

# **Air Quality Conformity Determination Pittsburgh Transportation Management Area**

for the  
**8-Hour Ozone Air Quality Standards  
PM 2.5 and PM10 Air Quality Standards**

Companion Document to the

**2025-2028 Transportation Improvement Program  
and amendments to  
SmartMoves for a Changing Region**



**Final Report  
July 2024**

# Southwestern Pennsylvania Commission

## 2024

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### **Southwestern Pennsylvania Commission**

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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 2024 to make its transportation-related conformity determination for the region's 2025-2028 Transportation Improvement Program and updates to the region's 2050 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 (Conformity 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<sub>3</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), 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 TIP, Plan, 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 TIP or Plan, 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 June 26, 2023 in conjunction with adoption of SPC's 2050 Long Range

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Transportation Plan (*SmartMoves for a Changing Region*) and updates to the 2023-2026 TIP. The United States Department of Transportation, in consultation with EPA, concurred with SPC's conformity finding on October 19, 2023.

SPC has developed a new fiscally constrained Transportation Improvement program (2025-2028 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 and regional priorities through 2050. These changes to the regionally significant projects to be programmed on the region's 2050 Plan and 2025-2028 TIP triggered the need for a new finding of conformity. The new conformity finding was needed prior to SPC's adoption of the 2025-2028 TIP, modifications to the 2050 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 February 7, 2024, 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 MOVES3 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 by SPC on June 26, 2023. This data is normally updated with the latest available files on a three year cycle. Travel trends were severely impacted in 2020, 2021 and 2022 by the Covid-19 pandemic. With the concurrence of Pennsylvania's interagency consultation group, updating the 2017 data to 2022 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. Necessary changes were made to the MOVES default parameters to match the actual performance of the local program. 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



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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 12 forecast of population, employment and households was developed in the spring of 2023 and was adopted with the 2050 Plan on June 26, 2023. The Cycle 12 forecast replaces the Cycle 11 forecast which was adopted in 2019. The base year for the Cycle 12 forecast is 2020. The horizon year is 2050. The Cycle 12 forecast was used to generate trips for the travel demand model for this conformity assessment. 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. The estimates of vehicle miles traveled (VMT) and emissions projections for this conformity assessment were developed from SPC’s travel model.
- The travel model was last 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 development of the 2023-2026 TIP in the spring of 2022, nor for the development of the 2050 Long Range Plan in the spring of 2023. And is not being done during this conformity assessment for development of the 2025-2028 TIP. Travel patterns are still in flux coming out of the Covid-19 pandemic. In coming years, as more post-Covid data becomes available, and post-Covid trends can be more reliably estimated, informed adjustments to the travel demand model may be in order. The model validation discussion in Section IV is a comparison of observed 2020, 2021, and 2022 travel patterns which were significantly impacted by the pandemic, to 2023 travel model outputs based on SPC’s Cycle 12 forecast. The modeling anticipates a return to pre-Covid travel levels.
- 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

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(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 NO<sub>x</sub> 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 NO<sub>x</sub> 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 June 26, 2023.
- Motor vehicle emission budgets are available to SPC for use in the conformity assessment for the Pittsburgh-Beaver Valley PM<sub>2.5</sub> nonattainment area under the 1997 annual PM<sub>2.5</sub> NAAQS and the 2006 daily PM<sub>2.5</sub> 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

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parts of Armstrong, Greene and Lawrence counties. EPA approved the PM<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub> nonattainment area under the 2012 annual PM<sub>2.5</sub> NAAQS. EPA approved the PM<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub> nonattainment in the Liberty-Clairton PM<sub>2.5</sub> 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<sub>2.5</sub> impacts is required for conformity purposes for the Liberty-Clairton PM<sub>2.5</sub> area. Other conformity requirements, including latest planning assumptions, interagency and public consultation, and fiscal constraint still need to be addressed in the conformity assessment.
- Conformity assessments for the Allegheny County CO maintenance area are no longer required. Under 40 CFR 93.102(b)(4) of EPA’s regulations, transportation conformity applies to maintenance areas for a 20-year planning period. EPA approved the first 10-year maintenance plan for the Allegheny County CO maintenance area on November 12, 2002 (67 FR 68521) with an effective date of January 13, 2003. EPA approved the second 10-year Limited Maintenance Plan (LMP) on March 27, 2014 (79 FR 17054). As the Allegheny County CO maintenance area has shown continuous maintenance of the CO NAAQS from January 13, 2003 through January 13, 2023, the area has met its obligation to demonstrate maintenance of the CO NAAQS for 20-years. Therefore, as of January 14, 2023, the transportation conformity assessments are no longer required to address conformity for the Allegheny County CO maintenance area. EPA confirmed this finding in a letter to the Allegheny County Health Department. A copy of the letter was received by SPC on March 23, 2023.

