-279	79	C	PADOT	S10	EX
ALCO	97027	I-376	- Carnegie Interchange - Improve / Reconfigure	376	ERC	PADOT	R3	EX
ALCO	97029	I-376	- Greentree Interchange – Improve / Reconfigure	376	ERC	PADOT	R3	EX
ALCO	104325	I-79	- Widening – Alpine Rd to Prestley Rd (S. Fayette Twp)	79	C	PADOT		
PGH	99874	1-376	- Squirrel Hill Interchange – Improve / Reconfigure	376	ERC	PADOT	R3	EX
PGH	105438	1-376	– Bridge Replacement – Commercial Street Bridge	376	ERC	PADOT	X1	EX
PGH	112249	I-376	- Drainage Imp – "Bath Tub" – Ft Pitt Br to 10th St.	376	E	PADOT	X1	EX
PGH	113362	I-376	– Bridge Improvement – Frazier Street Bridge	376	E C	PADOT	S19	EX
BECO	117387	I-376	- ITS Installation (Chippewa Township)	376	C	PADOT	X11	EX
BUCO	106274	I-79	- Reconstruct-Widen – Cranberry, Jackson Townships	79	ER	PADOT		
BUCO	109288	I-79	- Bridge Replace – over Connoquenessing Cr - Jackson Twp	79	E	PADOT	S19	EX
LACO	87757	I-79	– Resurface - Butler Co. Line to Mercer Co. Line	79	RC	PADOT	S10	EX
LACO	109284	I-376	– Resurface - SR 224 to Turnpike	376	ERC	PADOT	S10	EX
WACO	75945	I-70	- Reconstruct - Buffalo, Donegal Townships	70	E	PADOT	S19	EX
WACO	106919	I-70	- Reconstruct – Belle Vernon Bridge to Bentleyville	70	ER	PADOT	S10	EX
WECO	75978	I-70	- PA 51 Interchange Reconstruction	70	RC	PADOT	R3	EX
WECO	88508	I-70	- Arnold City Interchange Reconstruction	70	RC	PADOT	R3	EX

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2023-2026 TIP
Regionally Significant Projects Funded by Pennsylvania Turnpike Commission

COUNTY	MPMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES
ALCO		Rt.8 Int. to Allegh.Valley Int. – Widen to 6 Lanes (MP 39-43)	76	E C	TRPK	
ALCO		Allegh.Valley Int. – Pgh Int. - Widen to 6 Lanes (MP 49-57)	76	E C	TRPK	
ALCO		Pgh Int. to Irwin Int. – Widen to 6 Lanes (MP 57-66)	76	E C	TRPK	
ALCO		Mon-Fayette Expressway (SR 51 [Large] to SR 837 [Duquesne])		ER	TRPK	
BECO		Replace Beaver River Bridge – Widen to 6 Lanes (MP 12.5–13.5)	76	E C	TRPK	
BUCO		Cranberry Int. to Pine Twp. – Widen to 6 Lanes (MP 28–31)	76	C	TRPK	
WECO		Mile 99 to Westmoreland/Somerset Co. Line – Widen to 6 Lanes	76	E C	TRPK	

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2023-2026 TIP
Projects Funded Through FAST-Act Title III Programs

PROJECT SPONSOR	MPMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
ACTA	106606	Operating Assistance	M1	EX
ACTS	114525	Purchase Small Transit Buses	M10	EX
ACTS	118110	Operating Assistance	M1	EX
ACTS	118112	Support Vehicle	M2	EX
BCTA	65404	Purchase Paratransit Buses	M10	EX
BCTA	65590	Bus Replacement	M10	EX
BCTA	70708	Support Equipment	M4	EX
BCTA	83817	Computer Hardware and Software	M4	EX
BCTA	94985	Facility Renovations	M4	EX
BCTA	94986	Operating Asst. - Rural	M1	EX
BCTA	105099	Preventive Maintenance	M3	EX
BCTA	114400	Midlife Vehicle Overhaul	M3	EX
BCTA	118113	State Funding – Operating Assistance	M1	EX
BCTA	118124	Paratransit Service – Operating Assistance	M1	EX
BTA	77852	Operating Assistance	M1	EX
BTA	114742	Rt.68 Park-n-Ride Facilities		
BTA	118125	Bus Support Equipment / Facilities	M8	EX
BTA	118126	Facility Improvements (Signs for Parking Lot)	M7	EX
BTA	118127	Purchase Bus Shelters	M7	EX
BTA	118128	Computer Hardware and Software	M4	EX
BTA	118129	Communications Systems	M4	EX
BTA	118130	Fare Collection Equipment	M5	EX
BTA	118131	Replacement CNG Bus	M10	EX
BTA	118132	Security and Surveillance Equipment	M6	EX
BTA	118133	Shop Equipment	M4	EX
FACT	65222	Operating Assistance	M1	EX
FACT	71083	Capital Assistance	M10	EX
FACT	90041	Bus Procurement	M10	EX
FACT	114613	Communication Equipment	M5	EX
FACT	118134	Facility Assessment Study	X1	EX
FACT	118135	Operating Assistance – Shared Ride	M1	EX
FACT	118136	Support Vehicles	M2	EX
FACT	118137	Mini-Van Replacements	M10	EX
GREENE	114735	Facility Improvements	M8	EX
GREENE	118138	Bus Wash	M4	EX
GREENE	118139	Operating Assistances	M1	EX
GREENE	118140	Bus Replacements	M10	EX
HHF	111095	Operating Assistance	M1	EX
ICTA	65421	Operating Assistance - Rural	M1	EX
ICTA	114533	CTC Mini Vans	M10	EX
ICTA	118143	Operating Assistance – Shared Ride	M1	EX
ICTA	118144	CNG Bus Replacements	M10	EX

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2023-2026 TIP
Projects Funded Through FAST-Act Title III Programs

PROJECT SPONSOR	MPMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
ICTA	118146	Support Equipment (Skylight Panel Replacement)	M8	EX
MDCO	114736	Antenna Replacement	M6	EX
MDCO	114743	Ecolane Tablets	M5	EX
MDCO	114744	Server Upgrade	M4	EX
MDCO	118147	Intermodal Station Assets	R6	EX
MDCO	118148	Operating Assistance – Shared Ride	M1	EX
MDCO	118149	Shop Equipment – Power Washer	M4	EX
MDCO	118150	Shop Equipment – Wheel Alignment Machine	M4	EX
MDCO	118159	Shop Equipment – Wheel balancer and AC Auto Charger	M4	EX
MDCO	118160	Small Bus Replacement	M10	EX
MMVTA	65428	Operating Assistance - Urban	M1	EX
MMVTA	107897	Extended Warranty	M5	EX
MMVTA	114617	ITS System Upgrades	M6	EX
MMVTA	114618	Office Equipment	M4	EX
MMVTA	114619	Study/Planning	X1	EX
MMVTA	118161	Admin Facility Improvements	M8	EX
MMVTA	118162	Support Equipment - Facilities	M4	EX
MMVTA	118163	Multimodal Hub – Preliminary E&D	M8	EX
MMVTA	118164	Multimodal Hub - Construction	M8	EX
MMVTA	118165	Park-n-Ride Maintenance	M8	EX
MMVTA	118166	Replacement Buses	M10	EX
MMVTA	118165	Farebox System	M5	EX
NCATA	77860	Operating Assistance - Rural	M1	EX
NCATA	114737	Garage Equipment	---	NA
NCATA	114745	Bus Facility Maintenance	---	NA
NCATA	118167	CNG Buses	M10	EX
NCATA	118168	Bus Storage Facility	---	NA
NCATA	118169	Support Vehicles	M2	EX
PAAC	65465	Capital Cost of Contracting - Access	M1	EX
PAAC	65535	Preventive Maintenance - Bus	M3	EX
PAAC	65541	Support Vehicles	M2	EX
PAAC	65550	Vehicle Overhaul Program	M3	EX
PAAC	71148	Bus Procurement	M10	EX
PAAC	77757	PAAC Capital Bond Debt Service	M1	EX
PAAC	84311	Operating Assistance	M1	EX
PAAC	90171	Transit Security Grant	NS	
PAAC	90349	Fixed Guideway Improvements	M9	EX
PAAC	95003	Fixed Facility Improvements	M8	EX
PAAC	95004	Fixed Guideway Bridge	M9	EX
PAAC	95005	IT / ITS Hardware/Software	M4	EX
PAAC	95006	Preventive Maintenance - Rail	M3	EX
PAAC	95007	Shop Equipment	M4	EX
PAAC	106644	Shared Ride	M1	EX
PAAC	110895	Pittsburgh BRT		
PAAC	114536	Fixed Guideway Tunnel Improvements	M9	Ex
PAAC	118170	FTA Elderly and Handicapped Program	M1	Ex

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2023-2026 TIP
Projects Funded Through FAST-Act Title III Programs

PROJECT SPONSOR	MPMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
PAAC	118171	Light Rail Vehicle Procurement	M10	Ex
SPC	71104	Capital Cost of Contracting - CommuteInfo	M1	EX
SPC	118151	Automatic Passenger Counters	M5	EX
SPC	118152	Computer Hardware	M4	EX
SPC	118153	Marketing Services	A1	EX
SPC	118154	Software Procurement	M4	EX
WASH	90068	Operating Assistance	M1	EX
WASH	102353	Maint. Facility Construction	M11	EX
WASH	102576	Operating Assistance State	M1	EX
WASH	106645	Heavy-Duty Bus Replacement	M10	EX
WASH	106646	Small Transit Buses	M10	EX
WASH	106650	Office Equipment Hardware	M4	EX
WASH	114751	Support Vehicles	M2	EX
WASH	118156	Bus Shelters	M7	EX
WASH	118157	Communications Systems	M4	EX
WASH	118172	Surveillance / Security Systems	M6	EX
WASH	118173	Fare Collection Equipment	M5	EX
WASH	118174	Multimodal Hub / Transfer Facility	R6	EX
WASH	118175	Operating Assistance – Shared Ride	M1	EX
WASH	118176	Park & Ride Lot - Feasibility Study	X1	EX
WCTA	65572	Operating Assistance - Rural	M1	EX
WCTA	102359	State Operating Assistance	M1	EX
WCTA	114540	Shared Ride Vehicles	M10	EX
WCTA	114541	Office Equipment	M4	EX
WCTA	114740	Transit Center Equipment	M4	EX
WCTA	118177	Fixed-Route Bus Replacement	M10	EX
WCTA	118178	Operating Assistance – Shared Ride	M1	EX
WCTA	118179	Preventive Maintenance	M3	EX

Transit Program – Project Sponsors:

ACTA	Airport Corridor Transportation Association
ACTS	Allied Coordinated Transportation Services (Lawrence County)
BCTA	Beaver County Transit Authority
BTA	Butler Transit Authority
FACT	Fayette Area Coordinated Transportation
GREENE	Greene County Human Services
HHF	Heritage Health Foundation
ICTA	Indiana County Transit Authority (dba – IndiGo)
MDCO	Mid-County Transit Authority (dba – Town & Country Transit)
MMVTA	Mid-Mon Valley Transit Authority
NCATA	New Castle Area Transit Authority
PAAC	Port Authority of Allegheny County (dba – Pittsburgh Regional Transit)
SPC	Southwestern Pennsylvania Commission
WASH	Washington County Transportation Authority (dba – Freedom Transit)
WCTA	Westmoreland County Transit Authority

NOTE: Projects without "exempt codes" are the non-exempt projects included in the Conformity Assessment for the 2023-2026 TIP. The assessment of the non-exempt projects is described in Section VII.

APPENDIX B

Identification of Exempt and Regionally Significant Projects
Included in the Fiscally Constrained Portion of the 2045 Plan

SPC Long Range Transportation Plan
Fiscally Constrained Highway/Bridge Project List

MPMS/GIS ID	District	County	Investment Category	Title	Estimated Cost	Route	Stage	Narrative	AQ Status	Exempt Code
91262	10	Armstrong	Safety	SR 28 Hays Run 3R	$26,759,000	28	Mid-Term (2027-2034)	Safety improvements including reconstruction, rehabilitation and resurfacing along PA 28 SR 1028 (Anderson Creek Road) to T-535 (McAuley Falls Road) in Rayburn and Boggs Townships.	Exempt	S10
109622	10	Armstrong	Bridge Reconstruction	1/112th Infantry Bridge and Graff Ramp Rehabilitation	$1,744,230	66	Mid-Term (2027-2034)	Bridge Rehabilitation of the existing structure carrying SR 66 and the Graff Bridge Ramp (SR 8008) over US 422, SR 2025 (Garretts Run Road), and Garretts Run in Manor Township, Armstrong County.	Exempt	S19
23978	10	Armstrong	Bridge Preservation	Graff Bridge Preservation	$1,500,000	422	Mid-Term (2027-2034)	Preservation of the existing structure carrying US 422 over the Allegheny River in North Buffalo Township, Armstrong County	Exempt	S19
98689	10	Armstrong	Safety	SR 422 Dunbar Dip	$43,300,000	422	Mid-Term (2027-2034)	This project would involve the construction of a 3-lane section from the eastern limit of the Kittanning Elementary project listed above and would continue east for approximately 1.75 miles. Work would also involve the realignment of several intersections and extensive geometry improvements in Kittanning Township, Armstrong County.	Exempt	S10
115094	10	Armstrong	Road Preservation	US 422 Kittanning East PM	$6,743,650	422	Mid-Term (2027-2034)	Roadway resurfacing to include milling of existing bituminous material, minor drainage, transverse and longitudinal joint repair and paving of bituminous leveling and wearing courses along US 422 from intersection of Redmill Road East to just east of the intersection of SR 2007 in Kittanning and Manor Townships, Armstrong County	Exempt	S10
	10	Armstrong, Butler, Indiana	Bridge Preservation	Bridge NON NHS Preservation Line Item (stage 2)	$13,957,000	TBD	Mid-Term (2027-2034)	Non-NHS Bridge Preservation Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Preservation	Bridge NHS Preservation Line Item (stage 2)	$8,444,600	TBD	Mid-Term (2027-2034)	NHS Bridge Preservation Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Reconstruction	Bridge NON NHS Reconstruction Line Item (stage 2)	$61,533,200	TBD	Mid-Term (2027-2034)	Non-NHS Bridge Reconstruction Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Reconstruction	Local/Off System Bridges (stage 2)	$52,187,000	TBD	Mid-Term (2027-2034)	Local/Off System Bridge Reconstruction Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Reconstruction	Bridge NHS Reconstruction Line Item (stage 2)	$39,821,550	TBD	Mid-Term (2027-2034)	NHS Bridge Reconstruction Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Efficiency & Operations	Efficiency & Operations NHS Line Item	$5,229,000	TBD	Mid-Term (2027-2034)	NHS Efficiency and Operations Reserve	Exempt	X1
	10	Armstrong, Butler, Indiana	Road Preservation	Roadway NON NHS Preservation (stage 2)	$27,738,000	TBD	Mid-Term (2027-2034)	Non-NHS Bridge Preservation Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Road Preservation	Roadway NHS Preservation (stage 2)	$4,166,430	TBD	Mid-Term (2027-2034)	NHS Roadway Preservation Reserve	Exempt	S10
	10	Armstrong, Butler, Indiana	Road Reconstruction	Roadway NON NHS Reconstruction (stage 2)	$20,000,000	TBD	Mid-Term (2027-2034)	Non-NHS Roadway Reconstruction Reserve	Exempt	S10
	10	Armstrong, Butler, Indiana	Road Reconstruction	Roadway NHS Reconstruction (stage 2)	$4,209,000	TBD	Mid-Term (2027-2034)	NHS Roadway Reconstruction Reserve	Exempt	S10
24722	10	Butler	Bridge Reconstruction	PA 8 over Muddy Creek	$4,000,000	8	Mid-Term (2027-2034)	Replacement of the existing structure carrying PA 8 over Muddy Creek in Clay Township, Butler County.	Exempt	S19
113652	10	Butler	Bridge Preservation	PA 8 General Butler Bridge PM	$4,984,000	8	Mid-Term (2027-2034)	Preservation of existing structure carrying State Route 8 over Connoquenessing Creek, Quarry Street and railroads in Butler City, Butler County	Exempt	S19
114789	10	Butler	Road Preservation	SR 8 Butler City to SR 308*	$7,259,220	8	Mid-Term (2027-2034)	Resurfacing to include, bituminous patching, minor drainage, milling, leveling, binder and wearing courses along SR 8 from the intersection of SR 68 north to the intersection of SR 308 in Butler and Center Townships, Butler County	Exempt	S10
117377	10	Butler	Bridge Preservation	Butler Latex Group Bridges (SR 28)	$10,339,400	28	Mid-Term (2027-2034)	Preservation of various structures carrying various routes over various features in various municipalities in Butler County.	Exempt	S19
86105	10	Butler	Bridge Reconstruction	Karns Crossing Bridge	$12,269,500	68	Mid-Term (2027-2034)	Replacement, including intersection improvements and replacement and/or extension of the twin-cell arch culvert, of the existing structure carrying PA 68 over the Bessemer and Lake Erie and Buffalo and Pittsburgh Railroads and Connoquenessing Creek in Butler and Summit Townships, Butler County.	Exempt	S19

*Potential multi-modal elements to be determined during further project development.