Four major, regionally significant projects were completed in the region since the conformity assessment for the 2050 Long Range Plan and the 2023-2026 TIP update was prepared in the spring of 2023. Those projects are now included in the existing (2025 base year) transportation network for this conformity assessment. Those projects are:

**Allegheny County:**

- Market Place District Improvements-Montour Run Rd.-add through lane between FedEx Dr. and Market Place Blvd. [Moon Twp.]

**Butler County:**

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

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Seventeen non-codable, regionally significant projects were also completed and reflected in the existing year (2025) analysis. These projects are:

**Allegheny County:**

- District 11 4c SINC-UP Project – MPMS#100382 [Allegheny Co.]
- PGH CBD Signal Upgrade Phase-4 – MPMS#63378 [City of Pittsburgh – Allegheny Co.]
- HSIP 2022 – MPMS#118376 [City of Pittsburgh – Allegheny Co.]
- PA 837 – 33rd St. to Smithfield St. – MPMS#98085 [City of Pittsburgh – Allegheny Co.]
- North Avenue Signals & Safety – MPMS#116080 [City of Pittsburgh – Allegheny Co.]
- Homestead Eighth Ave. Transit & Pedestrian Improvements – MPMS#118764 [Allegheny Co.]
- SR 50 Upgrades - Thom's Run Road to Mayer St. - MPMS#28010 [Allegheny Co.]
- SR 1001 Freeport Road Signal Retiming – MPMS#110372 [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.]

**Butler County:**

- D10 4c SINC-UP Project – MPMS#112713 [Butler Co.]
- SR 68 Corridor Improvements - MPMS#106568 [Butler Co.]
- SR 356 Moraine Pt. Signals – MPMS#110462 [Butler Co.]

**Fayette County:**

- SR 119 Connellsville Signals – MPMS#110402 [Fayette Co.]

**Washington County:**

- Bebout Rd. @ E. McMurray Rd. Intersection – MPMS#109025 [Washington Co.]
- SR 88 Charleroi – MPMS#110399 [Washington Co.]

**Westmoreland County:**

- D12 4c SINC-UP Project – MPMS#114210 [Westmoreland 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<sub>2.5</sub> NAAQS, the 2006 24-hour PM<sub>2.5</sub> NAAQS, the 1971 carbon monoxide (CO) NAAQS, and the 1987 PM<sub>10</sub> 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, and the PM<sub>2.5</sub> and PM<sub>10</sub> air quality standards 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 six analysis years: 2025 – the base year for the conformity tests as well as a budget year for the PM<sub>2.5</sub> air quality standards; 2028 – the horizon year for the 2025-2028 TIP; 2035 – interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart; 2045 – a second interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart; and, 2050 – the horizon year for the Long Range Transportation Plan.

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### **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:

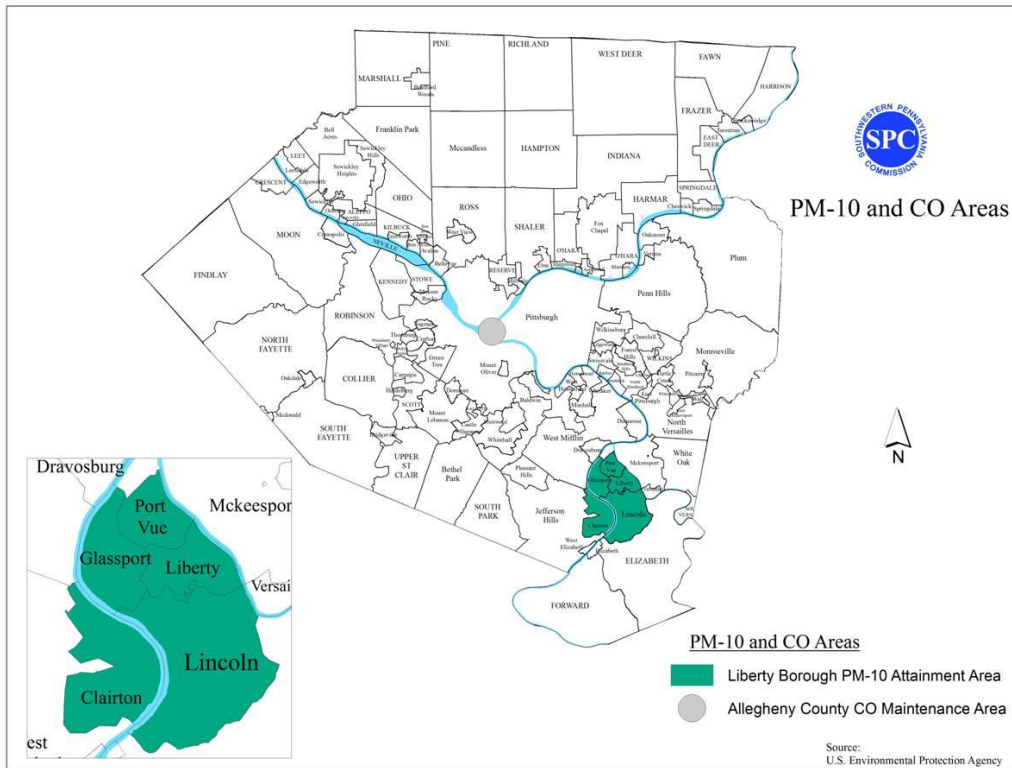
- 1) A determination should be made that the endorsed transportation plan and program will be consistent with the MVEBs in the approved control strategy SIP or redesignation request. Prior to EPA approval of MVEBs, a determination should be made that the transportation plan and program are consistent 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<sub>10</sub> 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<sub>2.5</sub> 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<sub>2.5</sub> 24-hour NAAQS (the same three geographic areas designated nonattainment for the PM<sub>2.5</sub> annual standard) – Map 3, and (7) the 2012 PM<sub>2.5</sub> annual NAAQS (one designated area, covering all of Allegheny County) – Map 3.