SPC Long Range Transportation Plan
Fiscally Constrained Highway/Bridge Project List

MPMS/GIS ID	District	County	Investment Category	Title	Estimated Cost	Route	Stage	Narrative	AQ Status	Exempt Code
91286	10	Butler	Road Reconstruction	SR 228 Three Degree Rd Intersection	$8,214,000	228	Mid-Term (2027-2034)	This safety improvement project includes adding through lanes along the length of the project, turn lanes at various intersections, side road improvements, the addition of service roads for access control, drainage and guide rail upgrades, signal replacement, signage, and pavement markings along PA 228 (Mars Crider Road) from 500 feet east of the intersection with SR 3015 (Mars Valencia Road) to 1.0 mile east of the intersection with SR 3007 (Three Degree Road) as well as sidewalks, ADA ramps, bicycle consideration and the addition of a roundabout on Three Degree Road in Adams Township, Butler County.	Regionally Significant	
92908	10	Butler	New Capacity	228 Mars RR Bridge West Expansion	$71,567,000	228	Mid-Term (2027-2034)	Intersection improvements and widening of PA 228 to 4/5 lanes from SR 3019 (Pittsburgh Street) west to SR 3021 (Franklin Road) in Seven Fields Borough and Adams and Cranberry Townships, Butler County.	Regionally Significant	
24409	10	Butler	Bridge Replacement	SR 268, State Game Lands 95 Br	$7,860,000	268	Mid-Term (2027-2034)	Bridge replacement of the existing structure carrying PA 268 over Bear Creek in Parker Township, Butler County.	Exempt	S19
24663	10	Butler	Bridge Reconstruction	US 422 over PA 356	$8,013,000	422	Mid-Term (2027-2034)	Replacement of the existing structure carrying US 422 over PA 356 in Butler Township, Butler County.	Exempt	S19
83611	10	Butler	Bridge Replacement	US 422 Shawood Pipe	$10,009,800	422	Mid-Term (2027-2034)	Replacement/repair of the existing culvert carrying a tributary to Muddy Creek beneath US Route 422 in Muddy Creek Township, Butler County.	Exempt	S19
24241	10	Butler	Bridge Reconstruction	PA 528 over Lake Arthur	$23,127,000	528	Mid-Term (2027-2034)	Reconstruction of the existing structure carrying PA 528 over Lake Arthur in Franklin Township, Butler County.	Exempt	S19
83323	10	Butler	Bridge Reconstruction	PA 528 over Big Run	$2,311,800	528	Mid-Term (2027-2034)	Replacement of the existing structure carrying State Route 528 (Arbor Drive) over Big Run in Brady Township, Butler County.	Exempt	S19
97102	10	Indiana	Road Reconstruction	SR 22 Armagh Bypass Reconstruct	$18,387,000	22	Mid-Term (2027-2034)	Highway reconstruction along US 22 from the West Wheatfield Township line east to 0.12 miles east of the US 422/PA 403 Interchange in East Wheatfield Township, Indiana County.	Exempt	S10
112423	10	Indiana	Road Preservation	SR 22 Through Blairsville PM	$13,047,700	22	Mid-Term (2027-2034)	Preventative maintenance along SR 22 from Blairsville/Westmoreland County Line east to Snyder Lane in Burrell Township, Indiana County.	Exempt	S10
112424	10	Indiana	Road Preservation	SR 22 Penn View PM	$14,187,800	22	Mid-Term (2027-2034)	Preventative Maintenance project to include minor drainage, patching, guiderail upgrades and a Binder & Wearing overlay along SR 22 from Snyder Lane in Burrell Township to just east of Kettle Hollow Road in West Wheatfield Township, Indiana County.	Exempt	S10
98805	10	Indiana	Bridge Preservation	SR 56 Buena Vista Bridge Pres.	$5,431,000	56	Mid-Term (2027-2034)	Preservation (preventative maintenance) of the existing structure carrying PA 56 over Blacklick Creek and the Conrail Railroad in East Wheatfield Township, Indiana County.	Exempt	S19
25621	10	Indiana	Bridge Reconstruction	US 119 over SR 8001 Bridges	$5,955,120	119	Mid-Term (2027-2034)	Rehabilitation of the existing structures carrying US 119 northbound and southbound over SR 8001 in White Township, Indiana County.	Exempt	S19
99709	10	Indiana	Safety	SR 286 Oakland Avenue Ped Safety	$3,028,000	286	Mid-Term (2027-2034)	Pedestrian safety improvements from IUP (Maple Street) to Plaza Drive in White Township and Indiana Borough, Indiana County.	Exempt	X12
117685	10	Indiana	Bridge Replacement	SR 286 First Sergeant Alexander Kelly Memorial Bridge	$17,787,800	286	Mid-Term (2027-2034)	Replacement of the existing structure carrying SR 286 over the Kiskiminetas River in Saltsburg Borough, Indiana County.	Exempt	S19
114605	10	Indiana	Road Preservation	US 422 County Line to Bypass	$5,644,200	422	Mid-Term (2027-2034)	Resurfacing to include milling of exiting roadway surface, level and wearing courses, minor drainage, guiderail upgrades and shoulder back-up along SR 422 from the Armstrong County line East to the Bypass near the intersection of SR 4422, in Armstrong Township, Indiana County	Exempt	S10
83227	10	Indiana	Bridge Replacement	US 119 over Pine Run	$1,000,000	119	Mid-Term (2027-2034)	Replacement of the existing structure carrying US 119 over Pine Run in East Mahoning Township, Indiana County.	Exempt	S19
98811 98827	10	Indiana	Bridge Preservation	Bridge to Nowhere EB PM &WB PM	$13,440,000	422	Mid-Term (2027-2034)	Bridge Rehabilitation of the existing structure carrying US 422 eastbound over SR 4422 (Ben Franklin Road), State Route 4005 (Indian Springs Road), State Route 3035 (Old US 119) and the Buffalo and Pittsburgh Railroad in White Township, Indiana County.	Exempt	S19
100958	11	Allegheny	Bridge Preservation	62nd Street Bridge*	$20,000,000	8	Mid-Term (2027-2034)	Bridge preservation on the 62nd Street Bridge in the City of Pittsburgh, Allegheny County	Exempt	S19
100956	11	Allegheny	Bridge Preservation	West End Bridge*	$66,700,000	19	Mid-Term (2027-2034)	Bridge preservation and painting of the West End Bridge (SR 19) over the Ohio River and CSX Railroad in the City of Pittsburgh, Allegheny County.	Exempt	S19
100768	11	Allegheny	Road Preservation	US Route 22 - Washington	$8,100,000	22	Mid-Term (2027-2034)	milling and resurfacing on US 22 from the Washington County Line to McKee Road in North Fayette and Findlay Townships, Allegheny County	Exempt	S10
100769	11	Allegheny	Road Preservation	US 22 - US 30 to McKee Rd	$6,500,000	22	Mid-Term (2027-2034)	Concrete rehabilitation of US 22 from US 30 to McKee Road in North Fayette Township	Exempt	S10

*Potential multi-modal elements to be determined during further project development.

SPC Long Range Transportation Plan
Fiscally Constrained Highway/Bridge Project List

MPMS/GIS ID	District	County	Investment Category	Title	Estimated Cost	Route	Stage	Narrative	AQ Status	Exempt Code
100774	11	Allegheny	Road Reconstruction	PA 28: Allegheny Valley	$10,000,000	28	Mid-Term (2027-2034)	Reconstruction of PA 28 from Regional Industrial Development Corporation (RIDC) to Yutes Run in Springdale, O'Hara, and Harmar Townships	Exempt	S10
100776	11	Allegheny	Road Reconstruction	PA 28:Highland Pk to RIDC	$13,000,000	28	Mid-Term (2027-2034)	Reconstruction of PA 28 from Highland Park to Regional Industrial Development Corporation (RIDC) Park in O'Hara Township, Fox Chapel, Aspinwall, and Sharpsburg Borough, and the City of Pittsburgh	Exempt	S10
100778	11	Allegheny	Road Reconstruction	PA 28: Bull Ck to Butler	$21,000,000	28	Mid-Term (2027-2034)	Reconstruction of PA 28 from Bull Creek to the Butler County Line in Harrison, Fawn Townships and Tarentum Borough	Exempt	S10
100959	11	Allegheny	Bridge Preservation	PA 28 NB over PA 910	$13,000,000	28	Mid-Term (2027-2034)	Bridge preservation on State Route 28 northbound over State Route 910 in the Harmarville Interchange in Harmar Township	Exempt	S19
88441	11	Allegheny	Road Reconstruction	Lincoln Hwy: I-376 to Westinghouse Bridge*	$10,000,000	30	Mid-Term (2027-2034)	Mill and overlay on SR 30, Lincoln Highway, from I-376 to Westinghouse Bridge in North Braddock and East Pittsburgh Boros, Allegheny County.	Exempt	S10
111624	11	Allegheny	Bridge Preservation	Westinghouse Bridge*	$15,600,000	30	Mid-Term (2027-2034)	Bridge preservation on SR 30, Westinghouse Bridge over Turtle Creek and railroad tracks, one mile west of SR 148 in East Pittsburgh Borough, Allegheny County.	Exempt	S19
100782	11	Allegheny	Road Preservation	SR 48 Mosside Blvd-PA 130 to Haymaker	$3,300,000	48	Mid-Term (2027-2034)	Resurfacing on Mosside Boulevard from PA 130 to Haymaker Road in Monroeville Borough, Allegheny County.	Exempt	S10
100784	11	Allegheny	Road Reconstruction	PA 50-Wash County Line	$16,000,000	50	Mid-Term (2027-2034)	Rehabilitation of existing concrete pavement from Washington County Line to Miller's Run Road in South Fayette Township	Exempt	S10
109640	11	Allegheny	Safety	PA 50: I-79 to Thoms Run	$13,600,000	50	Mid-Term (2027-2034)	Roadway widening for additional lanes and intersection improvement of PA 50/I-79, from Mayer Street to Great Southern Shopping Center and from I-79 to Thoms Run Road in Collier Township, Allegheny County.	Regionally Significant	
100789	11	Allegheny	Road Reconstruction	Saw Mill Run Blvd: PA 88 to US 19*	$18,000,000	51	Mid-Term (2027-2034)	Reconstruction of Saw Mill Run Boulevard from PA 88 (Library Road) to I376 in the City of Pittsburgh, Allegheny County.	Exempt	S10
100793	11	Allegheny	Road Preservation	PA 51-Curry Hollow - SR 88*	$14,000,000	51	Mid-Term (2027-2034)	Resurface PA 51 from (SR 2040) Lebanon Church Road to SR 88 (Library Road) in the City of Pittsburgh, and Baldwin, Pleasant Hills, Whitehall and Brentwood Boroughs, Allegheny County	Exempt	S10
105450	11	Allegheny	Road Reconstruction	PA 51, Hayden Boulevard*	$14,000,000	51	Mid-Term (2027-2034)	Mill and overlay on PA 51, Hayden Boulevard from Aery Road to Hutchinson Road in Forward and Elizabeth, Allegheny County	Exempt	S10
56883	11	Allegheny	Bridge Preservation	SR 65 Spruce Run Rd Bridge*	$17,000,000	65	Mid-Term (2027-2034)	Bridge rehabilitation on SR 65 (Spruce Run Road) over Spruce Run in Ben Avon Boro, Allegheny County.	Exempt	S19
79448	11	Allegheny	Road Preservation	PA 65: Fort Duquesne to Kendal*	$14,000,000	65	Mid-Term (2027-2034)	Milling and resurfacing on R 65, Ohio River Boulevard in the City of Pittsburgh, Bellevue, Avalon, Ben Avon and Emsworth, Allegheny County	Exempt	S10
92279	11	Allegheny	Road Reconstruction	PA 65: Frt Duquesne Br to Cal Ave	$2,000,000	65	Mid-Term (2027-2034)	Concrete pavement restoration of SR 65 from the Fort Duquesne Bridge to California Avenue in the City of Pittsburgh Allegheny County.	Exempt	S10
100796	11	Allegheny	Road Preservation	PA 65, Ohio Rver Blvd-Terrace Av*	$3,500,000	65	Mid-Term (2027-2034)	Concrete pavement reconstruction on Ohio River Boulevard from Terrace Avenue to River Avenue in Kilbuck Township and Emsworth and Glenfield Boroughs, Allegheny County	Exempt	S10
100797	11	Allegheny	Road Preservation	Ohio Rver Blvd-River Ave*	$2,000,000	65	Mid-Term (2027-2034)	Resurfacing on PA 65, Ohio River Boulevard from River Avenue to Edgeworth Lane in Edgeworth and Sewickley Boroughs	Exempt	S10
100798	11	Allegheny	Road Preservation	Ohio Rver Blvd-Ped Walkway*	$2,500,000	65	Mid-Term (2027-2034)	Resurfacing on PA 65, Ohio River Boulevard from the Pedestrian walk way to 200 feet past Eckert Street Bridge in City of Pittsburgh	Exempt	S10
109349	11	Allegheny	Road Preservation	PA 65/Emsworth to I-79*	$9,000,000	65	Mid-Term (2027-2034)	Patch and overlay on PA 65 (Ohio River Blvd) from Emsworth to I-79 in Kilbuck Township and Emsworth and Glenfield, Boroughs, Allegheny County	Exempt	S10
115421	11	Allegheny	Bridge Preservation	SR 65 Eckert Street Bridge (65 ov Eckert St., City of Pittsburgh)*	$27,000,000	65	Mid-Term (2027-2034)	Bridge deck replacement on PA 65, Ohio River Boulevard over Eckert Street in the City of Pittsburgh, Allegheny County	Exempt	S19
105457	11	Allegheny	Bridge Preservation	Neville Island Bridge Ramps - Phase 3	$8,000,000	79	Mid-Term (2027-2034)	Bridge preservation on SR 79 NB Ramp to PA 65 NB in Glenfield Boro, Allegheny County.	Exempt	S19
27505	11	Allegheny	New Capacity	286/Sandune-Logans*	$33,000,000	286	Mid-Term (2027-2034)	Widening iwth bitumous to add a center turn lane; milling and resurfacing; shoulder work; curbs, drainage, drive adjustments; signal updates, structure work. located on SR 286, begins at Presque Isle Drive/Sandune Drive and end just north of Logans Ferry Road, in Plum, Allegheny County and Murrysville, Westmoreland County. Approx. 1.49 miles.	Regionally Significant	
80508	11	Allegheny	New Capacity	286/Sagamore-Sandune PH2*	$34,000,000	286	Mid-Term (2027-2034)	Widening to add turn lanes and through lanes; milling and resurfacing; reconstruction, drainage; curbs, driveway adjustments; signals; structure work. Located on SR 286, from Old Frankstown Road/ Sagamore Road to just north of Presque Isle Drive/Sandune Drive, in Plum, Allegheny County. Approx. 2.02 miles.	Regionally Significant	

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100624	11	Allegheny	Bridge Reconstruction	Tarentum Bridge ov NS RR*	$21,000,000	366	Mid-Term (2027-2034)	Bridge restoration/replacement on PA 366, Tarentum Bridge over Norfolk Southern Rail and Allegheny River, in Tarentum Borough, Allegheny County.	Exempt	S19
94651	11	Allegheny	Efficiency & Operations	Pkwy East Active Traffic Management	$9,400,000	376	Mid-Term (2027-2034)	The Parkway East Active Traffic Management System (PE ATMS) is an intelligent transportation system (ITS) improvement intended to improve traffic safety and operations on portions of I-376 in Allegheny County, Pennsylvania.Pennsylvania. The limits of the project are between the Grant Street interchange (MP 70.5) and the eastern terminus of I-376 at the Pennsylvania Turnpike and US 22 (MP 84.5).	Regionally Significant	
97028	11	Allegheny	Safety	I-376/Banksville Interchange (TYP second 4 yrs)	$53,000,000	376	Mid-Term (2027-2034)	Interchange improvement on I-376 from the Parkway Center Interchange (SR 8091) to the Fort Pitt Tunnel in the City of Pittsburgh, Allegheny County. Includes US 19 (Banksville Road), PA 51 ramps and Banksville Interchange ramps (SR 8075).	Regionally Significant	
98125	11	Allegheny	Safety	SR 885 (Bates Street) Improvement (pending study)*	$25,000,000	885	Mid-Term (2027-2034)	Widening on S.R. 885 (Bates Street) from Second Ave. to Boulevard of the Allies in the City of Pittsburgh, Allegheny County.	Regionally Significant	
104328	11	Allegheny	Efficiency & Operations	I-79 at PA 910 Interchange	$11,017,000	910	Mid-Term (2027-2034)	This project is on the CMAQ Program for congestion reduction at the I79/PA 910 Interchange by widening and improving traffic flow at on/off ramps to Interstate 79 in Marshall Township, Allegheny County.	Regionally Significant	
109549	11	Allegheny	Bridge Preservation	Highland Park Bridge	$35,000,000	1005	Mid-Term (2027-2034)	Bridge preservation on SR 1005 (Highland Park) over Allegheny River, Norfolk Southern Railway and AVR Railroad in Sharpsburg Borough, Allegheny County.	Exempt	S19
91796	11	Allegheny	Road Preservation	Streets Run Road	$20,350,000	2046	Mid-Term (2027-2034)	Mill & overlay on SR 2046 (Streets Run Road) from Prospect Road to Baldwin Road in Baldwin and West Mifflin Boroughs, Allegheny County.	Exempt	S10
111630	11	Allegheny	Bridge Preservation	SR 2048 Hall Station Bridge*	$12,500,000	2048	Mid-Term (2027-2034)	Bridge preservation on SR 2048 over Thompson Run in Monroeville Boro, Allegheny County.	Exempt	S19
78232	11	Allegheny	Bridge Reconstruction	Electric Ave ov Falls Run*	$28,000,000	2112	Mid-Term (2027-2034)	Bridge restoration/replacement on SR 2112, Electric Avenue over Falls Run in East Pittsburgh and Turtle Creek Boroughs, Allegheny County.	Exempt	S19
69071	11	Allegheny	Bridge Preservation	40th Street Bridge Preservation*	$35,000,000	2124	Mid-Term (2027-2034)	40th Street Bridge Located on the 40th St. Br. over the Allegheny River in the City of Pittsburgh, Allegheny County. Preserve 2,364 foot bridge with full paint, repair cracks and section loss.	Exempt	S19
100701	11	Allegheny	Bridge Preservation	McKees Rocks Bridge Phase 3*	$70,000,000	3104	Mid-Term (2027-2034)	Bridge rehabilitation on State Route 3104 (McKees Rocks Bridge) over Ohio River and Norfolk Southern Railroad in the City of Pittsburgh	Exempt	S19
114106	11	Allegheny	Bridge Preservation	Sewickley Bridge Preservation Phase 2*	$38,000,000	4025	Mid-Term (2027-2034)	Bridge rehabilitation on SR 4025, Sewickley Bridge, over the Ohio River in Sewickley Boro, Allegheny County.	Exempt	S19
27138	11	Allegheny	Bridge Reconstruction	S. Millvale Avenue Bridge*	$13,000,000	7301	Mid-Term (2027-2034)	Bridge rehabilitation on S. Millvale Avenue over NS & East Busway in the City of Pittsburgh, Allegheny County	Exempt	S19
91907	11	Allegheny	Bridge Reconstruction	Charles Anderson Bridge*	$23,300,000	7301	Mid-Term (2027-2034)	(Sponsor = City of Pittsburgh) Bridge replacement/rehabilitation on Charles Anderson Bridge over Schenley Park, Bike Trail and CSX Railroad in the City of Pittsburgh, Allegheny County.	Exempt	S19
103366	11	Allegheny	Bridge Reconstruction	Homestead Grays Bridge*	$40,000,000	7301	Mid-Term (2027-2034)	Bridge rehabilitation on Homestead Grays Bridge over parking lot parallel to CSX Railroad in Homestead Borough, Allegheny County	Exempt	S19
106386	11	Allegheny	Bridge Reconstruction	Larimer Avenue Bridge*	$16,407,600	7301	Mid-Term (2027-2034)	(Sponsor = City of Pittsburgh) Bridge restoration/replacement on Larimer Avenue Bridge over Allegheny Valley Railroad in the City of Pittsburgh, Allegheny County.	Exempt	S19
114150	11	Allegheny	Bridge Reconstruction	Swindell Bridge*	$27,000,000	7301	Mid-Term (2027-2034)	Swindell Bridge Rehabilitation located between Essen Street and N.Charles Street over I-279, HOV, Ramp G, and East Street in the City of Pittsburgh, Allegheny County.	Exempt	S19
56960	11	Allegheny	Bridge Preservation	Rankin Bridge*	$27,000,000	7456	Mid-Term (2027-2034)	Bridge preservation over Monongahela River, SR 9111, Union R/R, P&LE R/R and Kenmawr Avenue in Rankin Boro, Allegheny County.	Exempt	S19
93915	11	Allegheny	Bridge Reconstruction	Talbot Avenue Ramp Bridge Rehabilitation*	$5,000,000	7456	Mid-Term (2027-2034)	Bridge rehabilitation on Ramp located on Rankin Bridge to Talbot Ave, over Union RR, in Rankin Borough, Allegheny County.	Exempt	S19
109562	11	Allegheny	Bridge Reconstruction	Blvd of Allies - Ramp H	$20,000,000	8002	Mid-Term (2027-2034)	Deck replacement on Ramp H from Crosstown Blvd. (SR 0579) to Blvd. of the Allies, in the City of Pittsburgh, Allegheny County	Exempt	S19
27491	11	Allegheny	Road Reconstruction	Beck's Run Road	$2,000,000	9900	Mid-Term (2027-2034)	(Sponsor = Allegheny County) Highway reconstruction on Beck's Run Road between East Carson Street and Brownsville Road in the City of Pittsburgh, Allegheny County.	Exempt	S10

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27806	11	Allegheny	Bridge Preservation	Corliss Tunnel*	$17,000,000	9900	Mid-Term (2027-2034)	(Project sponsor = City of Pittsburgh) Tunnel reconstruction and preservation work on the structure that carries Corliss Street from the intersection of West Carson Street westward toward Crafton Heights in the City of Pittsburgh, Allegheny County.	Exempt	S19
106269	11	Allegheny	Road Reconstruction	Neville Road*	$6,000,000	9900	Mid-Term (2027-2034)	(Sponsor = Allegheny County) Highway restoration on Neville Road from Grand Avenue to the Fleming Park Bridge in Neville Township, Allegheny County.	Exempt	S10
20192029	11	Allegheny	Road Reconstruction	County Road Painters Run Rd*	$30,000,000	9900	Mid-Term (2027-2034)	Highway restoration and roadway improvements of Painters Run Road from Bower Hill Road in Upper St. Clair Township to Rob Hollow Road in the Municipality of Mt. Lebanon; Project sponsor is Allegheny County	Exempt	S10
117775	11	Allegheny	Bridge Preservation	Mansfield Bridge	$5,000,000	H523	Mid-Term (2027-2034)	Bridge preservation on Mansfield Bridge over the Monongahela River in Dravosburg Boro, Allegheny County.	Exempt	S19
100773	11	Allegheny	Road Reconstruction	PA 28/East Ohio Street	$5,200,000	28	Mid-Term (2027-2034)	Patch and overlay on PA 28, from General Robinson Street to Heinz Wall in the City of Pittsburgh, Allegheny County	Exempt	S10
115515	11	Allegheny	Bridge Preservation	North Shore Expressway Preservation	$13,000,000	279	Mid-Term (2027-2034)	Bridge preservation on North of Ft. Duquesne bridge on I-279 in the City of Pittsburgh, Allegheny County.	Exempt	S19
109383	11	Allegheny	Road Reconstruction	Bigelow Boulevard*	$10,750,000	400	Mid-Term (2027-2034)	Mill and Overlay on SR 400 (Bigelow Boulevard) from segment 4 to segment 20 in the City of Pittsburgh, Allegheny County.	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Reconstruction	Local, County, and State Slide Remediation & Reconstruction	$75,000,000	9901	Mid-Term (2027-2034)	Funds anticipated for slide remediation and road reconstruction in Allegheny, Beaver, and Lawrence Counties	Exempt	S2
	11	Allegheny, Beaver, Lawrence	Bridge Preservation	Bridge NHS Preservation Line Item	$40,369,000	TBD	Mid-Term (2027-2034)	NHS Bridge Preservation Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Preservation	Bridge NON NHS Preservation Line Item	$23,501,000	TBD	Mid-Term (2027-2034)	Non-NHS Bridge Preservation Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Reconstruction	Local/Off System Bridges	$118,706,400	TBD	Mid-Term (2027-2034)	Local/Off System Bridge Reconstruction Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Reconstruction	Bridge NHS Reconstruction Line Item	$115,949,000	TBD	Mid-Term (2027-2034)	NHS Bridge Reconstruction Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Reconstruction	Bridge NON NHS Reconstruction Line Item	$18,967,000	TBD	Mid-Term (2027-2034)	Non-NHS Bridge Reconstruction Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Efficiency & Operations	Efficiency & Operations NHS Line Item	$64,135,000	TBD	Mid-Term (2027-2034)	NHS Efficiency & Operations Reserve	Exempt	X1
	11	Allegheny, Beaver, Lawrence	Road Preservation	Roadway NHS Preservation (Stage 2)	$15,163,000	TBD	Mid-Term (2027-2034)	NHS Roadway Preservation Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Preservation	Roadway NON NHS Preservation (Stage 2)	$3,479,000	TBD	Mid-Term (2027-2034)	Non-NHS Roadway Preservation Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Reconstruction	Roadway NON NHS Reconstruction(Stage 2)	$20,000,000	TBD	Mid-Term (2027-2034)	Non-NHS Roadway Reconstruction Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Reconstruction	Roadway NHS Reconstruction (Stage 2)	$9,306,000	TBD	Mid-Term (2027-2034)	NHS Roadway Reconstruction Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Safety	Safety Line Item	$15,057,000	TBD	Mid-Term (2027-2034)	Safety Reserve	Exempt	S6
113669	11	Beaver	Bridge Preservation	SR 18 Tornado Bridge*	$5,500,000	18	Mid-Term (2027-2034)	Bridge preservation on SR 18, Big Beaver Boulevard over Service Road and Wallace Run in City of Beaver Falls, Beaver County	Exempt	S19
111604	11	Beaver	Bridge Preservation	SR 51, Beaver Rochester Bridge	$10,000,000	51	Mid-Term (2027-2034)	Bridge preservation on SR 51 over Beaver River in Beaver Boro, Beaver County.	Exempt	S19
115203	11	Beaver	Road Reconstruction	SR 51, Constitution Boulevard - Mill and Overlay*	$5,000,000	51	Mid-Term (2027-2034)	Mill and overlay on SR 51, Constitution Boulevard, between Beaver Rochester Road to Brady's Run Creek in Fallston Boro, Beaver County	Exempt	S10
116587	11	Beaver	Road Reconstruction	SR 51, Consitution Boulevard - CPR*	$5,500,000	51	Mid-Term (2027-2034)	Concrete pavement reconstruction on SR 51, Constitution Boulevard in the City of Aliquippa, Beaver County	Exempt	S10
116588	11	Beaver	Road Reconstruction	SR 51, Constitution Boulevard - Mill and Overlay2	$11,000,000	51	Mid-Term (2027-2034)	Mill and overlay on SR 51, Constitution Boulevard, between Dilworth Run and Branch Small Run in Darlington Township, Beaver County	Exempt	S10
105453	11	Beaver	Road Preservation	SR 3007, Broadhead Road, Frankfort Rd - Allegheny Co Line	$9,222,000	3007	Mid-Term (2027-2034)	Mill and overlay on PA 3007, Brodhead Road from Frankfort Road to Allegheny County line in City of Aliquippa, Hopewell and Center Townships, Beaver County	Exempt	S10
117987	11	Beaver	Bridge Preservation	Ambridge-Aliquippa Bridge*	$30,000,000	3052	Mid-Term (2027-2034)	Bridge rehabilitation on SR 3052 over the Ohio River in Ambridge and Aliquippa Boroughs, Beaver County.	Exempt	S19

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28918	11	Beaver	Bridge Preservation	SR 4042, Old Rochester-Bridgewater Rd Bridge*	$5,600,000	4042	Mid-Term (2027-2034)	Bridge preservation on SR 4042, Old Rochester-Bridgewater Rd over Beaver River and Norfolk Southern Railroad in Rochester and Bridgewater Boroughs, Beaver County	Exempt	S19
101232	11	Beaver	Road Reconstruction	PA 51/McKinley - Ohio State	$17,000,000	51	Mid-Term (2027-2034)	Reconstruction of Constitution Boulevard from McKinley Road to the Ohio State Line in Chippewa Township, Beaver County	Exempt	S10
109356	11	Beaver	Road Reconstruction	PA 68 -Midland Beaver Road*	$13,248,000	68	Mid-Term (2027-2034)	Mill and Overlay on SR 68, Midland Beaver Road from segment 10 to segment 210 in Center and Chippewa Townships, Beaver County	Exempt	S10
100916	11	Lawrence	Road Preservation	PA 18 Resurfacing	$5,890,000	18	Mid-Term (2027-2034)	Resurface on PA 18 from the Beaver County Line to the Mahoning River in the City of New Castle, Neshannock and North Beaver Townships, and Wampum and New Beaver Boroughs, Lawrence County.	NA	
100917	11	Lawrence	Road Preservation	PA 18, Wilmington Road	$5,000,000	18	Mid-Term (2027-2034)	Mill and overlay on SR 18, Wilmington Road in Wilmington and Neshannock Townships, Lawrence County	NA	
109386	11	Lawrence	Road Preservation	PA 19: Perry Highway 2*	$1,000,000	19	Mid-Term (2027-2034)	Mill and Overlay on SR 19, Perry Highway from segment 10 to segment 80 in Shenango and Slippery Rock Townships, Lawrence County.	NA	
92282	11	Lawrence	Road Preservation	Benjamin Franklin Highway	$8,000,000	422	Mid-Term (2027-2034)	Mill and overlay on SR 422, Benjamin Franklin Highway, from the Ohio State line to Harbor Village Drive in Pulaski Township, Lawrence County.	NA	
116560	11	Lawrence	Road Reconstruction	SR 422, Benjamin Franklin Hwy	$10,200,000	422	Mid-Term (2027-2034)	Mill and overlay on US422 from New Butler Rd intersection to US 19 intersection in Shanango, Union and Slippery Rock Townships, Lawrence County.	NA	
20192018	11	Lawrence	Safety	SR 956 Mercer Rd - New Wilm Twp line - Safety inprovements*	$6,000,000	956	Mid-Term (2027-2034)	Corridor and safety improvements along SR 956 from Mercer Road to the New Wilmington Township line in Wilmington Township, Lawrence County, including roadway reconstruction to accommodate 11 ft lanes and 8 ft shoulders	NA	
29402	11	Lawrence	Bridge Reconstruction	Rose Point Bridge	$4,270,000	7212	Mid-Term (2027-2034)	(Sponsor = Slippery Rock) Bridge replacement or restoration on Old Route 422 (T-741) over Slippery Rock Creek in Slippery Rock Township, Lawrence County.	NA	
96661	12	Fayette	Safety	SR 119 McClure/Kingview Road Interchange	$21,800,000	119	Mid-Term (2027-2034)	This project is for intersection improvements on US 119 at McClure Road and Kingview Road in Upper Tyrone and Bullskin Townships, Fayette County. The project will eliminate two signalized intersections on US Route 119 with Kingview Road and McClure Road, and a new full-access interchange would be constructed in between the two existing intersections. A new bridge carrying a new connector road would be constructed.	Regionally Significant	
98427	12	Fayette	Road Preservation	PA 381: PA 711 to Imel Rd	$3,018,750	381	Mid-Term (2027-2034)	This project is the resurfacing of PA 381 (Indian Creek Valley Road) from PA 711 to Imel Road in Saltlick Township, Fayette County.	Exempt	S10
81192	12	Fayette	Bridge Reconstruction	Layton Bridge	$26,000,000	4038	Mid-Term (2027-2034)	This project is for the improvement of the Layton Bridge (State Route 4038, Layton Street) over the Youghiogheny River and Great Allegheny Passage Trail in Perry Township, Fayette County. *No new capacity will be added*	Exempt	S19
117586	12	Fayette, Greene, Washington, Westmoreland	Road Reconstruction	Slide Remediation & Reconstruction	$44,000,000	TBD	Mid-Term (2027-2034)	District Wide Slide Reserve Contract for FFY 2031-20234	Exempt	S2
	12	Fayette, Greene, Washington, Westmoreland	Bridge Preservation	Bridge NHS Preservation Line Item	$65,297,000	TBD	Mid-Term (2027-2034)	NHS Bridge Prerservation Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Bridge Preservation	Bridge NON NHS Preservation Line Item	$11,288,000	TBD	Mid-Term (2027-2034)	Non-NHS Bridge Preservation Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Bridge Reconstruction	Bridge NON NHS Reconstruction Line Item	$144,677,000	TBD	Mid-Term (2027-2034)	Non-NHS Bridge Reconstruction Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Bridge Reconstruction	Local/Off System Bridges	$89,207,000	TBD	Mid-Term (2027-2034)	Local/Off System Bridge Reconstruction Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Bridge Reconstruction	Bridge NHS Reconstruction Line Item	$30,339,000	TBD	Mid-Term (2027-2034)	NHS Bridge Reconstruction Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Efficiency & Operations	Efficiency & Operations NHS Line Item	$21,441,000	TBD	Mid-Term (2027-2034)	NHS Efficiency and Operations Reserve	Exempt	X1

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	12	Fayette, Greene, Washington, Westmoreland	Road Preservation	Roadway Non NHS Preservation	$114,939,250	TBD	Mid-Term (2027-2034)	Non-NHS Roadway Preservation Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Road Preservation	Roadway NHS Preservation Line Item	$10,023,000	TBD	Mid-Term (2027-2034)	NHS Roadway Preservation Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Road Reconstruction	Roadway Non NHS Reconstruction	$60,863,000	TBD	Mid-Term (2027-2034)	Non-NHS Roadway Reconstruction Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Road Reconstruction	Roadway NHS Reconstruction Line Item	$34,235,500	TBD	Mid-Term (2027-2034)	NHS Roadway Reconstruction Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Safety	Safety Line Item	$13,283,000	TBD	Mid-Term (2027-2034)	Safety Reserve	Exempt	S6
105358	12	Greene	Safety	PA 19/221 Ruff Creek Int*	$5,200,000	19	Mid-Term (2027-2034)	This project is the study to determine if improvements need made to the PA 19 (Washington Road) and PA 221 (Dunn Station Road/Lippencot Road) Intersection in Washington Township, Greene County.	Exempt	X1
100448	12	Washington	Road Preservation	PA 18: Old Scales Road to Oak Grove Road	$1,000,000	18	Mid-Term (2027-2034)	The project is to resurface PA 18 from State Route 3009 (Old Scales Road) to State Route 4020 (Oak Grove Road) in South Franklin Township and the City of Washington, Washington County.	Exempt	S10
100467	12	Washington	Road Preservation	PA 18: Oak Grove Road to PA 50	$4,500,000	18	Mid-Term (2027-2034)	The project is to resurface PA 18 from State Route 4020 (Oak Grove Road) to PA 50 in the City of Washington and Chartiers Township, Washington County.	Exempt	S10
100413	12	Washington	Road Preservation	US 19: SR 1002 to Valley Brook Rd	$6,850,000	19	Mid-Term (2027-2034)	This project is for the resurfacing of US 19 (Washington Road) from State Route 1002 (McMurray Road) to State Route 1010 (Valley Brook Road) in Peters Township, Washington County.	Exempt	S10
98351	12	Washington	Road Preservation	US 40: I-79 to PA 519	$4,087,000	40	Mid-Term (2027-2034)	This project is for betterment improvements to US 40 (National Pike) from Interstate 79 to PA 519 in Amwell Township, Washington County.	Exempt	S10
98847	12	Washington	Bridge Preservation	B'ville High Level Brdg	$33,600,000	40	Mid-Term (2027-2034)	This project is for the preservation of the structure carrying US 40 over the Monongahela River, PA 88 (Blainsburg Hill Road), State Route 4003 (Brownsville Road), State Route 4035 (Market Street) and 2 railroads in West Brownsville Borough, Fayette County, and Brownsville Borough, Washington County.	Exempt	S19
116176	12	Washington	Road Preservation	US 40 National Pike Pavement Preservation*	$5,821,000	40	Mid-Term (2027-2034)	This project is for the resurfacing of SR 0040 from SEG 0010/0000 to SEG 0120/0100 (PA State Line to Lafayette Street) for a total length of 5.5 miles in Donegal Township, Washington County. Pavement preservation project to include guiderail upgrades, sign replacement, tree trimming and minor drainage improvements.	Exempt	S10
116204	12	Washington	Bridge Preservation	PA 88 ov Br Peters Crk	$2,250,000	88	Mid-Term (2027-2034)	This project is for the replacement/rehabilitation of the structure carrying PA 88 over Peters Creek in Finleyville Borough, Washington County. *No new capacity will be added*	Exempt	S19
98348	12	Washington	Road Preservation	PA 844: PA 231 to Wellsburg Rd	$7,500,000	844	Mid-Term (2027-2034)	This project is for the resurfacing of PA 844 (Washington Pike) from PA 231 to Wellsburg Road in Canton and Hopewell Townships, and West Middletown Borough, Washington County.	Exempt	S10
91135	12	Washington	Bridge Reconstruction	Old B'ville Bridge Rehab	$6,400,000	2067	Mid-Term (2027-2034)	This project is the rehabilitation of the Old Brownsville Bridge (SR 2067 over NS R/R, MON, CITY ST) in West Brownsville Borough, Washington County. *No new capacity will be added*	Exempt	S19
20192121	12	Washington	Efficiency & Operations	I-70 Interstate Detour Improvement plan implementation-	$8,000,000	Various	Mid-Term (2027-2034)	This project is various pavement and intersection improvements to the ancillary State Routes that are used as detour routes for Interstate 70 in various municipalities in Washington County	Regionally Significant	
20192122	12	Washington	Efficiency & Operations	I-79 Interstate Detour Improvement plan implementation- -	$8,000,000	Various	Mid-Term (2027-2034)	This project is various pavement and intersection improvements to the ancillary State Routes that are used as detour routes for Interstate 79 in various municipalities in Washington County	Regionally Significant	
110900	12	Westmoreland	Road Reconstruction	US 30 Corridor Impvmts - Western Section*	$21,727,500	30	Mid-Term (2027-2034)	This project is for safety improvements to the western section of the US 30 Corridor Safety Improvement Study Area from the intersection of US 30/PA 48 to Malts Lane in Allegheny and Westmoreland Counties.	Exempt	S6