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With the exception of the carbon monoxide nonattainment area, transportation conformity must be addressed by SPC for each nonattainment and maintenance area. This report addresses conformity for all of the applicable nonattainment areas and NAAQS. Discussion of the carbon monoxide maintenance area appears below and in Section VII.



Map 1

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### PM<sub>10</sub>

In accord with the federal Clean Air Act, the EPA designated a moderate nonattainment area for particulate matter under the 1987 PM<sub>10</sub> 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). Subsequently EPA issued an “insignificance finding” that PM<sub>10</sub> nonattainment in that area stemmed primarily from industrial sources in the area and not from mobile sources. As a result, this nonattainment area was not required to have a PM<sub>10</sub> transportation conformity motor vehicle emissions budget. And, in addition, because the PM<sub>10</sub> 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<sub>10</sub> 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<sub>10</sub> Attainment Plan to EPA for review and approval. That was followed on July 12, 1995 with submittal of a Maintenance Plan that included contingency measures that would be enforced if the area failed to attain the PM<sub>10</sub> standard. On September 8, 1998, EPA’s final approval of those

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documents was announced in the Federal Register (63 FR 47434) and EPA declared that the area had attained the PM<sub>10</sub> standard. On October 28, 2002, a request to redesignate the area as attainment for PM<sub>10</sub> 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<sub>10</sub> NAAQS, was announced in the Federal Register on September 11, 2003 (68 FR 53515).

The 2050 Plan and the 2025-2028 TIP will not worsen the PM<sub>10</sub> emissions in that area, nor will they interfere with the expeditious implementation of mitigation measures to control those emissions. Six projects are identified on the 2025-2028 TIP and the 2050 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, \$15,000,000 (MPMS# 114193); 2). SR 2010 Slide Remediation – Slide remediation work on Lovedale Road (SR 2010) in Lincoln Borough and Elizabeth Township, \$13,400,000 (MPMS# 114194); 3). Lovedale Road Bridge/Wylie Run - Bridge Replacement on SR 2010, Lovedale Road over Wylie Run in Elizabeth Township & Lincoln Borough, \$4,000,000 (MPMS# 74319); 4). Clairton-Glassport Bridge – Bridge rehabilitation on SR 2038 over Monongahela River in the City of Clairton, \$20,761,800 (MPMS# 118913); 5). Resurface – Mill and overlay on SRs 48, 2037, and 2083 in the boroughs of White Oak, Lincoln, Versailles and East Pittsburgh, the townships of Elizabeth and North Versailles, and the City of McKeesport, \$10,400,000 (MPMS# 108528); 6). SR 837 Concrete Rehabilitation – Concrete reconstruction on North State Street (PA 837) in the City of Clairton and the boroughs of Dravosburg and West Mifflin, \$14,080,000 (MPMS# 115085). The total cost programmed on the 2025-2028 TIP and 2050 Plan for these six projects is \$77,641,800.