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112391	12	Westmoreland	Bridge Reconstruction	SR 56, Vandergrift Bridge*	$5,400,000	56	Mid-Term (2027-2034)	This project is for preservation activities of the Vandergrift Bridge carrying PA-56 over PA-2054, railroad, and Kiskiminetas River in East Vandergrift Borough, Westmoreland County. *No new capacity will be added*	Exempt	S19
98869	12	Westmoreland	Bridge Reconstruction	West Newton Bridge*	$6,800,000	136	Mid-Term (2027-2034)	This project is the replacement of the structure carrying PA 136 (Main Street) over Youghiogheny River in West Newton Borough, Westmoreland County. *No new capacity will be added*	Exempt	S19
116790	12	Westmoreland	Bridge Preservation	Freeport Bridge Truss Preservation*	$1,000,000	356	Mid-Term (2027-2034)	This project is for truss preservation activities to the Freeport Bridge carrying PA 356 over the Kiskiminetas River in Allegheny Township, Westmoreland County.	Exempt	S19
101066	12	Westmoreland	Road Preservation	PA 381: PA 31 to PA 130*	$2,200,000	381	Mid-Term (2027-2034)	This project is for the resurfacing of PA 381 from the intersection with PA 31 to the intersection with PA 130 in Donegal and Cook Townships, Westmoreland County.	Exempt	S10
101067	12	Westmoreland	Road Preservation	PA 381 - SR 2043 to US 30	$1,000,000	381	Mid-Term (2027-2034)	This project is for the resurfacing of PA 381 from the intersection with State Route 2043 (Weavertown Road) to the intersection with US 30 in Ligonier Township, Westmoreland County.	Exempt	S10
108010	12	Westmoreland	Efficiency & Operations	LVTIP: Norvelt to Pleasant Unity	$35,500,000	981	Mid-Term (2027-2034)	This project is for corridor improvements to PA 981 from the village of Norvelt to the village of Pleasant Unity in Mt Pleasant Township, Westmoreland County. SR 981, Section V20 is approximately 3.5 miles and begins north of the SR 981 and SR 2021 (Kecksburg Road)/Mt. Pleasant Road intersection (Norvelt intersection) in Mount Pleasant Township. From just north of the Norvelt intersection, the project area extends generally along SR 2023 to the intersection with SR 130 in Unity Township. Section V20 primarily follows existing SR 2023 with some offline shifts to improve the roadway.	Exempt	R4
108140	12	Westmoreland	Efficiency & Operations	LVTIP: Pleasant Unity to Airport	$7,500,000	981	Mid-Term (2027-2034)	The LVTIP (Laurel Valley Transportation Improvement Project) project will upgrade 12 miles of the PA 981 corridor from the intersection with PA 819 in Mount Pleasant Township to the Westmoreland County Airport in Unity Township. The LVTIP will be constructed in three separate sections. Section Y10 is the northern most and will tie into the recently completed 981-V10 project near the airport. SR 981-Y10 is approximately 2.5 miles in length and begins at the SR 2023 intersection with SR 130 in Unity Township. Corridor improvements would include on-line upgrades as well as segments of new alignment where upgrades are not feasible due to physical/environmental constraints.	Exempt	R4
81747	12	Westmoreland	Bridge Reconstruction	Salina Bridge	$13,000,000	1060	Mid-Term (2027-2034)	This project is for improvement to the structure (Salina Bridge) carrying State Route 1060 (Bridge Street) over the Kiskiminetas River and Norfolk Southern Railroad in Bell Township, Westmoreland County. *No new capacity will be added*	Exempt	S19
112395	12	Westmoreland	Bridge Preservation	W. Leechburg Bridge*	$4,000,000	4093	Mid-Term (2027-2034)	This project is for preservation activities of the West Leechburg Bridge carrying PA-4093 over the railroad and Kiskiminetas River in West Leechburg Borough, Westmoreland County. *No new capacity will be added*	Exempt	S19
		Region	CMAQ, TA, Smart	Region CMAQ Line Item	$215,985,000	TBD	Mid-Term (2027-2034)	CMAQ Program Reserve	NS	
		Region	CMAQ, TA, Smart	Region TAP Line Item	$34,064,000	TBD	Mid-Term (2027-2034)	TAP Program	Exempt	X12
		Region	CMAQ, TA, Smart	SPC Smart Tr. Initiative	$30,641,000	TBD	Mid-Term (2027-2034)	Smart Transporation Reserve	Exempt	X1

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99933	10	Armstrong	Road Preservation	PA 28 Resurfacing	$4,600,000	28	Long-Term (2035-2047)	Resurfacing to include milling of existing bituminous wearing courses, bituminous patching, paving, leveling, binder and wearing courses and minor drainage and guiderail upgrades along PA 28 from 0.56 miles west of the SR 1027 intersection to the T-810 (Calhoun Road) intersection in Boggs and Mahoning Townships.	Exempt	S10
101134	10	Armstrong	Road Reconstruction	PA 28 Slabtown South	$13,325,000	28	Long-Term (2035-2047)	Highway reconstruction along PA 28 between SR 1035 and T-821 (Heffelfinger Road) in Boggs Township.	Exempt	S10
990038	10	Armstrong	Safety	SR 28 Corridor Improvements - Kittaining to Clarion County Line	$30,000,000	28	Long-Term (2035-2047)	Corridor and safety improvements including roadway reconstruction, intersection improvements, and roadway realignments to improve traffic and freight movement operations through the corridor.	Exempt	S6
112432	10	Armstrong	Road Preservation	SR 422 Kittanning Bypass PM	$13,750,000	422	Long-Term (2035-2047)	Preventative maintenance along SR 422 from 1/4 mile west of the SR 66 Interchange, east to the SR 85 intersection in Manor and North Buffalo Townships	Exempt	S10
990037	10	Armstrong	Efficiency & Operations	US 422 & Dutch Ridge Rd Intersection	$13,000,000	422	Long-Term (2035-2047)	Intersection improvements including addition of turning lanes at Dutch Ridge Road & US 422 in Elderton Borough, Armstrong County	Exempt	R1
99129	10	Armstrong	Bridge Reconstruction	PA 839 over Mahoning Cr.	$4,719,000	839	Long-Term (2035-2047)	Replacement of the existing structure carrying PA 839 over Mahoning Creek in Wayne Township.	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Preservation	Bridge NHS Preservation Line Item (stage 3)	$73,489,000	TBD	Long-Term (2035-2047)	NHS Bridge Preservation Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Preservation	Bridge NON-NHS Preservation Line Item (state 3)	$62,174,000	TBD	Long-Term (2035-2047)	Non-NHS Bridge Preservation Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Reconstruction	Bridge NHS Reconstruction Line Item (stage 3)	$194,628,000	TBD	Long-Term (2035-2047)	NHS Bridge Reconstruction Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Reconstruction	Bridge NON-NHS Reconstruction Line Item (stage 3)	$170,504,000	TBD	Long-Term (2035-2047)	Non-NHS Bridge Reconstruction Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Bridge Reconstruction	Local/Off System Bridges (stage 3)	$104,584,000	TBD	Long-Term (2035-2047)	Local/Off System Bridge Reconstruction Reserve	Exempt	S19
	10	Armstrong, Butler, Indiana	Efficiency & Operations	Efficiency & Operations NHS Line Item	$78,119,000	TBD	Long-Term (2035-2047)	NHS Efficiency & Operations Reserve	Exempt	X1
	10	Armstrong, Butler, Indiana	Road Preservation	Roadway NON NHS Preservation (stage 3)	$87,747,000	TBD	Long-Term (2035-2047)	Non NHS Roadway Preservation Reserve	Exempt	S10
	10	Armstrong, Butler, Indiana	Road Preservation	Roadway NHS Preservation (stage 3)	$19,320,000	TBD	Long-Term (2035-2047)	NHS Roadway Preservation Reserve	Exempt	S10
	10	Armstrong, Butler, Indiana	Road Reconstruction	Roadway NON NHS Reconstruction (stage 3)	$26,978,000	TBD	Long-Term (2035-2047)	Non NHS Roadway Reconstruction Reserve	Exempt	S10
	10	Armstrong, Butler, Indiana	Road Reconstruction	Roadway NHS Reconstruction (stage 3)	$16,199,000	TBD	Long-Term (2035-2047)	NHS Roadway Reconstruction Reserve	Exempt	S10
	10	Armstrong, Butler, Indiana	Safety	Safety Line Item	$8,647,000	TBD	Long-Term (2035-2047)	Safety Reserve	Exempt	S6
112427	10	Armstrong/Butler	Road Reconstruction	SR 28 AVE Reconstruction	$35,800,000	28	Long-Term (2035-2047)	Highway reconstruction along SR 28 from the Allegheny/Butler County Line north to US 422 Interchange in Buffalo, North Buffalo, South Buffalo and East Franklin Townships, Butler County	Exempt	S10
112422	10	Butler	Road Preservation	SR 19 Cranberry PM*	$18,250,000	19	Long-Term (2035-2047)	Preventative maintenance along US 19 from the Allegheny/Butler County line north to Zelienople in Cranberry and Jackson Townships, Butler County	Exempt	S10
990041	10	Butler	Safety	SR68 Safety Improvements	$10,000,000	68	Long-Term (2035-2047)	Safety improvements along SR 68 in Forward, Connequenessing, and Butler Townships, Butler County	Exempt	S6
92908	10	Butler	New Capacity	Mars RR Bridge West Expansion	$14,600,000	228	Long-Term (2035-2047)	Intersection improvements and widening of PA 228 to 4/5 lanes from SR 3019 (Pittsburgh Street) west to SR 3021 (Franklin Road) in Seven Fields Borough and Adams and Cranberry Townships, Butler County.	Regionally Significant	
100061	10	Butler	Road Preservation	SR 422, Interstate 79 West Resurf	$2,500,000	422	Long-Term (2035-2047)	Resurfacing to include milling of existing bituminous wearing courses, bituminous patching, paving, leveling, binder and wearing courses and minor drainage and guiderail upgrades along US 422 from the Lawrence County Line to Interstate 79 in Muddy Creek Township, Butler County.	Exempt	S10
112434	10	Butler	Road Preservation	SR 422 Butler Bypass PM	$21,000,000	422	Long-Term (2035-2047)	Preventative maintenance along SR 422 from the SR 356 Interchange East to 0.50 miles west of Bonniebrook Road Intersection in Butler, Summit, Connoquenessing, and Franklin Townships	Exempt	S10
25543	10	Indiana	Efficiency & Operations	US 22 & SR 217 Interchange improvement	$16,000,000	22	Long-Term (2035-2047)	Interchange reconstruction along US 22 and PA 217 in Burrell Township and Blairsville Borough.	Exempt	R3

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95728	10	Indiana	Bridge Reconstruction	US 119 Hamill Southbound Bridge	$3,446,000	119	Long-Term (2035-2047)	Preservation (preventative maintenance) of the existing structure carrying US 119 Southbound over PA 286 in White Township.	Exempt	S19
112421	10	Indiana	Road Preservation	SR 119 South PM	$33,000,000	119	Long-Term (2035-2047)	Preventative maintenance along SR 119 from the SR 119/22 interchange north to its intersection with SR 56 in Center and Burrell Townships, Indiana County	Exempt	S10
112431	10	Indiana	Road Reconstruction	SR 119 Indiana Bypass Reconstruction	$41,353,000	119	Long-Term (2035-2047)	Highway reconstruction along US 119 from 1/2 mile south of the US 119/422 Interchange, north to the SR 110 Interchange in Center, White and Rayne Townships	Exempt	S10
112430	10	Indiana	Road Reconstruction	SR 422 Indiana Bypass Reconstruction	$35,609,000	422	Long-Term (2035-2047)	Highway reconstruction along SR 422 from the SR 119 Interchange East to 1/2 mile east of SR 553 Interchange in Cherryhill Township	Exempt	S10
25616	10	Indiana	Bridge Reconstruction	US 119 Sullivan SB Bridge	$3,446,000	119	Long-Term (2035-2047)	Reconstruction of the existing structure carrying US 119 over SR 954 in White Township, Indiana County	Exempt	S19
69988	10	Indiana	Road Reconstruction	SR 119 Wake Robin Curve	$32,500,000	119	Long-Term (2035-2047)	Two-lane relocation/realignment of US Route 119 south of the intersection with SR 4008 (Chambersville Road) in Rayne Township, Indiana County.	Exempt	S19
95727	10	Indiana	Bridge Reconstruction	US 119 Hamill Northbound Bridge	$3,446,000	119	Long-Term (2035-2047)	Preservation (preventative maintenance) of the existing structure carryiing US 119 northbound over PA 286 in White Township.	Exempt	S19
112537	10	Indiana	Bridge Reconstruction	US 119 Sullivan NB Bridge	$3,446,000	119	Long-Term (2035-2047)	Reconstruction of the existing structure carrying US 119 over SR 954 in White Township, Indiana County	Exempt	S19
112632	10	Indiana	Bridge Reconstruction	US 119 Lutz School Rd NB Bridge	$3,446,000	119	Long-Term (2035-2047)	Reconstruction of the existing structure carrying US 119 northbound over SR 1003 (Lutz School Road) in White Township, Indiana County	Exempt	S19
112661	10	Indiana	Bridge Reconstruction	US 119 Lutz School Rd SB Bridge	$3,446,000	119	Long-Term (2035-2047)	Reconstruction of the existing structure carrying US 119 southbound over SR 1003 (Lutz School Road) in White Township, Indiana County	Exempt	S19
100289	10	Indiana	Road Reconstruction	SR 422 Cheese Rn Rd to Trim Tree Rd	$11,946,000	422	Long-Term (2035-2047)	Highway reconstruction including vertical and horizontal geometry improvements along US 422 between T-408 (Cheese Run Road) and T-433 (Trim Tree Road) in Armstrong Township.	Exempt	S10
20192010	11	Allegheny	Road Reconstruction	Washington Blvd Reconstruction*	$20,000,000	8	Long-Term (2035-2047)	Reconstruction of Washington Boulevard to improve flooding conditions in City of Pittsburgh, Allegheny County, Contingent upon study recommendations	Exempt	S10
92271	11	Allegheny	Road Reconstruction	PA 28: Millvale-Etna Interchange	$9,189,000	28	Long-Term (2035-2047)	Mill and overlay - Millvale to Etna Interchange in Allegheny County	Exempt	S10
20192011	11	Allegheny	Road Preservation	SR 28: Resurfacing and Bridge Preservation	$27,000,000	28	Long-Term (2035-2047)	Mill and overlay, bridge preservation on SR 28 from Bailey's Run to Butler County Line in Tarentum Borough, East Deer, Fawn and Harrison Townships	Exempt	S10
20192013	11	Allegheny	New Capacity	PA 28 - Fox Chapel Bottleneck Widening (RIDC to Fox Chapel)	$34,100,000	28	Long-Term (2035-2047)	Widen to accommodate 2nd southbound thru lane from RIDC to Fox Chapel on SR 28 in Fox Chapel Boro, Allegheny County	Regionally Significant	
	11	Allegheny	Bridge Reconstruction	Glenwood Bridge	$10,000,000	885	Long-Term (2035-2047)	Bridge Rehabilitation on Glenwood Bridge in Located in Baldwin, Pittsburgh and West Homestead, Allegheny County	Exempt	S19
104328	11	Allegheny	Efficiency & Operations	I-79 at PA 910 Interchange	$16,200,000	910	Long-Term (2035-2047)	This project is on the CMAQ Program for congestion reduction at the I79/PA 910 Interchange by widening and improving traffic flow at on/off ramps to Interstate 79 in Marshall Township, Allegheny County.	Regionally Significant	
20192012	11	Allegheny	Road Reconstruction	Highland Park Bridge/Ramps Reconstruction	$90,000,000	1005	Long-Term (2035-2047)	Bridge and ramp restoration on SR 1005 over the Allegheny River Includes Ramps F and G(SR 8082) in the City of Pittsburgh, O'Hara Township, Sharpsburg Borough, and Indiana Township	Exempt	S19
20192019	11	Allegheny	Bridge Preservation	Clairton-Glassport Bridge*	$19,000,000	2038	Long-Term (2035-2047)	Bridge rehabilitation on SR 2038 over Monongahela River in the City of Clairton	Exempt	S19
20192021	11	Allegheny	Bridge Reconstruction	Birmingham Bridge*	$66,000,000	2085	Long-Term (2035-2047)	Bridge rehabilitation on SR 2085, Birmingham Bridge in the City of Pittsburgh	Exempt	S19
20192027	11	Allegheny	Bridge Preservation	10th Street Bridge Preservation*	$12,000,000	7301	Long-Term (2035-2047)	Bridge Preservation work on the structure that carries 10th Street from the intersection of 2nd Avenue and the Armstrong Tunnel to near Muriel Street on the South Side in City of Pittsburgh, Allegheny County; Project sponsor is Allegheny County	Exempt	S19
20192034	11	Allegheny	Road Reconstruction	Smallman Street Reconstruction	$11,000,000	9900	Long-Term (2035-2047)	Highway reconstruction on Smallman Street from 31st Street to 21st Street in the City of Pittsburgh, Allegheny County; Project sponsor is City of Pittsburgh	Exempt	S10
	11	Allegheny	Efficiency & Operations	PGH Signal updates phase 5*	$8,000,000	9900	Long-Term (2035-2047)	Signal Software and Hardware upgrade/replacement project within the City of Pittsburgh; afftected locations not yet determined; Project sponsor is City of Pittsburgh	Regionally Significant	
	11	Allegheny	Bridge Reconstruction	16th Street Bridge	$10,000,000	H021	Long-Term (2035-2047)	Bridge Rehabilitation on 16th Street Bridge in Pittsburgh, Allegheny County	Exempt	S19