### **Carbon Monoxide**

As noted in Section I, conformity assessments for the Allegheny County carbon monoxide (CO) maintenance area are no longer 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:

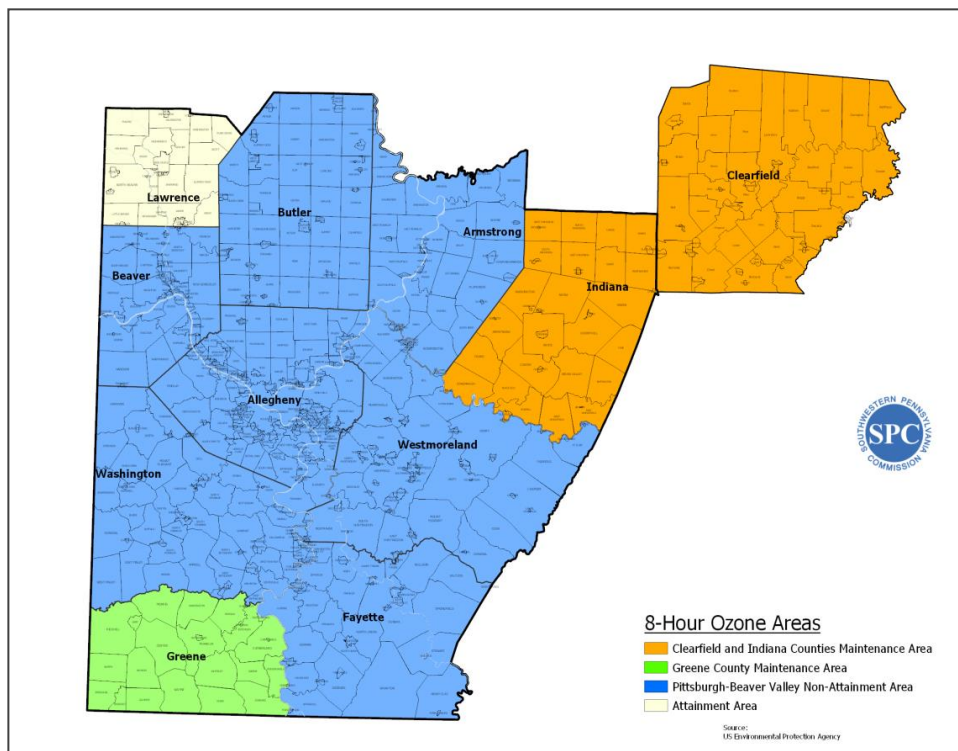
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- Pittsburgh - Beaver Valley. This area includes the same seven counties within SPC's planning area that were included under the 1997 8-hour ozone NAAQS (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland).

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.



Map 2

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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 (NO<sub>x</sub>). A major source of VOCs and NO<sub>x</sub> 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



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typically highest during hot summer days. For ozone nonattainment areas, reductions in both VOC and NO<sub>x</sub> 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 NO<sub>x</sub> 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 NO<sub>x</sub> emissions in a future year for the transportation plan or program when compared to the established MVEBs. The analysis must estimate total motor vehicle 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.

MVEBs for VOC and NO<sub>x</sub> 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 (NO<sub>x</sub>) 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.

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### **PM<sub>2.5</sub>**

The EPA published the 1997 Annual PM<sub>2.5</sub> NAAQS on July 18, 1997 (62 FR 38653). Three nonattainment areas were designated in the SPC planning area under the 1997 Annual PM<sub>2.5</sub> 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<sub>2.5</sub> NAAQS on October 17, 2006 (71 FR 61144). Three nonattainment areas were designated in the SPC planning area under the 2006 24-hour PM<sub>2.5</sub> NAAQS effective December 14, 2009 (74 FR 58688). The boundaries of the three nonattainment areas designated under the 2006 24-hour PM<sub>2.5</sub> NAAQS are identical to the three nonattainment areas designated under the 1997 Annual PM<sub>2.5</sub> NAAQS.

Map 3 shows the boundaries of the three 1997/2006 PM<sub>2.5</sub> nonattainment areas in southwestern Pennsylvania. These three areas are designated nonattainment for both the 1997 Annual PM<sub>2.5</sub> NAAQS and the 2006 24-hour PM<sub>2.5</sub> NAAQS.

The remainder of the SPC planning area is designated as an attainment area under both the 1997 Annual and 2006 24-hour PM<sub>2.5</sub> NAAQS. The attainment area includes all of Fayette County and the remainder of Armstrong, Greene, Indiana, and Lawrence counties.

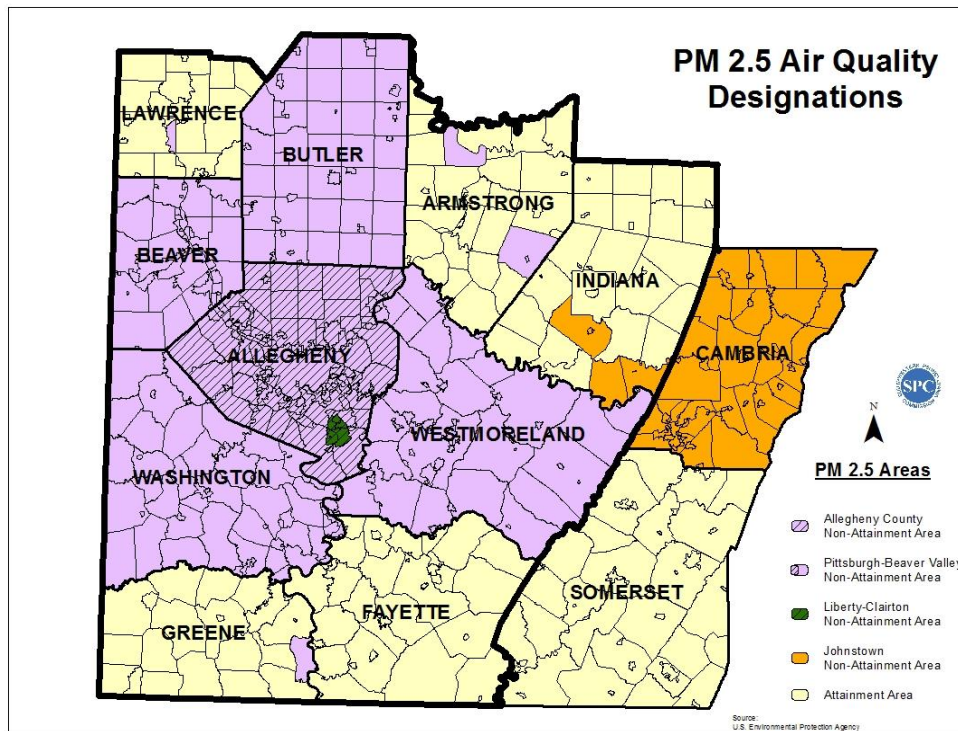
The Transportation Conformity Rule requires that the conformity determination for transportation plans and programs be based on comparisons to approved emission budgets, provided that the budgets are established in a control strategies State Implementation Plan and that EPA has declared the MVEBs to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

MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> were approved by EPA under the 2006 24-hour PM<sub>2.5</sub> NAAQS and the 1997 Annual PM<sub>2.5</sub> NAAQS for the Pittsburgh – Beaver Valley PM<sub>2.5</sub> Area in a final rule published in the Federal Register on October 2, 2015 (80 FR 59624). These MVEBs are based

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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<sub>2.5</sub> 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<sub>2.5</sub> Area are presented in Table 14 and are shown graphically in Figures 3 (PM<sub>2.5</sub>) and 4 (NO<sub>x</sub>) in Section VII.



Map 3

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MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> were approved by EPA under the 2006 24-hour PM<sub>2.5</sub> NAAQS and the 1997 Annual PM<sub>2.5</sub> NAAQS for the Indiana County portion of the Johnstown PM<sub>2.5</sub> 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<sub>2.5</sub> nonattainment area under both the annual and the daily PM<sub>2.5</sub> 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<sub>2.5</sub> nonattainment area are presented in Table 15 and shown graphically in Figures 5 (PM<sub>2.5</sub>) and 6 (NO<sub>x</sub>) in Section VII.

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The ACHD submitted, on May 13, 2014, a supplement to its Attainment Demonstration SIP for the Liberty – Clairton area under the 1997 annual PM<sub>2.5</sub> NAAQS and the 2006 daily PM<sub>2.5</sub> 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<sub>2.5</sub> impacts is required for conformity purposes. Interagency consultation, fiscal constraint, and public review are still required.

The 2050 Plan and 2025-2028 TIP will not worsen the PM<sub>2.5</sub> emissions in that area, nor will they interfere with the expeditious implementation of mitigation measures to control those emissions. The six projects identified on the 2025-2028 TIP and the 2050 Plan in the Liberty – Clairton PM<sub>2.5</sub> Area are listed in the PM<sub>10</sub> discussion above.

The EPA published the 2012 Annual PM<sub>2.5</sub> 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<sub>2.5</sub> 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<sub>2.5</sub> NAAQS.

MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> were approved by EPA under the 2012 Annual PM<sub>2.5</sub> NAAQS for the Allegheny County PM<sub>2.5</sub> 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<sub>2.5</sub> NAAQS. The annual values for the MVEBs for the Allegheny County PM<sub>2.5</sub> Area under the 2012 Annual PM<sub>2.5</sub> NAAQS are presented in Table 16 and are shown graphically in Figures 7 (PM<sub>2.5</sub>) and 8 (NO<sub>x</sub>) in Section VII.