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	11	Allegheny	Bridge Reconstruction	Jacks Run Road Bridge No. 1	$10,000,000	H265	Long-Term (2035-2047)		Exempt	S19
102815	11	Allegheny	Efficiency & Operations	Beaver Ave Conversion	$4,500,000		Long-Term (2035-2047)	Possible new roadway alignment in an effort to mitiigate traffic around the North Shore, particularily around Heinz Field and Rivers Casino during sporting events in the City of Pittsburgh, Allegheny County.	Regionally Significant	
	11	Allegheny	Road Reconstruction	ALCO Roads (Bethel Ch, Lebanon Ch, McKees Rks Strochein Rd, Haymaker Rd.)	$65,000,000		Long-Term (2035-2047)	Roadway restoration of various roadways (Bethel Ch, Lebanaon Ch, McKees Rks Strochein Rd, Haymaker Rd) in Allegheny County	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Reconstruction	Local, County, and State Slide Remediation & Reconstruction	$100,000,000	9901	Long-Term (2035-2047)	Funds anticipated for slide remediation and road reconstruction in Allegheny, Beaver, and Lawrence Counties	Exempt	S2
	11	Allegheny, Beaver, Lawrence	Bridge Preservation	Bridge NON-NHS Preservation Line Item	$240,826,000	TBD	Long-Term (2035-2047)	Non-NHS Bridge Preservation Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Preservation	Bridge NHS Preservation Line Item	$181,830,000	TBD	Long-Term (2035-2047)	NHS Bridge Preservation Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Reconstruction	Bridge NON-NHS Reconstruction Line Item	$668,711,000	TBD	Long-Term (2035-2047)	Non-NHS Bridge Reconstruction Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Reconstruction	Bridge NHS Reconstruction Line Item	$431,753,000	TBD	Long-Term (2035-2047)	NHS Bridge Reconstruction Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Bridge Reconstruction	Local/Off System Bridges	$315,399,000	TBD	Long-Term (2035-2047)	Local/Off System Bridge Reconstruction Reserve	Exempt	S19
	11	Allegheny, Beaver, Lawrence	Efficiency & Operations	Efficiency & Operations NHS Line Item	$241,141,000	TBD	Long-Term (2035-2047)	NHS Efficiency & Operations Reserve	Exempt	X1
	11	Allegheny, Beaver, Lawrence	Road Preservation	Roadway NON NHS Preservation (Stage 3)	$202,497,000	TBD	Long-Term (2035-2047)	Non-NHS Roadway Preservation Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Preservation	Roadway NHS Preservation (Stage 3)	$85,267,000	TBD	Long-Term (2035-2047)	NHS Roadway Preservation Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Reconstruction	Roadway NHS Reconstruction (Stage 3)	$255,034,000	TBD	Long-Term (2035-2047)	NHS Roadway Reconstruction Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Road Reconstruction	Roadway NON NHS Reconstruction (Stage 3)	$180,277,000	TBD	Long-Term (2035-2047)	Non-NHS Roadway Reconstruction Reserve	Exempt	S10
	11	Allegheny, Beaver, Lawrence	Safety	Safety Line Item	$133,581,000	TBD	Long-Term (2035-2047)	Safety Reserve	Exempt	S6
20192017	11	Lawrence	Bridge Reconstruction	SR 422 Bridges (Benjamin Franklin & Taylor Township)	$70,000,000	422	Long-Term (2035-2047)	Bridge Rehabilitation. located on SR 422 (Benjamin Franklin Township) in Taylor Township Lawrence County	Exempt	S19
20192102	12	Fayette	Efficiency & Operations	PA 21 Operational & Safety (also see New Cap)*	$30,000,000	21	Long-Term (2035-2047)	The project is for efficiency and operations improvements to the SR 21 (Row E. Furman Highway) corridor in Masontown Borough and German Township, Fayette County	Regionally Significant	
20192111	12	Fayette	Efficiency & Operations	US 119 Operations & Safety*	$50,000,000	119	Long-Term (2035-2047)	This project is for safety and operations improvements to the US 119 (Morgantown Street, Morgantown Road, Main Street, George C. Marshall Parkway, University Drive, Morrell Avenue, Eighth Street, Memorial Boulevard) Corridor from the West Virginia State Line to the Westmoreland County Line in various municipalities in FAyette County	Regionally Significant	
20192112	12	Fayette	Road Reconstruction	US Route 119 Reconstruction: Uniontown to Penn State	$108,000,000	119	Long-Term (2035-2047)	This project is for the reconstruction of US 119 (George C. Marshall Parkway) from the city of Uniontown to Penn State Fayette Campus in North Union Township, Fayette County	Exempt	S10
20192113	12	Fayette	Road Reconstruction	US Route 119 Reconstruction: Connellsville to Kingview*	$108,000,000	119	Long-Term (2035-2047)	This project is for the reconstruction of US 119 (Memorial Highway)from the City of Connellsville to Kingview Road in Bullskin and Connellsville Townships, Fayette County	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Bridge Preservation	Capital Maint Bridge NON-NHS Preservation Line Item	$99,782,000	TBD	Long-Term (2035-2047)	Non-NHS Bridge Preservation Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Bridge Preservation	Capital Maint Bridge NHS Preservation Line Item	$62,355,000	TBD	Long-Term (2035-2047)	NHS Bridge Prerservation Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Bridge Reconstruction	Capital Maint Bridge NON-NHS Reconstruction Line Item	$325,578,000	TBD	Long-Term (2035-2047)	Non-NHS Bridge Reconstruction Reserve	Exempt	S19

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	12	Fayette, Greene, Washington, Westmoreland	Bridge Reconstruction	Local/Off System Bridges	$178,771,000	TBD	Long-Term (2035-2047)	Local/Off System Bridge Reconstruction Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Bridge Reconstruction	Capital Maint Bridge NHS Reconstruction Line Item	$180,159,000	TBD	Long-Term (2035-2047)	NHS Bridge Reconstruction Reserve	Exempt	S19
	12	Fayette, Greene, Washington, Westmoreland	Efficiency & Operations	Efficiency & Operations NHS Line Item	$20,168,000	TBD	Long-Term (2035-2047)	NHS Efficiency & Operations Reserve	Exempt	X1
	12	Fayette, Greene, Washington, Westmoreland	Road Preservation	Roadway Non NHS Preservation Line Item	$56,675,000	TBD	Long-Term (2035-2047)	Roadway Non NHS Preservation Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Road Preservation	Roadway NHS Preservation Line Item	$45,087,000	TBD	Long-Term (2035-2047)	Roadway NHS Preservation Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Road Reconstruction	Local, County, and State Slide Remediation & Reconstruction	$75,000,000	TBD	Long-Term (2035-2047)	This project is the location of a line item for funds anticipated for slide remediation and road reconstruction in Fayette, Greene, Washington and Westmoreland Counties in the third stage of the Long Range Transportation Plan (Years 2031 to 2045)	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Road Reconstruction	Roadway Non NHS Reconstruction (Stage 3)	$26,662,000	TBD	Long-Term (2035-2047)	Roadway Non NHS Reconstruction Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Road Reconstruction	Roadway NHS Reconstruction (Stage 3)	$18,557,000	TBD	Long-Term (2035-2047)	Roadway NHS Reconstruction Reserve	Exempt	S10
	12	Fayette, Greene, Washington, Westmoreland	Safety	Safety Line Item	$7,227,000	TBD	Long-Term (2035-2047)	Safety Reserve	Exempt	S6
990031	12	Fayette/Greene	New Capacity	PA 21 Widening	$50,000,000	21	Long-Term (2035-2047)	(Not Fully Funded) This project is to add new capacity to the SR 21 Corridor from the Masontown Bridge to the Village of Revere in German, Menallen, and South Union Townships, and Masontown Borough, Fayette County. In addition, this project is partially funding the implementation of the future Greene County SR 21 Feasibility and Capacity Study in the area I-79 to the Fayette County line in Franklin, Jefferson, Cumberland and Mononghahela townships, Greene County.	Regionally Significant	
TBD	12	Greene	Study	SR 21 Operations and Capacity Feasibility Study GRCO	$1,500,000	21	Long-Term (2035-2047)	This project is to study the operation and capacity needs along SR 21 in Greene County.	Exempt	X1
112387	12	Greene	Bridge Preservation	Point Marion Bridge	$5,000,000	88	Long-Term (2035-2047)	This project is for the preservation activities of the Point Marion Bridge carrying PA 88 (Dilliner Road) over the Monongahela River in Dunkard Township, Greene County. *No new capacity will be added*	Exempt	S19
990032	12	Greene	Safety	SR 88 Safety improvements at SR 2016 and 2014	$6,000,000	88	Long-Term (2035-2047)	This project is for safety improvement on SR 88 at two intersections: Maple Town Crossroads (SR 2016) and Fieldson's Crossroads (SR 2014) in Monongahela Township, Greene County	Exempt	R1
990033	12	Greene	Safety	I-79 Mt. Morris Interchange Area Improvements	$7,000,000		Long-Term (2035-2047)	This project is for safety improvements on the local road system surrounding the Mount Morris Interchange in Mount Morris Township, Greene County	Exempt	S6
20192100	12	Washington	Road Reconstruction	SR 18: within Burgettsown Boro*	$13,000,000	18	Long-Term (2035-2047)	This project is for the reconstruction of SR 18 (Main Street, JL Brunner Memorial Bypass) within the Burgettstown Borough limits in Burgettstown Borough, Washington County	Exempt	S10
105493	12	Washington	Road Preservation	US 19/40: I-79 to Chestnut Street*	$3,159,000	19	Long-Term (2035-2047)	This project is for betterment improvements to US 19/US 40 from the intersection with I-79 to the intersection of Chestnut Street in South Strabane and Amwell Townships, and the City of Washington, Washington County.	Exempt	S10
20192101	12	Washington	Efficiency & Operations	US 19 corridor and intersection imprv (Old Oak - Waterdam)	$9,592,000	19	Long-Term (2035-2047)	This project is for efficiency and operations improvements to the US 19 (Washington Road) corridor and intersection at Old Oak and Waterdam Roads in Peters Township, Washington County	Exempt	R1

*Potential multi-modal elements to be determined during further project development.

SPC Long Range Transportation Plan
Fiscally Constrained Highway/Bridge Project List

MPMS/GIS ID	District	County	Investment Category	Title	Estimated Cost	Route	Stage	Narrative	AQ Status	Exempt Code
105352	12	Washington	Safety	I-79 Ramp at McClelland Rd	$5,973,000	79	Long-Term (2035-2047)	This project is for intersection improvements to the I-79 Ramp to SR 1023 (McClelland Road) Intersection in North Strabane Township, Washington County.	Exempt	R1
20192124	12	Washington	Efficiency & Operations	McMurray Rd US 19 to Morganza Rd*	$11,487,000	1002	Long-Term (2035-2047)	This project is for efficiency and operations improvements to West McMurray Road from US 19 (Washington Road) to SR 1009 (Morganza Road) in Peters and North Strabane Townships, Washington County	Exempt	X1
20192118	12	Washington	Efficiency & Operations	SR 1032 Southpointe Blvd from I-79 to Morganza Rd (concept 4)*	$15,000,000	1032	Long-Term (2035-2047)	This project is for efficiency and operations improvements to State Route 1032 (Southpointe Boulevard) from Interstate 79 to State Route 1009 (Morganza Road) in North Strabane Township, Washington County	Exempt	X1
20192116	12	Washington	Efficiency & Operations	Weavertown Rd Corridor from US 19 to Morganza Rd (concept 7)	$18,000,000	1059	Long-Term (2035-2047)	This project is for efficiency and operations improvements to State Route 1025 (Weavertown Road) from US Route 19 (Washington Road) to State Route 1009 (Morganza Road) in North Strabane Township, Washington County	Exempt	X1
112389	12	Washington	Bridge Reconstruction	Donora-Monnessen High Bridge	$9,189,000	1077	Long-Term (2035-2047)	This project is for preservation activities of the Donora Monessen High Level Bridge carrying PA 1077 (Vance Dei Cas Highway) over PA 837, PA 906, railroad and the Monongahela River in Donora Borough, Washington County. *No new capacity will be added to any of the structures*	Exempt	S19
114390	12	Westmoreland	Efficiency & Operations	US 30 & Georges Station Intersection*	$28,717,000	30	Long-Term (2035-2047)	This project is for improvements to the intersection of US 30 (Lincoln Highway) and State Route 1053 (Georges Station Road), located in Hempfield Township, Westmoreland County.	Exempt	R1
20192103	12	Westmoreland	Bridge Reconstruction	US 30 Walworth Viaduct	$17,230,000	30	Long-Term (2035-2047)	This project is for the replacement/rehabilitation of the Walworth Viaduct on US 30 (Lincoln Highway) in Hempfield Township, Westmoreland County	Exempt	S19
20192105	12	Westmoreland	Efficiency & Operations	Route 30 Interchange with Donohoe Road	$25,000,000	30	Long-Term (2035-2047)	This project is for efficiency and operations improvements to the US 30 (Lincoln Highway) corridor at the State Route 1026 (Donohoe Road) intersection in Hempfield Township, Westmoreland County	Exempt	X1
20192106	12	Westmoreland	Road Reconstruction	US Route 30 Reconstruction ALCO line to Irwin*	$90,000,000	30	Long-Term (2035-2047)	This project is for the reconstruction of US 30 (Lincoln Highway) from the Allegheny County Line to Irwin Borough in North Huntingdon Township, Westmoreland County	Exempt	S10
20192108	12	Westmoreland	Efficiency & Operations	US 30 Operations & Safety*	$48,000,000	30	Long-Term (2035-2047)	This project is for safety and operations improvements to the US 30 (Lincoln Highway) Corridor from the Allegheny County Line to the Somerset County Line in various municipalities in Westmoreland County	Exempt	S6
20192109	12	Westmoreland	Road Reconstruction	SR 66: US 22 to County Line*	$21,000,000	66	Long-Term (2035-2047)	This project is for the reconstruction of SR 66 (Freeport Road, SR 0066 SH, Main Street) from the intersection of SR 66 and US 22 (William Penn Highway) to the Armstrong County Line in Salem and Washington Townships; and Delmont and Oklahoma Boroughs, Westmoreland County	Exempt	S10
112392	12	Westmoreland	Bridge Preservation	Avonmore Bridge*	$5,743,000	156	Long-Term (2035-2047)	This project is for the replacement/rehabilitation of the Avonmore Bridge carrying PA-156 over the Kiskiminetas River in Avonmore Borough, Westmoreland County.	Exempt	S19
105350	12	Westmoreland	Safety	PA 201 Ramp to PA 51 South	$5,973,000	201	Long-Term (2035-2047)	This project is for intersection safety improvements at the PA 201 & Ramp SR 8011 to PA 51 South intersections in Rostraver Township, Westmoreland County.	Exempt	R1
20192114	12	Westmoreland	Road Reconstruction	PA 286: Allegheny Co Line to Indiana Co Line	$13,000,000	286	Long-Term (2035-2047)	This project is for the reconstruction of SR 286 (Saltsburg Road) from the Allegheny County Line to the Indiana County Line in Murrysville Borough, and Washington, Bell, and Loyalhanna Townships, Westmoreland County	Exempt	S10
88617	12	Westmoreland	Bridge Reconstruction	PA 366 over PA 400/380	$17,000,000	366	Long-Term (2035-2047)	Improvements to the structure carrying PA 366 over PA 400 and PA 380 in Murrysville Borough, Westmoreland County.	Exempt	S19
20192115	12	Westmoreland	Road Preservation	PA 366: Allegheny Co Line to PA 66*	$7,000,000	366	Long-Term (2035-2047)	This project is for roadway preservation activities on SR 366 (Tarentum Road, Stevenson Boulevard, Greensburg Road) from the Allegheny County Line to SR 66 in the City of New Kensington, Lower Burrell Borough, Upper Burrell and Washington Townships, Westmoreland County	Exempt	S10
112394	12	Westmoreland	Bridge Preservation	Larimer Bridge	$5,000,000	993	Long-Term (2035-2047)	This project is for the replacement/rehabilitation of the Larimer Bridge carrying PA 993 (Irwin Trafford Road) over Brush Creek in North Huntingdon Township, Westmoreland County. *No new capacity will be added to the structure*	Exempt	S19
		Region	CMAQ, TA, Smart	SPC Region CMAQ Line Item	$432,837,000	TBD	Long-Term (2035-2047)	CMAQ Program Reserve	NS	

*Potential multi-modal elements to be determined during further project development.

SPC Long Range Transportation Plan
Fiscally Constrained Highway/Bridge Project List

MPMS/GIS ID	District	County	Investment Category	Title	Estimated Cost	Route	Stage	Narrative	AQ Status	Exempt Code
		Region	CMAQ, TA, Smart	SPC Region TA Line Item	$68,265,000	TBD	Long-Term (2035-2047)	Transportation Alternatives Set-Aside Program Reserve	Exempt	X12
		Region	CMAQ, TA, Smart	SPC Region Smart Tr. Initiative	$61,405,000	TBD	Long-Term (2035-2047)	Smart Transporation Program Reserve	Exempt	X1
					$10,579,833,000					

*Potential multi-modal elements to be determined during further project development.

PA. Turnpike Commission (Programming / Planning)

Widening & Maintenance Projects - (Mainline) I-76			23-26 TIP	Est. Comp.	Exist.	Improved	Total Cost	Regional Conformity Determination	
County	**MilePost#**	**Project Name / Description / Notes**	Phases	Year	#Lanes	#Lanes	Estimate	Status	Exempt Code
BECO	13.21	Replacement of Beaver River Bridge (Widening from 4 lanes to 6 lanes)	C	2030	4	6	$150,000,000	Significant	
BUCO ALCO	28-31	Total Reconstruction (Cranberry to Pine Twp.) (Widening from 4 lanes to 6 lanes)	C	2023	4	6	$42,640,000	Significant	
ALCO	40-48	Total Reconstruction (MP39.2 to 43.15 Mainline West Reconstruct) (Widening from 4 lanes to 6 lanes)	C	2028	4	6	$100,000,000	Significant	
ALCO	49-53	Total Reconstruction (Allegheny Valley Int. to Pittsburgh Int.) (Widening from 4 lanes to 6 lanes)	C	2025	4	6	$244,000,000	Significant	
ALCO	53 -57	Total Reconstruction (Allegheny Valley Int. to Pittsburgh Int.) (Widening from 4 lanes to 6 lanes)	C	2028	4	6	$436,000,000	Significant	
ALCO WECO	57-66	Total Reconstruction (Pittsburgh Int. to Irwin Int.) (Widening from 4 lanes to 6 lanes)	E C	2023 2031	4	6	$143,000,000	Significant	
WECO	99-109	Total Reconstruction (Widening from 4 lanes to 6 lanes) -NOTE: only 1 mile of this is in SPC region	C	2025	4	6	$160,000,000	Significant	
Regional	Line Item	Overlay, Resurfacing, Bridge Rehabilitation, Maintenance	C	2026	NA	NA	NA	Exempt	S6, S7, S10 S11, S19

Data Source: PA. Turnpike Website

New Projects (new capacity) - PA. Turnpike			2045LRP	Est. Comp.	Exist.	Total	Total Cost	Regional Conformity Determination	
County	MilePost#	Project Name / Description / Notes	Phases	Year	#Lanes	Lanes	Estimate	Status	Exempt Code
ALCO		Mon-Fayette Expressway (SR 51 to I-376) (Construct new 4-lane highway)	E C	2030 2035	0	4	$2,160,000,000	Significant	

SPC July 2022

NOTES FROM PTC:

This covers projects on the PA Turnpike system from MP 0 to 100
MP 0 is at western Lawrence Co/PA State line
MP 100 is at eastern Westmoreland Co/western Somerset Co line
Also includes Beaver Valley Expressway, Greensburg Bypass, Southern Beltway and Mon/Fayette Expressway

PTC Mainline

MP 0 to MP 8 - Lawrence County
MP 8 to MP 24.45 - Beaver County
MP 24.45 to MP 28.82 - Butler County
MP 28.82 to MP 58.95 - Allegheny County
MP 58.95 to MP 100 - Westmoreland County

2027- 2045 LRTP Investments - Public Transportation

Project Sponsor	MPMS#	Project Name / Description	Location	Est. Comp. Year	Nonattainment Status		Regional Conformity Determination	
					Ozone	PM2.5	Status	Exempt Code
Regional Line item		**Transit Vehicle Replacement**	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	
		Purchase of transit vehicles according to the current Fleet Replacement Schedule. Years 2027-2045.						**M10**
Regional Line item		**Transit Vehicle Preservation & Rehab**	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	
		Preservation and rehabilitation of existing vehicles. Years 2027-2045.						**M3**
Regional Line item		**Transit Capital Maintenance**	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	
		Expenses associated with maintaining and modernizing capital assets such as: Preservation and rehabilitation of fixed facilities; Minor service expansion; Modernization / upgrade of facilities, services. Years 2027-2045.						**M2, M6, M7, M8, M9, X11, X12**
Regional Line item		**Transit Operations**	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	
		Expenses associated with the provision of public transit service including personnel salaries and benefits, fuel, materials & supplies, and routine minor maintenance expenses. Years 2027-2045.						**A1, M1, M4, M5**

SPC - July 2022

APPENDIX C

Sample MOVES 2014a Input Files

1. MOVES County Data Manager Importer File _PM2.5 Annual Run (MOVESIMPORTER.XML)

Sample for 2045 Run for Pittsburgh-Beaver Valley nonattainment area – Allegheny County. Separate XML file for each county in the analysis.

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               </dayvmtfraction>
               <hourvmtfraction>
                  <filename>C:\SPC_MOVES\CBB6\\PMAPG\B6_2045\\42003_2045_00_05_B6_2045\CDM\hourvmtfraction.csv</filename>
               </hourvmtfraction>
            </parts>
         </vehicletypevmt>
```

```
        <starts>
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            <parts>
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                </startsPerDay>
                <startsHourFraction>
<filename></filename>
                </startsHourFraction>
                <startsSourceTypeFraction>
<filename></filename>
                </startsSourceTypeFraction>
                <startsMonthAdjust>
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                </startsMonthAdjust>
                <importStartsOpModeDistribution>
<filename></filename>
                </importStartsOpModeDistribution>
                <Starts>
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        </starts>

        <hotelling>
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        </hotelling>

        <onroadretrofit>
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            <description><![CDATA[]]></description>
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                </anytable>
            </parts>
        </generic>
                                    </importer>
</moves>
```

2. MOVES Run Specification File – PM2.5 Annual Run (MOVESRUN.MRS)

Sample for 2045 Run for Pittsburgh-Beaver Valley nonattainment area – Allegheny County. Separate MRS file for each county in the analysis.

```
<runspec version="MOVES2014a-20161117">
<description><![CDATA[MOVES2014A RunSpec Created by CENTRAL4 Scenario: ALLE 2045 ANNAVG B6_2045 Emission Inventory with user's
data]]></description>

   <models>
   <model value="ONROAD"/>
   </models>
<modelscale value="INV"/>
   <modeldomain value="SINGLE"/>
   <geographicselections>
      <geographicselection type="COUNTY" key="42003" description="PENNSYLVANIA - Allegheny County"/>
   </geographicselections>
   <timespan>
      <year key="2045"/>

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<month id="2"/>
<month id="3"/>
<month id="4"/>
<month id="5"/>
<month id="6"/>
<month id="7"/>
<month id="8"/>
<month id="9"/>
<month id="10"/>
<month id="11"/>
<month id="12"/>
<day id="5"/>
      <beginhour id="1"/>
      <endhour id="24"/>
<aggregateBy key="Hour"/>
   </timespan>
   <onroadvehicleselections>

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<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11" sourcetypename="Motorcycle"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
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<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetypename="Passenger Car"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetypename="Passenger Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
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<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21" sourcetypename="Passenger Car"/>
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<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetypename="Intercity Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetypename="Transit Bus"/>
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<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetypename="Intercity Bus"/>
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<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetypename="School Bus"/>
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<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="42" sourcetypename="Transit Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="43" sourcetypename="School Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetypename="Refuse Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
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<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
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<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetypename="Motor Home"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetypename="Refuse Truck"/>
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</offroadvehicleselections>
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</offroadvehiclesccs>
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<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="15" processname="Crankcase Running Exhaust"/>
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<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="91" processname="Auxiliary Power Exhaust"/>

<pollutantprocessassociation pollutantkey="118" pollutantname="Composite - NonECPM" processkey="1" processname="Running Exhaust"/>
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<pollutantprocessassociation pollutantkey="119" pollutantname="H2O (aerosol)" processkey="90" processname="Extended Idle Exhaust"/>
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<pollutantprocessassociation pollutantkey="110" pollutantname="Primary Exhaust PM2.5 - Total" processkey="16" processname="Crankcase Start Exhaust"/>
<pollutantprocessassociation pollutantkey="110" pollutantname="Primary Exhaust PM2.5 - Total" processkey="17" processname="Crankcase Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="110" pollutantname="Primary Exhaust PM2.5 - Total" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="110" pollutantname="Primary Exhaust PM2.5 - Total" processkey="91" processname="Auxiliary Power Exhaust"/>
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<pollutantprocessassociation pollutantkey="117" pollutantname="Primary PM2.5 - Tirewear Particulate" processkey="10" processname="Tirewear"/>
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<pollutantprocessassociation pollutantkey="115" pollutantname="Sulfate Particulate" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="115" pollutantname="Sulfate Particulate" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="115" pollutantname="Sulfate Particulate" processkey="91" processname="Auxiliary Power Exhaust"/>

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<databaseselection servername="localhost" databasename="MOVES2014_calevii08" description=""/>

</databaseselections>
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<uncertaintyparameters uncertaintymodeenabled="false" numberofrunspersimulation="0" numberofsimulations="0"/>
<geographicoutputdetail description="COUNTY"/>
<outputemissionsbreakdownselection>
<modelyear selected="false"/>
<fueltype selected="false"/>
<fuelsubtype selected="false"/>
<emissionprocess selected="true"/>
<onroadoffroad selected="true"/>
<roadtype selected="true"/>
<sourceusetype selected="true"/>
<movesvehicletype selected="false"/>
<onroadscc selected="false"/>
<offroadscc selected="false"/>
<estimateuncertainty selected="false" numberOfIterations="2" keepSampledData="false" keepIterations="false"/>
<sector selected="false"/>
<engtechid selected="false"/>
<hpclass selected="false"/>
</outputemissionsbreakdownselection>
<outputdatabase servername="localhost" databasename="42003_2045_00_05_B6_2045_PMAPG_mo" description=""/>>
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<outputvmtdata value="true"/>
<outputsho value="true"/>
<outputsh value="true"/>
<outputshp value="true"/>
<outputshidling value="true"/>
<outputstarts value="true"/>
<outputpopulation value="true"/>
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<distancefactors selected="false" units="Miles"/>
<massfactors selected="false" units="Grams" energyunits="Million BTU"/>
</outputfactors>
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<donotexecute>

```
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useParameters           No

]]></internalcontrolstrategy>
    </internalcontrolstrategies>
</runspec>
```