PM<sub>2.5</sub> 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<sub>2.5</sub> emissions are contained in re-entrained road dust and transportation construction dust. PM<sub>2.5</sub> emissions are also formed through reactions in the atmosphere among several precursor emissions including VOC, NO<sub>x</sub>, ammonia (NH<sub>3</sub>) and sulfates (SO<sub>x</sub>). Under EPA conformity regulations:

- Direct PM<sub>2.5</sub> 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<sub>2.5</sub> in the nonattainment area, or is named in a PM<sub>2.5</sub> 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<sub>2.5</sub> SIP and a MVEB is established for this item.

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- NO<sub>x</sub> 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<sub>3</sub> and SO<sub>x</sub> 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<sub>2.5</sub> conformity analysis encompasses the following pollutants: Direct PM<sub>2.5</sub> emissions (tailpipe, brake wear, tire wear); and NO<sub>x</sub> precursor emissions.

The process used to develop the emission factors needed for the PM<sub>2.5</sub> conformity assessments is presented in Section V. Results of the analysis, and the conformity determinations for the PM<sub>2.5</sub> nonattainment areas within the SPC planning area, are found in Section VII.

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### III. Transportation Networks Developed for Conformity Assessment

SPC’s process for this conformity determination for the 2025-2028 TIP and updates to the 2050 Transportation 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). 2025 network – used to represent the base year for the conformity tests; and to represent the PM<sub>2.5</sub> NAAQS budget year; 2). 2028 network – the horizon year for the 2025-2028 TIP; 3). 2035 network – an interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart; 4). 2045 network -a second interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart, and; 5). 2050 network – the horizon year for the Long-Range Transportation Plan.

The adopted 2025-2028 TIP is the fiscally constrained program of projects for federal fiscal years 2025 through 2028 (October 1, 2024 through September 30, 2028) that reflect the region’s transportation priorities. It was adopted by SPC on June 24, 2024. The SPC report 2025-2028 Transportation Improvement Program for Southwestern Pennsylvania (July 2024) 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 2025-2028 TIP for construction would be completed by 2028. Appendix A lists all of the projects included on the 2025-2028 TIP.

The adopted 2050 Long Range Plan (2050 Plan) is the region’s fiscally constrained long-range transportation plan. The SPC report *SmartMoves for a Changing Region* (SPC, July 2024), identifies the specific projects included in the Plan for SPC’s 10-county planning area. It was initially adopted by SPC on June 26, 2023. The Plan was updated in the spring of 2024 to account for revised fiscal projections and changes to regional priorities. The modified Plan was adopted by SPC on June 24, 2024. Appendix C lists the projects included on the modified 2050 Plan.

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“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 2025 network. The projects and facilities are those listed as completed from 1990 through 2025. The network was used to develop 2025 emissions estimates for the "existing" (2025) transportation system and for the PM2.5 NAAQS 2025 budget year

“Non-exempt” projects and facilities listed in Figure 1 for completion by 2028 were added to the 2025 network to define the transportation system for the 2028 network. The 2028 (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 2025-2028 TIP. This network was used in the conformity analysis to develop emissions estimates for the TIP year (2028).

“Non-exempt” projects and facilities listed in Figure 1 for completion between 2028 and 2035 were added to the 2028 network to define the 2035 “interim year #1” network. The 2035 network was used to develop emissions estimates for the 2035 “interim year #1” 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 “interim year #2” network. The 2045 network was used to develop emissions estimates for the 2045 “interim year #2” analysis scenario.

“Non-exempt” projects and facilities listed in Figure 1 for completion between 2045 and 2050 were added to the 2045 network to define the 2050 Long Range Transportation Plan network. The 2050 network was used to develop emissions estimates for the Long-Range Plan.

Of all the highway and transit projects programmed on the 2025-2028 TIP and 2050 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 2025-2028 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 2050 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.