3. MOVES County Data Manager Importer File _Ozone July Weekday Run (MOVESIMPORTER.XML)

Sample for 2045 Run for Pittsburgh-Beaver Valley Ozone nonattainment area – Allegheny County. Separate XML file for each county in the analysis.

```
<moves>
    <importer mode="county" >
        <filters>
    <geographicselections>
        <geographicselection type="COUNTY" key="42003" description="PENNSYLVANIA - Allegheny County"/>
    </geographicselections>
    <timespan>
        <year key="2045"/>
        <month id="07"/>
        <day id="2"/>
        <day id="5"/>
        <beginhour id="1"/>
        <endhour id="24"/>
        <aggregateBy key="Hour"/>
    </timespan>
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        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetypename="Combination Long-haul Truck"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetypename="Combination Short-haul Truck"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetypename="Intercity Bus"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetypename="Light Commercial Truck"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetypename="Motor Home"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11" sourcetypename="Motorcycle"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetypename="Passenger Car"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetypename="Passenger Truck"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetypename="Refuse Truck"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetypename="School Bus"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetypename="Single Unit Long-haul Truck"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetypename="Single Unit Short-haul Truck"/>
        <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetypename="Transit Bus"/>
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        <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetypename="Motorcycle"/>
        <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetypename="Passenger Car"/>
        <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetypename="Passenger Truck"/>
        <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetypename="Refuse Truck"/>
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Long-haul Truck"/>
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Short-haul Truck"/>
          <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetypename="Intercity Bus"/>
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Truck"/>
          <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetypename="Motor Home"/>
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Truck"/>
          <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetypename="Refuse Truck"/>
          <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetypename="School Bus"/>
          <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetypename="Single Unit Long-
haul Truck"/>
```

```
            <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetypename="Single Unit
Short-haul Truck"/>
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    <offroadvehicleselections>
    </offroadvehicleselections>
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    </offroadvehiclesccs>
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        <roadtype roadtypeid="2" roadtypename="Rural Restricted Access"/>
        <roadtype roadtypeid="3" roadtypename="Rural Unrestricted Access"/>
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4. MOVES Run Specification File – Ozone July Weekday Run (MOVESRUN.MRS)

Sample for 2045 Run for Pittsburgh-Beaver Valley nonattainment area – Allegheny County. Separate MRS file for each county in the analysis.

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APPENDIX D

County and Facility Type Summaries
VMT, Speed, Emissions

Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary

2023 Existing Year - Base (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	$PM_{2.5}$
Allegheny (Partial)	Off-Network	N/A	N/A	1,148.04	33.96
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,416,451	43.4	1.93	0.11
	Urban Restricted	2,913,409,161	48.2	1,041.06	61.06
	Urban UnRestricted	5,393,882,522	27.8	1,726.39	124.09
	Subtotal	*8,314,708,134*		*3,917.43*	*219.21*
Armstrong (Partial)	Off-Network	N/A	N/A	4.84	0.13
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	40,848,562	45.9	15.88	0.71
	Subtotal	*40,848,562*		*20.72*	*0.84*
Beaver	Off-Network	N/A	N/A	178.85	5.29
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	6,495,821	37.8	2.05	0.12
	Urban Restricted	267,039,286	56.4	73.30	3.99
	Urban UnRestricted	952,677,675	34.7	293.38	18.28
	Subtotal	*1,226,212,782*		*547.57*	*27.69*
Butler	Off-Network	N/A	N/A	288.04	7.08
	Rural Restricted	82,151,263	49.2	32.14	1.84
	Rural UnRestricted	189,952,938	33.2	59.25	3.62
	Urban Restricted	431,751,021	56.3	266.24	11.40
	Urban UnRestricted	1,277,204,678	37.3	418.06	22.84
	Subtotal	*1,981,059,900*		*1,063.72*	*46.77*
Washington	Off-Network	N/A	N/A	292.68	7.54
	Rural Restricted	163,628,526	57.3	55.56	2.74
	Rural UnRestricted	74,357,676	34.2	20.42	1.34
	Urban Restricted	1,055,449,217	55.5	504.97	23.64
	Urban UnRestricted	1,019,345,010	34.9	313.85	19.43
	Subtotal	*2,312,780,429*		*1,187.48*	*54.69*
Westmoreland	Off-Network	N/A	N/A	421.39	11.84
	Rural Restricted	64,332,158	50.7	23.83	1.39
	Rural UnRestricted	130,184,723	29.8	39.80	2.80
	Urban Restricted	1,008,804,590	55.4	660.45	28.23
	Urban UnRestricted	2,090,970,345	34.8	661.06	40.76
	Subtotal	*3,294,291,817*		*1,806.54*	*85.01*
Greene (Partial)	Off-Network	N/A	N/A	2.25	0.06
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	23,740,787	43.8	8.48	0.38
	Subtotal	*23,740,787*		*10.73*	*0.44*
Lawrence (Partial)	Off-Network	N/A	N/A	1.59	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	361,190	25.0	0.00	0.00
	Urban UnRestricted	15,304,518	41.5	6.12	0.28
	Subtotal	*15,665,708*		*7.71*	*0.32*
Region Subtotal		17,209,308,117		8,561.89	434.96
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**17,209,308,117**		**8,561.89**	**434.96**
			(Kg/Year)	**7,767,221**	**394,588**

SPC July 2022

Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary

2025 Budget Year - PM 2.5 NAAQS (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	$PM_{2.5}$
Allegheny (Partial)	Off-Network	N/A	N/A	966.93	30.85
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,332,409	43.2	1.51	0.09
	Urban Restricted	2,899,711,395	48.7	829.70	52.17
	Urban UnRestricted	5,522,400,005	28.3	1,377.65	111.17
	Subtotal	*8,429,443,809*		*3,175.79*	*194.28*
Armstrong (Partial)	Off-Network	N/A	N/A	3.96	0.11
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	39,919,204	45.9	12.31	0.59
	Subtotal	*39,919,204*		*16.27*	*0.71*
Beaver	Off-Network	N/A	N/A	147.23	4.70
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	6,416,064	37.8	1.61	0.10
	Urban Restricted	270,145,676	57.0	58.72	3.47
	Urban UnRestricted	963,260,178	35.1	234.04	16.11
	Subtotal	*1,239,821,918*		*441.60*	*24.38*
Butler	Off-Network	N/A	N/A	242.96	6.38
	Rural Restricted	80,995,371	49.0	25.25	1.58
	Rural UnRestricted	195,389,573	33.5	47.67	3.27
	Urban Restricted	429,509,103	56.2	212.66	9.47
	Urban UnRestricted	1,289,957,766	37.4	331.92	20.21
	Subtotal	*1,995,851,814*		*860.46*	*40.92*
Washington	Off-Network	N/A	N/A	251.08	6.74
	Rural Restricted	165,516,497	57.3	44.92	2.39
	Rural UnRestricted	76,187,256	34.9	16.38	1.20
	Urban Restricted	1,035,886,948	55.5	402.78	19.80
	Urban UnRestricted	1,047,890,153	35.3	253.75	17.39
	Subtotal	*2,325,480,855*		*968.91*	*47.50*
Westmoreland	Off-Network	N/A	N/A	352.52	10.54
	Rural Restricted	64,539,138	50.8	19.18	1.20
	Rural UnRestricted	134,342,672	30.0	32.27	2.55
	Urban Restricted	1,006,744,887	55.4	532.23	23.31
	Urban UnRestricted	2,111,157,952	35.0	527.44	35.89
	Subtotal	*3,316,784,649*		*1,463.64*	*73.49*
Greene (Partial)	Off-Network	N/A	N/A	1.82	0.05
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	23,796,464	43.9	6.55	0.33
	Subtotal	*23,796,464*		*8.37*	*0.38*
Lawrence (Partial)	Off-Network	N/A	N/A	1.38	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	268,646	25.0	0.00	0.00
	Urban UnRestricted	15,063,145	41.7	4.70	0.24
	Subtotal	*15,331,791*		*6.08*	*0.28*
Region Subtotal		17,386,430,504		6,941.12	381.94
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**17,386,430,504**		**6,941.12**	**381.94**
			(Kg/Year)	**6,296,878**	**346,489**

SPC July 2022

Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary

2026 TIP Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	$PM_{2.5}$
Allegheny (Partial)	Off-Network	N/A	N/A	880.76	29.39
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,328,909	43.1	1.31	0.09
	Urban Restricted	2,910,145,927	48.7	739.98	48.34
	Urban UnRestricted	5,557,381,124	28.3	1,213.78	106.25
	Subtotal	*8,474,855,960*		*2,835.83*	*184.06*
Armstrong (Partial)	Off-Network	N/A	N/A	3.58	0.11
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	39,750,708	46.0	10.89	0.55
	Subtotal	*39,750,708*		*14.47*	*0.66*
Beaver	Off-Network	N/A	N/A	144.54	4.83
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	6,452,792	37.8	1.42	0.10
	Urban Restricted	271,556,598	57.0	52.29	3.25
	Urban UnRestricted	965,644,576	35.1	206.11	15.26
	Subtotal	*1,243,653,966*		*404.37*	*23.44*
Butler	Off-Network	N/A	N/A	223.30	6.05
	Rural Restricted	80,723,668	48.9	22.62	1.47
	Rural UnRestricted	194,751,878	33.6	41.78	3.09
	Urban Restricted	431,088,962	56.2	192.06	8.68
	Urban UnRestricted	1,296,960,118	37.3	294.10	19.18
	Subtotal	*2,003,524,625*		*773.85*	*38.47*
Washington	Off-Network	N/A	N/A	231.46	6.36
	Rural Restricted	166,038,279	57.3	40.20	2.21
	Rural UnRestricted	76,267,012	34.9	14.30	1.14
	Urban Restricted	1,038,479,302	55.4	360.78	18.18
	Urban UnRestricted	1,051,916,479	35.3	223.81	16.50
	Subtotal	*2,332,701,072*		*870.55*	*44.39*
Westmoreland	Off-Network	N/A	N/A	320.44	9.94
	Rural Restricted	64,608,872	50.8	17.09	1.11
	Rural UnRestricted	134,574,135	30.0	28.38	2.43
	Urban Restricted	1,008,576,727	55.5	479.45	21.29
	Urban UnRestricted	2,117,789,794	35.0	465.46	34.01
	Subtotal	*3,325,549,528*		*1,310.81*	*68.77*
Greene (Partial)	Off-Network	N/A	N/A	1.63	0.05
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	23,897,545	43.9	5.76	0.31
	Subtotal	*23,897,545*		*7.39*	*0.36*
Lawrence (Partial)	Off-Network	N/A	N/A	1.25	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	268,001	25.0	0.00	0.00
	Urban UnRestricted	15,091,350	41.7	4.11	0.23
	Subtotal	*15,359,351*		*5.36*	*0.26*
Region Subtotal		17,459,292,754		6,222.64	360.40
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**17,459,292,754**		**6,222.64**	**360.40**
			(Kg/Year)	**5,645,084**	**326,951**

SPC July 2022

Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary

2035 Interim Year #1 (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	$PM_{2.5}$
Allegheny (Partial)	Off-Network	N/A	N/A	541.72	19.30
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,126,364	43.3	0.65	0.06
	Urban Restricted	3,090,825,176	48.3	424.05	31.75
	Urban UnRestricted	5,653,206,343	27.7	627.86	81.33
	Subtotal	*8,751,157,884*		*1,594.28*	*132.44*
Armstrong (Partial)	Off-Network	N/A	N/A	2.31	0.08
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	40,815,978	46.0	5.75	0.36
	Subtotal	*40,815,978*		*8.06*	*0.43*
Beaver	Off-Network	N/A	N/A	88.81	3.17
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	6,818,060	37.9	0.79	0.07
	Urban Restricted	285,440,078	56.4	29.26	2.14
	Urban UnRestricted	986,425,760	34.8	109.27	11.14
	Subtotal	*1,278,683,899*		*228.13*	*16.53*
Butler	Off-Network	N/A	N/A	138.56	3.84
	Rural Restricted	83,491,272	49.2	12.53	0.91
	Rural UnRestricted	195,113,287	33.2	20.89	2.27
	Urban Restricted	444,765,224	56.2	109.85	5.08
	Urban UnRestricted	1,346,379,191	37.0	153.97	14.07
	Subtotal	*2,069,748,974*		*435.80*	*26.16*
Washington	Off-Network	N/A	N/A	159.48	3.95
	Rural Restricted	194,002,533	57.6	25.02	1.51
	Rural UnRestricted	77,147,348	34.2	7.41	0.85
	Urban Restricted	1,007,282,248	55.0	198.31	10.60
	Urban UnRestricted	1,120,908,181	35.4	124.12	12.39
	Subtotal	*2,399,340,309*		*514.34*	*29.31*
Westmoreland	Off-Network	N/A	N/A	217.67	6.98
	Rural Restricted	63,520,937	50.5	9.22	0.67
	Rural UnRestricted	133,342,669	29.8	14.51	1.78
	Urban Restricted	1,024,254,401	55.4	273.23	12.20
	Urban UnRestricted	2,160,690,726	34.7	248.01	24.80
	Subtotal	*3,381,808,733*		*762.64*	*46.43*
Greene (Partial)	Off-Network	N/A	N/A	0.84	0.03
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	24,367,617	43.8	2.88	0.22
	Subtotal	*24,367,617*		*3.72*	*0.25*
Lawrence (Partial)	Off-Network	N/A	N/A	0.69	0.02
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	365,490	25.0	0.00	0.00
	Urban UnRestricted	15,542,402	41.5	2.13	0.16
	Subtotal	*15,907,892*		*2.83*	*0.18*
Region Subtotal		17,961,831,285		3,549.81	251.73
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**17,961,831,285**		**3,549.81**	**251.73**
			(Kg/Year)	**3,220,332**	**228,368**

SPC July 2022

Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary

2045 Long Range Plan Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	$PM_{2.5}$
Allegheny (Partial)	Off-Network	N/A	N/A	486.19	11.55
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	6,740,028	43.0	0.51	0.05
	Urban Restricted	3,291,539,180	48.4	380.31	28.32
	Urban UnRestricted	5,882,137,852	27.7	549.61	78.02
	Subtotal	*9,180,417,061*		*1,416.62*	*117.93*
Armstrong (Partial)	Off-Network	N/A	N/A	2.04	0.05
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	40,396,737	46.1	4.87	0.31
	Subtotal	*40,396,737*		*6.90*	*0.36*
Beaver	Off-Network	N/A	N/A	79.62	1.89
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	6,908,269	37.8	0.68	0.07
	Urban Restricted	302,847,097	56.4	24.77	1.83
	Urban UnRestricted	1,017,365,138	34.8	95.35	10.44
	Subtotal	*1,327,120,504*		*200.43*	*14.23*
Butler	Off-Network	N/A	N/A	123.35	2.30
	Rural Restricted	86,394,246	49.1	10.80	0.79
	Rural UnRestricted	199,370,961	33.2	17.58	2.10
	Urban Restricted	459,810,062	56.3	100.54	4.56
	Urban UnRestricted	1,405,578,972	36.9	133.49	13.33
	Subtotal	*2,151,154,241*		*385.76*	*23.08*
Washington	Off-Network	N/A	N/A	145.73	2.35
	Rural Restricted	207,082,902	57.8	22.22	1.32
	Rural UnRestricted	78,626,266	34.3	6.25	0.78
	Urban Restricted	1,019,198,785	55.0	176.30	9.21
	Urban UnRestricted	1,175,636,137	35.3	109.50	11.81
	Subtotal	*2,480,544,090*		*460.01*	*25.47*
Westmoreland	Off-Network	N/A	N/A	197.29	4.25
	Rural Restricted	62,479,912	50.5	7.71	0.55
	Rural UnRestricted	135,594,027	29.8	12.48	1.66
	Urban Restricted	1,037,270,475	55.5	250.31	10.91
	Urban UnRestricted	2,225,192,352	34.7	217.13	23.26
	Subtotal	*3,460,536,767*		*684.91*	*40.63*
Greene (Partial)	Off-Network	N/A	N/A	0.65	0.02
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	25,161,304	43.8	2.37	0.19
	Subtotal	*25,161,304*		*3.02*	*0.21*
Lawrence (Partial)	Off-Network	N/A	N/A	0.59	0.01
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	370,807	25.0	0.00	0.00
	Urban UnRestricted	15,813,154	41.6	1.77	0.14
	Subtotal	*16,183,961*		*2.35*	*0.15*
Region Subtotal		18,681,514,664		3,160.00	222.06
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**18,681,514,664**		**3,160.00**	**222.06**
			(Kg/Year)	**2,866,703**	**201,451**

SPC July 2022

Allegheny County, PA PM2.5 Annual Emission Summary

2023 Existing Year - Base (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Allegheny	Off-Network	N/A	N/A	1,166.64	34.51
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,416,259	43.4	1.93	0.11
	Urban Restricted	2,913,380,747	48.2	1,040.94	61.05
	Urban UnRestricted	5,472,227,907	27.8	1,748.71	125.62
	Subtotal	*8,393,024,912*		*3,958.23*	*221.29*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**8,393,024,912**		**3,958.23**	**221.29**
			(Kg/Year)	**3,590,845**	**200,748**

SPC July 2022

Allegheny County, PA PM2.5 Annual Emission Summary

2025 Budget Year - PM 2.5 NAAQS (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Allegheny	Off-Network	N/A	N/A	982.58	31.36
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,326,755	43.2	1.51	0.09
	Urban Restricted	2,899,687,339	48.7	829.64	52.17
	Urban UnRestricted	5,599,104,317	28.3	1,394.89	112.51
	Subtotal	*8,506,118,411*		*3,208.62*	*196.12*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**8,506,118,411**		**3,208.62**	**196.12**
			(Kg/Year)	**2,910,810**	**177,919**

SPC July 2022

Allegheny County, PA PM2.5 Annual Emission Summary

2026 TIP Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Allegheny	Off-Network	N/A	N/A	895.01	29.87
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,328,985	43.1	1.31	0.09
	Urban Restricted	2,910,119,204	48.7	739.91	48.33
	Urban UnRestricted	5,634,321,680	28.3	1,228.84	107.52
	Subtotal	*8,551,769,869*		*2,865.06*	*185.82*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**8,551,769,869**		**2,865.06**	**185.82**
			(Kg/Year)	**2,599,143**	**168,569**

SPC July 2022

Allegheny County, PA PM2.5 Annual Emission Summary

2035 Interim Year #1 (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Allegheny	Off-Network	N/A	N/A	550.44	19.62
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,126,562	43.3	0.65	0.06
	Urban Restricted	3,090,808,914	48.3	424.03	31.75
	Urban UnRestricted	5,725,213,235	27.8	635.00	82.22
	Subtotal	*8,823,148,711*		*1,610.12*	*133.64*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**8,823,148,711**		**1,610.12**	**133.64**
			(Kg/Year)	**1,460,680**	**121,239**

SPC July 2022

Allegheny County, PA PM2.5 Annual Emission Summary

2045 Long Range Plan Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Allegheny	Off-Network	N/A	N/A	493.99	11.74
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	6,740,464	43.0	0.51	0.05
	Urban Restricted	3,291,519,271	48.4	380.29	28.32
	Urban UnRestricted	5,953,566,490	27.7	555.54	78.83
	Subtotal	*9,251,826,225*		*1,430.34*	*118.93*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**9,251,826,225**		**1,430.34**	**118.93**
			(Kg/Year)	**1,297,586**	**107,891**

SPC July 2022

Indiana County PM2.5 Annual Emission Summary*

2023 Existing Year - Base (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Indiana (Partial)	Off-Network	N/A	N/A	16.38	0.40
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	210,360	25.0	0.00	0.00
	Urban UnRestricted	150,186,446	49.4	72.14	2.81
	Subtotal	*150,396,805*		*88.52*	*3.22*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**150,396,805**		**88.52**	**3.22**
			(Kg/Year)	**80,305**	**2,920**

SPC July 2022

** Indiana County Portion of Johnstown, PA PM2.5 Nonattainment Area*

Indiana County PM2.5 Annual Emission Summary*

2025 Budget Year - PM 2.5 NAAQS (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Indiana (Partial)	Off-Network	N/A	N/A	13.30	0.36
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	190,193	25.0	0.00	0.00
	Urban UnRestricted	148,702,357	49.2	55.93	2.35
	Subtotal	*148,892,549*		*69.23*	*2.71*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**148,892,549**		**69.23**	**2.71**
			(Kg/Year)	**62,808**	**2,457**

SPC July 2022

** Indiana County Portion of Johnstown, PA PM2.5 Nonattainment Area*

Indiana County PM2.5 Annual Emission Summary*

2026 TIP Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Indiana (Partial)	Off-Network	N/A	N/A	11.94	0.34
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	191,406	25.0	0.00	0.00
	Urban UnRestricted	148,859,661	49.2	49.37	2.18
	Subtotal	*149,051,067*		*61.32*	*2.52*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**149,051,067**		**61.32**	**2.52**
			(Kg/Year)	**55,625**	**2,286**

SPC July 2022

** Indiana County Portion of Johnstown, PA PM2.5 Nonattainment Area*

Indiana County PM2.5 Annual Emission Summary*

2035 Interim Year #1 (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Indiana (Partial)	Off-Network	N/A	N/A	6.23	0.21
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	225,878	25.0	0.00	0.00
	Urban UnRestricted	153,053,845	49.4	26.29	1.37
	Subtotal	*153,279,723*		*32.52*	*1.58*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**153,279,723**		**32.52**	**1.58**
			(Kg/Year)	**29,503**	**1,437**

SPC July 2022

** Indiana County Portion of Johnstown, PA PM2.5 Nonattainment Area*

Indiana County PM2.5 Annual Emission Summary*

2045 Long Range Plan Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissoins (Tons/Year)	
				NOx	PM2.5
Indiana (Partial)	Off-Network	N/A	N/A	4.93	0.11
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	233,619	25.0	0.00	0.00
	Urban UnRestricted	156,012,299	49.4	22.52	1.20
	Subtotal	*156,245,918*		*27.45*	*1.32*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**156,245,918**		**27.45**	**1.32**
			(Kg/Year)	**24,902**	**1,193**

SPC July 2022

** Indiana County Portion of Johnstown, PA PM2.5 Nonattainment Area*

Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary

2023 Existing Year - Base (By Road Type)

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	6.098	2.836
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	25,681	43.4	0.001	0.006
	Urban Restricted	9,307,361	48.2	0.599	2.997
	Urban UnRestricted	18,217,957	27.8	1.490	5.226
	Subtotal	*27,550,999*		*8.188*	*11.065*
Armstrong	Off-Network	0	N/A	0.523	0.318
	Rural Restricted	227,972	54.4	0.015	0.087
	Rural UnRestricted	178,539	34.5	0.014	0.051
	Urban Restricted	73,101	30.6	0.002	0.000
	Urban UnRestricted	1,339,260	43.5	0.094	0.467
	Subtotal	*1,818,871*		*0.649*	*0.923*
Beaver	Off-Network	0	N/A	0.938	0.435
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	20,286	37.8	0.001	0.006
	Urban Restricted	853,232	56.4	0.048	0.212
	Urban UnRestricted	3,206,647	34.7	0.222	0.892
	Subtotal	*4,080,165*		*1.211*	*1.545*
Butler	Off-Network	0	N/A	1.444	0.726
	Rural Restricted	262,485	49.2	0.020	0.093
	Rural UnRestricted	625,682	33.2	0.049	0.177
	Urban Restricted	1,379,560	56.3	0.102	0.765
	Urban UnRestricted	4,323,472	37.3	0.318	1.274
	Subtotal	*6,591,199*		*1.933*	*3.034*
Washington	Off-Network	0	N/A	1.287	0.738
	Rural Restricted	522,824	N/A	0.030	0.161
	Rural UnRestricted	247,355	N/A	0.017	0.062
	Urban Restricted	3,372,393	N/A	0.213	1.453
	Urban UnRestricted	3,474,274	N/A	0.241	0.970
	Subtotal	*7,616,845*		*1.789*	*3.383*
Westmoreland	Off-Network	0	N/A	2.081	1.043
	Rural Restricted	205,551	N/A	0.013	0.069
	Rural UnRestricted	441,631	N/A	0.034	0.122
	Urban Restricted	3,223,388	N/A	0.219	1.893
	Urban UnRestricted	7,007,860	N/A	0.487	1.996