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**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)

### **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)

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

### 2. PM<sub>2.5</sub> Conformity Base Year (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 Widened 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)
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)

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

### 3. Existing Base Network / PM<sub>2.5</sub> Budget Year Transportation System

- 2008 Transportation System plus:

Facilities completed between 2008 and 2025

#### 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 (25<sup>th</sup> St. to 33<sup>rd</sup> 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. PA 28 Highland Park Bridge Interchange Improvements
12. Corrigan Drive Upgrade/Road Diet (Reduce from 4 to 2 lanes through South Park)
13. Stevenson Mill Connector [Moon Twp.]
14. Rouser Road Connector [Moon Twp.]
15. I-76 PA. Turnpike Mainline (Construct New Bridge over Allegheny River) 6 lanes
16. I-76 PA. Turnpike Mainline Widened to 6 lanes (Pine Twp. to Route 8 Interchange)
17. I-76 PA. Turnpike Mainline Widened to 6 lanes (SR 8 Int. to Allegheny Valley Int.)
18. I-76 PA. Turnpike Mainline Widened to 6 lanes (Cranberry Int. to Pine Twp.)
19. I-79 widening to 3 lanes northbound (Southpointe to Alpine Road)

#### Beaver County:

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

#### Butler County:

22. I-79 Exit 88 Interchange Completion (SR 3025 at Seneca Valley High School)
23. SR 228 Mars Railroad Bridge - Replace existing 2 lane bridge with 4 lane bridge (SR 228 over CSX RR and Breakneck Creek) – [Adams Twp.]
24. Moraine State Park North Shore Access - Interchange Completion (SR 422 @ West Park Road)
25. Freedom Road (SR 3020) Bridge Replacement (Widened to 6 lanes) – Over I-76 PA. Turnpike
26. SR 228 Corridor Improvements (Widening to 3 lanes Eastbound only) I-79 to SR 3021 Franklin Road
27. Freedom Road Improvements – Widen to 4 lanes (Haine School Rd. to Commonwealth Drive)
28. Freedom Road Improvements - Widen to 4 lanes (Powell Rd. to Haine School Rd.)
29. SR 228 Balls Bend - Widening to 4 lanes (Three Degree Rd. to SR 8).

#### Fayette County:

30. Matthew Drive - Widen to 4 lanes (Uniontown)
31. Mon-Fayette Expressway (MFE) (Uniontown to Brownsville) – Phase 1
32. SR 4049 Northgate Highway – New 4 lane Connector (Rt.40 to Rt.51) – Part of MFE Plan Phase 1
33. Mon-Fayette Expressway (Uniontown to Brownsville) – Phase 2
34. Mon-Fayette Expressway (Fairchance to I-68 – West Virginia)
35. Masontown Bridge - Replace existing 2 lane bridge with 4 lane bridge (Rt.21 over Mon. River)
36. Route 21 (Sec. J10) - Widen to 4 lanes (Thompson Crossroads to Rt.119)

#### Greene County:

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

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

**Indiana County:**

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

**Washington County:**

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

**Westmoreland County:**

45. Route 22 Reconstruction/widening to 4 lanes (New Alexandria to Route 982)
46. Route 22 Reconstruction/widening to 4 lanes (Route 982 to Westinghouse)
47. Route 22 Reconstruction/widening to 4 lanes (Westinghouse to Indiana Co.)
48. Route 30 Widening (St. Vincent’s College to Mt. Laurel Shopping Ctr.)
49. Route 981 Widening (North and south approaches to Route 30 intersection)
50. Parnassus Triangle Phase 2 - SR 366 widening to 4 lanes – (Bridge St. to 7<sup>th</sup> St.)
51. I-76 PA. Turnpike Mainline Widened to 6 lanes (Irwin Int. to New Stanton Int.)
52. New Stanton Interchange Improvements (I-70)

**4. TIP Year (2028) Transportation System**

- 2025 Transportation System plus:  
Facilities on 2025-2028 TIP for Construction by 2028

**Allegheny County:**

1. Bus Rapid Transit (BRT) Project Phase-1 (Downtown – Oakland – East End) [City of Pittsburgh]
2. Moon Transportation Authority (MTA) – Stevenson Mill/Rouser Road Offsites [Moon Twp.]
3. Market Place District Improvements-Montour Run Rd.-add through lane between FedEx Dr. and Market Place Blvd. [Moon Twp.]
4. Campbell’s Run Road Improvements – Widen to 4 lanes - [Robinson Twp.]
5. I-279 Southbound Off-Ramp to East Street [City of Pittsburgh]

**5. Interim Year #1 (2035) Transportation System**

- 2028 Transportation System plus:  
Facilities on 2050 Long Range Plan for Construction between 2028 and 2035

**Allegheny County:**

1. Bus Rapid Transit (BRT) Project Phase-2 (Downtown – Oakland – East End) [City of Pittsburgh]
2. Bates Street Improvements – Widen to 4 lanes (2<sup>nd</sup> Ave. to Blvd. of Allies) [City of Pittsburgh]
3. I-79 @ SR 910 Interchange - Widening and installation of additional travel lane
4. I-376 Inbound Transit Hard Shoulder and Off-Ramp
5. I-376 Parkway West @ Banksville Interchange improvements
6. I-76 PA Turnpike Mainline – (Widen to 6 lanes) – Allegheny Valley Int. to Pittsburgh Int.
7. I-76 PA Turnpike Mainline – (Widen to 6 lanes) – Pittsburgh Int. to Westmoreland County Line
8. Pa Turnpike – Mon Fayette Project – New 4-lane toll Freeway (Large to Duquesne)