	Subtotal	*10,878,429*		*2.834*	*5.122*
Fayette	Off-Network	0	N/A	0.982	0.441
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	2,358	44.7	0.000	0.001
	Urban Restricted	542,098	45.5	0.038	0.168
	Urban UnRestricted	2,837,836	40.2	0.204	0.931
	Subtotal	*3,382,292*		*1.224*	*1.542*
Region Subtotal		61,918,801		17.828	26.615
Off-Model Project Emission Benefits				0.000	0.000
Region Total		**61,918,801**		**17.828**	**26.615**
			(Kg/Day)	**16,173**	**24,145**

SPC July 2022

Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary

2025 Budget Year - PM 2.5 NAAQS (By Road Type)

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	5.327	2.325
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	25,375	43.2	0.001	0.005
	Urban Restricted	9,263,729	48.7	0.497	2.390
	Urban UnRestricted	18,632,218	28.3	1.272	4.169
	Subtotal	*27,921,322*		*7.097*	*8.889*
Armstrong	Off-Network	0	N/A	0.445	0.269
	Rural Restricted	227,472	54.6	0.012	0.069
	Rural UnRestricted	178,660	35.1	0.011	0.039
	Urban Restricted	73,567	32.9	0.002	0.000
	Urban UnRestricted	1,319,632	43.4	0.076	0.365
	Subtotal	*1,799,332*		*0.547*	*0.743*
Beaver	Off-Network	0	N/A	0.801	0.348
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	20,037	37.8	0.001	0.005
	Urban Restricted	863,166	57.0	0.041	0.170
	Urban UnRestricted	3,240,962	35.1	0.188	0.711
	Subtotal	*4,124,164*		*1.031*	*1.235*
Butler	Off-Network	0	N/A	1.246	0.601
	Rural Restricted	258,796	49.0	0.016	0.073
	Rural UnRestricted	644,045	33.5	0.042	0.142
	Urban Restricted	1,372,385	56.2	0.083	0.611
	Urban UnRestricted	4,365,052	37.4	0.266	1.011
	Subtotal	*6,640,279*		*1.653*	*2.439*
Washington	Off-Network	0	N/A	1.110	0.623
	Rural Restricted	528,857	N/A	0.026	0.130
	Rural UnRestricted	253,331	N/A	0.015	0.049
	Urban Restricted	3,309,881	N/A	0.174	1.159
	Urban UnRestricted	3,566,110	N/A	0.206	0.783
	Subtotal	*7,658,178*		*1.530*	*2.745*
Westmoreland	Off-Network	0	N/A	1.783	0.854
	Rural Restricted	206,209	N/A	0.011	0.055
	Rural UnRestricted	455,872	N/A	0.030	0.099
	Urban Restricted	3,216,814	N/A	0.179	1.525
	Urban UnRestricted	7,076,201	N/A	0.412	1.593
	Subtotal	*10,955,096*		*2.415*	*4.126*
Fayette	Off-Network	0	N/A	0.900	0.380
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	2,386	44.7	0.000	0.001
	Urban Restricted	547,282	46.3	0.031	0.135
	Urban UnRestricted	2,855,448	40.6	0.168	0.739
	Subtotal	*3,405,117*		*1.100*	*1.254*
Region Subtotal		62,503,488		15.373	21.430
Off-Model Project Emission Benefits				0.000	0.000
Region Total		**62,503,488**		**15.373**	**21.430**
			(Kg/Day)	**13,946**	**19,441**

SPC July 2022

Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary

2026 TIP Year (By Road Type)

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	4.836	2.084
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	25,382	43.1	0.001	0.004
	Urban Restricted	9,297,093	48.7	0.447	2.132
	Urban UnRestricted	18,749,296	28.3	1.139	3.671
	Subtotal	*28,071,771*		*6.423*	*7.891*
Armstrong	Off-Network	0	N/A	0.403	0.249
	Rural Restricted	227,591	54.6	0.011	0.062
	Rural UnRestricted	179,480	35.1	0.010	0.035
	Urban Restricted	73,513	32.9	0.002	0.000
	Urban UnRestricted	1,320,980	43.4	0.068	0.324
	Subtotal	*1,801,564*		*0.495*	*0.670*
Beaver	Off-Network	0	N/A	0.785	0.336
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	20,152	37.8	0.001	0.004
	Urban Restricted	867,670	57.0	0.037	0.152
	Urban UnRestricted	3,248,852	35.1	0.168	0.626
	Subtotal	*4,136,674*		*0.991*	*1.118*
Butler	Off-Network	0	N/A	1.136	0.547
	Rural Restricted	257,926	48.9	0.015	0.065
	Rural UnRestricted	641,583	33.6	0.037	0.125
	Urban Restricted	1,377,430	56.2	0.075	0.552
	Urban UnRestricted	4,388,904	37.3	0.239	0.896
	Subtotal	*6,665,843*		*1.502*	*2.185*
Washington	Off-Network	0	N/A	1.001	0.569
	Rural Restricted	530,521	N/A	0.023	0.116
	Rural UnRestricted	253,585	N/A	0.013	0.043
	Urban Restricted	3,318,168	N/A	0.156	1.039
	Urban UnRestricted	3,579,823	N/A	0.184	0.690
	Subtotal	*7,682,097*		*1.377*	*2.458*
Westmoreland	Off-Network	0	N/A	1.604	0.766
	Rural Restricted	206,433	N/A	0.010	0.049
	Rural UnRestricted	456,661	N/A	0.026	0.087
	Urban Restricted	3,222,666	N/A	0.160	1.374
	Urban UnRestricted	7,098,552	N/A	0.368	1.405
	Subtotal	*10,984,312*		*2.167*	*3.682*
Fayette	Off-Network	0	N/A	0.824	0.342
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	2,386	44.7	0.000	0.001
	Urban Restricted	548,208	46.3	0.028	0.120
	Urban UnRestricted	2,858,073	40.6	0.150	0.655
	Subtotal	*3,408,666*		*1.002*	*1.118*
Region Subtotal		62,750,926		13.957	19.122
Off-Model Project Emission Benefits				0.000	0.000
Region Total		**62,750,926**		**13.957**	**19.122**
			(Kg/Day)	**12,662**	**17,347**

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Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary

2035 Interim Year #1 (By Road Type)

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	3.315	1.075
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	24,680	43.3	0.001	0.002
	Urban Restricted	9,874,392	48.3	0.321	1.220
	Urban UnRestricted	19,066,997	27.8	0.829	1.891
	Subtotal	*28,966,070*		*4.466*	*4.188*
Armstrong	Off-Network	0	N/A	0.307	0.167
	Rural Restricted	217,705	54.5	0.007	0.031
	Rural UnRestricted	181,019	34.6	0.007	0.018
	Urban Restricted	89,044	31.3	0.006	0.021
	Urban UnRestricted	1,352,323	43.6	0.046	0.170
	Subtotal	*1,840,091*		*0.373*	*0.407*
Beaver	Off-Network	0	N/A	0.539	0.173
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	21,292	37.9	0.001	0.002
	Urban Restricted	912,028	56.4	0.026	0.085
	Urban UnRestricted	3,319,808	34.8	0.121	0.331
	Subtotal	*4,253,129*		*0.687*	*0.591*
Butler	Off-Network	0	N/A	0.766	0.304
	Rural Restricted	266,768	49.2	0.010	0.036
	Rural UnRestricted	642,836	33.2	0.026	0.062
	Urban Restricted	1,421,113	56.2	0.048	0.315
	Urban UnRestricted	4,564,475	37.0	0.173	0.468
	Subtotal	*6,895,192*		*1.024*	*1.185*
Washington	Off-Network	0	N/A	0.647	0.365
	Rural Restricted	619,874	N/A	0.018	0.072
	Rural UnRestricted	256,490	N/A	0.009	0.022
	Urban Restricted	3,218,462	N/A	0.099	0.570
	Urban UnRestricted	3,807,351	N/A	0.137	0.381
	Subtotal	*7,902,177*		*0.910*	*1.410*
Westmoreland	Off-Network	0	N/A	1.176	0.451
	Rural Restricted	202,957	N/A	0.007	0.027
	Rural UnRestricted	451,504	N/A	0.019	0.044
	Urban Restricted	3,272,764	N/A	0.101	0.782
	Urban UnRestricted	7,243,401	N/A	0.264	0.745
	Subtotal	*11,170,627*		*1.567*	*2.050*
Fayette	Off-Network	0	N/A	0.576	0.172
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	2,608	44.7	0.000	0.000
	Urban Restricted	553,328	45.5	0.019	0.063
	Urban UnRestricted	2,854,025	40.3	0.103	0.337
	Subtotal	*3,409,962*		*0.698*	*0.573*
Region Subtotal		64,437,247		9.724	10.404
Off-Model Project Emission Benefits				0.000	0.000
Region Total		**64,437,247**		**9.724**	**10.404**
			(Kg/Day)	**8,822**	**9,438**

SPC July 2022

Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary

2045 Long Range Plan Year (By Road Type)

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	2.703	0.869
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	23,348	43.0	0.001	0.002
	Urban Restricted	10,515,734	48.4	0.281	1.091
	Urban UnRestricted	19,838,591	27.7	0.745	1.648
	Subtotal	*30,377,674*		*3.729*	*3.610*
Armstrong	Off-Network	0	N/A	0.260	0.149
	Rural Restricted	218,999	54.5	0.006	0.027
	Rural UnRestricted	183,424	34.6	0.006	0.015
	Urban Restricted	89,740	31.3	0.005	0.018
	Urban UnRestricted	1,370,830	43.6	0.040	0.147
	Subtotal	*1,862,993*		*0.317*	*0.354*
Beaver	Off-Network	0	N/A	0.439	0.140
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	21,574	37.8	0.001	0.002
	Urban Restricted	967,650	56.4	0.023	0.072
	Urban UnRestricted	3,424,726	34.8	0.107	0.288
	Subtotal	*4,413,950*		*0.569*	*0.501*
Butler	Off-Network	0	N/A	0.628	0.255
	Rural Restricted	276,042	49.1	0.008	0.031
	Rural UnRestricted	656,909	33.2	0.023	0.052
	Urban Restricted	1,469,206	56.3	0.041	0.288
	Urban UnRestricted	4,767,235	36.9	0.155	0.404
	Subtotal	*7,169,392*		*0.856*	*1.030*
Washington	Off-Network	0	N/A	0.497	0.325
	Rural Restricted	661,664	N/A	0.015	0.064
	Rural UnRestricted	261,425	N/A	0.008	0.019
	Urban Restricted	3,256,480	N/A	0.083	0.506
	Urban UnRestricted	3,993,713	N/A	0.123	0.335
	Subtotal	*8,173,282*		*0.727*	*1.248*
Westmoreland	Off-Network	0	N/A	0.962	0.378
	Rural Restricted	199,630	N/A	0.005	0.022
	Rural UnRestricted	459,017	N/A	0.016	0.038
	Urban Restricted	3,314,355	N/A	0.087	0.716
	Urban UnRestricted	7,460,549	N/A	0.234	0.650
	Subtotal	*11,433,550*		*1.304*	*1.803*
Fayette	Off-Network	0	N/A	0.484	0.137
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	2,737	44.7	0.000	0.000
	Urban Restricted	562,689	45.5	0.016	0.053
	Urban UnRestricted	2,875,231	40.4	0.088	0.286
	Subtotal	*3,440,657*		*0.588*	*0.477*
Region Subtotal		66,871,499		8.090	9.022
Off-Model Project Emission Benefits				0.000	0.000
Region Total		**66,871,499**		**8.090**	**9.022**
			(Kg/Day)	**7,339**	**8,185**

SPC July 2022

APPENDIX E

Common Acronyms

COMMON ACRONYMS

AADT	Annual Average Daily Traffic
ADA	Americans with Disabilities Act of 1990 (federal)
ADT	Average Daily Traffic
BPR	PennDOT Bureau of Planning and Research
BRT	Bus Rapid Transit
CAAA 90	Federal Clean Air Act Amendments of 1990
CBD	Central Business District
CENTRAL	Menu-driven software platform that executes PPSUITE and MOVES in batch mode
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality
CO	Carbon Monoxide
CO_2	Carbon Dioxide
DEP	Pennsylvania Department of Environmental Protection (also PaDEP)
DOT	Department of Transportation
DVMT	Daily Vehicle Miles of Travel
EPA	Environmental Protection Agency (United States)
EPACT	Energy Policy Act of 1992 (federal)
FAST-Act	Fixing America's Surface Transportation Act (federal transportation law – enacted 2015)
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographic Information System
HBW	Home-Based Work trips
HBO	Home-Based Other trips
HC	Hydrocarbons
HDDV	Heavy Duty Diesel Vehicle
HDGV	Heavy Duty Gasoline Vehicle
HDV	Heavy Duty Vehicle
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
I/M	Vehicle Emissions Inspection and Maintenance Program
ISTEA	Intermodal Surface Transportation Efficiency Act (federal transportation law – enacted 1991)
IVHS	Intelligent Vehicle Highway Systems
ITS	Intelligent Transportation Systems
IVT	In-Vehicle Travel Time
LDDT	Light Duty Diesel Truck
LDDV	Light Duty Diesel Vehicle
LDGT	Light Duty Gasoline Truck
LDGV	Light Duty Gasoline Vehicle
LDT	Light Duty Truck
LDV	Light Duty Vehicle
LEV	Low Emission Vehicle
LRP	Long-Range Transportation Plan
LOS	Level of Service
MAP-21	Moving Ahead for Progress in the 21st Century (federal transportation law – enacted 2012)
MOVES	Motor Vehicle Emissions Simulator – EPA on-road emissions model (replaced MOBILE model)
MPO	Metropolitan Planning Organization
MPH	Miles per Hour
MPMS	Multi-Modal Project Management System (Pennsylvania)

COMMON ACRONYMS

NAAQS	National Ambient Air Quality Standards (federal)
NEPA	National Environmental Policy Act of 1969, as amended (federal)
NHB	Non Home-Based trips
NHS	National Highway System
NH_3	Ammonia
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
O_3	Ozone
OVT	Out of Vehicle Travel Time
PaDEP	Pennsylvania Department of Environmental Protection (also DEP)
PennDOT	Pennsylvania Department of Transportation
PM_{10}	Coarse Particulate Matter - particles with diameter less than 10 micrometers
$PM_{2.5}$	Fine Particulate Matter - particles with diameter less than 2.5 micrometers
PPB	Parts Per Billion
PPM	Parts Per Million
PPSUITE	Software tool to estimate DVMT, average speeds, and vehicle type mix for input to MOVES
RFG	Reformulated Gasoline
RFP	Reasonable Further Progress
RMS	PennDOT's Roadway Management System
ROW	Right of Way
RVP	Reid Vapor Pressure
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (federal – 2005)
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
SO_2	Sulfur Dioxide
SO_X	Sulfur Oxides
SPC	Southwestern Pennsylvania Commission
SR	State Route number
STC	State Transportation Commission
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TAZ	Traffic Analysis Zone
TCM	Transportation Control Measure
TDM	Travel Demand Management
TEA-21	Transportation Equity Act for the 21st Century (federal transportation law – enacted 1998)
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TPD	Tons per Day
TPY	Tons per Year
TR	Traffic Route number
TSM	Transportation System Management
USC	United States Code
$\mu G/M^3$	Micrograms per Cubic Meter
USDOT	United States Department of Transportation
VHT	Vehicle Hours Traveled
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
VOYAGER	Suite of computer programs used to model travel demand

APPENDIX F

SPC Resolutions 5-22 and 7-22

SOUTHWESTERN PENNSYLVANIA COMMISSION

RESOLUTION NO. 5-22

A RESOLUTION OF THE SOUTHWESTERN PENNSYLVANIA COMMISSION to make a finding of conformity that the region's fiscally constrained 2023-2026 Transportation Improvement Program (TIP) for the Pittsburgh Transportation Management Area (TMA) and the 2045 Transportation Plan (a component of *SmartMoves for a Changing Region*) are consistent with the requirements of the federal Clean Air Act.

WHEREAS, the federal Clean Air Act authorizes the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS), to define the boundaries of areas not in attainment of the Standards, and to establish criteria and procedures for attaining and maintaining the Standards;

WHEREAS, the EPA has designated three nonattainment and maintenance areas in the SPC planning region for the 8-Hour Ozone NAAQS; these include the Pittsburgh-Beaver Valley nonattainment area (comprised of the seven counties: Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland); the Greene County maintenance area (comprised of Greene County in its entirety); and the Clearfield-Indiana maintenance area (comprised of Clearfield County, which is outside of SPC's planning area, and Indiana County which is within SPC's planning area);

WHEREAS, the EPA has designated four nonattainment areas in the SPC planning region for the PM 2.5 NAAQS; these include the Liberty-Clairton nonattainment area (comprised of five municipalities within Allegheny County); the Pittsburgh-Beaver Valley nonattainment area (comprised of Beaver, Butler, Washington, and Westmoreland counties in their entirety and portions of Allegheny, Armstrong, Greene, and Lawrence counties); the Allegheny County nonattainment area (comprised of Allegheny County in its entirety); and the Johnstown nonattainment area (comprised of portions of Indiana County within SPC's planning area, and all of Cambria County which is in the planning area of the Johnstown MPO);

WHEREAS, the EPA has designated the Liberty-Clairton area as a maintenance area in the SPC planning region for the PM 10 NAAQS consisting of five municipalities within Allegheny County;

WHEREAS, the EPA has designated a maintenance area in the SPC planning region for the Carbon Monoxide (CO) NAAQS consisting of the City of Pittsburgh's central business district and certain other high traffic density areas in and near the City's Oakland neighborhood;

WHEREAS, the EPA, in the Transportation Conformity Rule (40 CFR Part 93), provides criteria and procedures to be followed by Metropolitan Planning Organizations (MPOs) in making conformity determinations regarding transportation plans, programs, and projects within designated nonattainment and maintenance areas;

WHEREAS, the Transportation Conformity Rule and Sections 174, 176(c), and 176(d) of the federal Clean Air Act (Sections 7504, 7506(c), and 7506(d) of Title 42 USC) require that the MPO not approve any plan, program, or project which does not conform with the Act;

WHEREAS, the Southwestern Pennsylvania Commission (SPC), as the MPO for the Pittsburgh Transportation Management Area, is responsible under Section 134 of Title 23 USC and Section 5303 of Title 49 USC for carrying out a continuing, cooperative, and comprehensive transportation planning process; Section 174 of the federal Clean Air Act designates this same organization as responsible for the transportation-related air quality planning within designated nonattainment and maintenance areas to achieve and maintain NAAQS;

WHEREAS, SPC staff has conducted a qualitative and quantitative analysis for the designated PM 2.5, PM 10, CO, and 8-Hour Ozone nonattainment and maintenance areas within the SPC region in accordance with the applicable criteria and procedures of the federal Clean Air Act and the Transportation Conformity Rule, and has demonstrated conformity of the 2023-2026 TIP and the 2045 Transportation Plan to the Clean Air Act;

WHEREAS, the results of the conformity analysis were widely available for public review and comment consistent with SPC's established public review procedures from May 9, 2022 through June 7, 2022 including four public meetings (three virtually and one in-person); responses to all public comments have been compiled and made available to Commission members for review.

NOW, THEREFORE, BE IT RESOLVED that the Southwestern Pennsylvania Commission finds that the region's fiscally constrained 2023-2026 TIP and the 2045 Transportation Plan conform to the federal Clean Air Act by supporting its intention of achieving and maintaining the NAAQS;

BE IT FURTHER RESOLVED that the region's 2023-2026 TIP and the 2045 Transportation Plan are consistent with the federal Clean Air Act and Transportation Conformity Rule; no goals, directives, recommendations, or projects in the region's Long Range Plan or TIP contradict in a negative manner any specific requirements or commitments of the applicable State Implementation Plan (SIP);

RESOLVED FURTHER that assessment of the designated PM 2.5, PM 10, CO, and 8-Hour Ozone nonattainment and maintenance areas within the SPC region demonstrates that the transportation plans, programs, and projects for those areas conform to the provisions of the federal Clean Air Act and the applicable criteria and procedures of the Transportation Conformity Rule.

I, Vincent Vicites, HEREBY CERTIFY that I am Secretary-Treasurer of the SOUTHWESTERN PENNSYLVANIA COMMISSION: that the foregoing resolution was adopted, in accordance with the By-Laws, by the Members of said Commission at a meeting duly called and held on the 27th day of June 2022, and that said resolution is now in full force and effect.

IN TESTIMONY WHEREOF I hereto subscribe my name as Secretary-Treasurer.

Vincent A. Vicites

Secretary-Treasurer

SOUTHWESTERN PENNSYLVANIA COMMISSION

RESOLUTION NO. 7-22

A RESOLUTION OF THE SOUTHWESTERN PENNSYLVANIA COMMISSION to adopt the FFY 2023-2026 Transportation Improvement Program (TIP) for the Pittsburgh Transportation Management Area and to authorize the submission of the TIP and its companion documents to the appropriate authorities and agencies, and to approve an update to *SmartMoves for a Changing Region* to reflect the updated revenues, project costs and schedules identified in SPC's FFY 2023-2026 TIP.

WHEREAS, Section 134 of Title 23 U.S.C., Part 450 of Title 23 CFR and 49 U.S.C. 5303-5304 requires that Metropolitan Planning Organizations (MPOs) conduct a comprehensive transportation planning process and develop and maintain a Long Range Plan and a Transportation Improvement Program;

WHEREAS, federal law requires that regional transportation plans and programs be developed by MPOs and approved by the Governor of the state and to be reviewed by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA);

WHEREAS, federal law requires the state to develop statewide transportation plans and programming subject to review by the Secretary of the United States Department of Transportation (U.S. DOT);

WHEREAS, SPC's established process for public involvement in the planning process was followed during TIP development. A review of public involvement in the regional transportation planning process and the resultant Transportation Improvement Program demonstrated that the benefits of the regional transportation planning process accrue to both Environmental Justice (EJ) and Non-EJ communities. Low-income and minority populations are not disproportionately impacted and are beneficiaries of the transportation planning process in Southwestern Pennsylvania;

WHEREAS, in accordance with the requirements of the Clean Air Act (as amended) and the Transportation Conformity Rule, qualitative and quantitative analysis of the FFY 2023-2026 TIP and *SmartMoves for a Changing Region* update has demonstrated that they conform to the provisions of the Clean Air Act and the applicable criteria and procedures of the Transportation Conformity Rule, with the resultant conformity finding approved by Commission Resolution 2-18;

WHEREAS, updated *SmartMoves for a Changing Region* project tables identify changes in revenues, costs and schedules for projects identified in *SmartMoves* as a result of the TIP Update;

WHEREAS, SPC's Transit Operators and Transportation Technical Committees unanimously recommended Commission approval of the 2023-2026 TIP and companion documents at its June 8th and June 16th respective meetings.

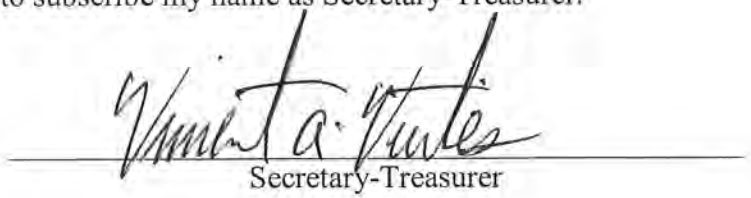
NOW, THEREFORE, BE IT RESOLVED that the FFY 2023-2026 TIP meets all applicable federal requirements and the Southwestern Pennsylvania Commission approves and adopts the 2023-2026 Transportation Improvement Program (TIP) for the Pittsburgh Transportation Management Area;

BE IT FURTHER RESOLVED that the FFY 2023-2026 TIP and companion documents are approved for submission to the appropriate authorities and agencies: 1) to the Secretary of the Pennsylvania Department of Transportation (PennDOT) for approval by the Governor, 2) to PennDOT for inclusion in the state transportation plan and program, with referral to US DOT, and 3) to FTA and FHWA for review; and

RESOLVED FURTHER that the Southwestern Pennsylvania Commission approves the amendment to *SmartMoves for a Changing Region.*

I, Vincent Vicites, HEREBY CERTIFY that I am Secretary-Treasurer of the SOUTHWESTERN PENNSYLVANIA COMMISSION: that the foregoing resolution was adopted, in accordance with the By-Laws, by the Members of said Commission at a meeting duly called and held on the 27th day of June 2022, and that said resolution is now in full force and effect.

IN TESTIMONY WHEREOF I hereto subscribe my name as Secretary-Treasurer.



Secretary-Treasurer