**Beaver County:**

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

**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

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

13. SR 356 Improvements – Widen 1.1-mile section to 5 lanes, including center turn lane, Harbison Rd. 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
- Westmoreland County:**
17. New PA. Turnpike Interchange – I-76 @ SR 130 [Penn Twp.]
  18. I-76 PA Turnpike Mainline – (Widen to 6 lanes) – Allegheny County Line to Irwin Interchange.
- 6. Interim Year #2 (2045) Transportation System**
- 2035 Transportation System plus:  
Facilities on 2050 Long Range Plan for Construction between 2035 and 2045
- Allegheny County:**
1. Pa Turnpike – Mon Fayette Project – New 4-lane toll Freeway (East Pittsburgh to Monroeville)
- 7. Long Range Plan Horizon Year (2050) Transportation System**
- 2045 Transportation System plus:  
Facilities on 2050 Long Range Plan for Construction between 2045 and 2050
- Allegheny County:**
1. Pa Turnpike – Mon Fayette Project – New 4-lane toll Freeway (East Pittsburgh to Duquesne)

All "non-exempt" projects on the 2025-2028 TIP or 2050 Long Range Plan and not listed above could not be coded. Their effect on emissions and conformity determination is qualitatively described in Section VII.

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### **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 twelfth cycle of population, household and employment forecasts in the spring of 2023 (Cycle 12 forecast). The Cycle 12 forecast was adopted with the 2050 Plan on June 26, 2023. The Cycle 12 forecast replaces the Cycle 11 forecast which was adopted in 2019. The base year for the Cycle 12 forecast is 2020. The horizon year is 2050. The Cycle 12 forecast is 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 estimates of future population and employment by county and the City of Pittsburgh. That model, developed by 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 developed the first version of its Mature Economic Region Land Use Allocation Model (MERLAM) to allocate the county-level forecasts of population, households and employment to the traffic analysis zones in each county. The MERLAM model has been updated and enhanced on a regular basis since it was first developed. 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	2020	2050	CHANGE 2020-2050	% CHANGE 2020-2050
Allegheny	1,211,358	1,223,838	+12,480	+1.0%
<i>Pittsburgh City</i>	302,706	316,784	+14,078	+4.7%
<i>non-Pittsburgh</i>	908,652	907,054	-1,598	-0.2%
Armstrong	64,162	61,075	-3,087	-4.8%
Beaver	162,575	160,135	-2,440	-1.5%
Butler	189,135	213,094	+23,959	+12.7%
Fayette	128,126	115,677	-12,449	-9.7%
Greene	35,621	31,276	-4,345	-12.2%
Indiana	83,664	76,056	-7,608	-9.1%
Lawrence	85,083	84,292	-791	-0.9%
Washington	206,803	227,080	+20,277	+9.8%
Westmoreland	347,087	354,414	+7,327	+2.1%
<b>TOTAL</b>	<b>2,513,614</b>	<b>2,546,936</b>	<b>+33,302</b>	<b>+1.3%</b>

TABLE 1

SPC July 2024

2020 and 2050 population estimates based on REMI forecast.

## REGIONAL HOUSEHOLDS

COUNTY	2020	2050	CHANGE 2020-2050	% CHANGE 2020-2050
Allegheny	545,695	564,883	+19,188	+3.5%
<i>Pittsburgh City</i>	140,496	152,181	+11,685	+8.3%
<i>non-Pittsburgh</i>	405,199	412,702	+7,503	+1.9%
Armstrong	28,035	27,952	-83	-0.3%
Beaver	72,086	73,888	+1,802	+2.5%
Butler	77,725	91,535	+13,810	+17.8%
Fayette	55,346	52,561	-2,785	-5.0%
Greene	14,503	13,344	-1,159	-8.0%
Indiana	33,855	32,735	-1,120	-3.3%
Lawrence	37,300	39,036	+1,736	+4.7%
Washington	85,201	94,146	+8,945	+10.5%
Westmoreland	153,772	164,441	+10,669	+6.9%
<b>TOTAL</b>	<b>1,103,518</b>	<b>1,154,521</b>	<b>+51,003</b>	<b>+4.6%</b>

TABLE 2

SPC July 2024

2020 and 2050 household estimates based on REMI forecast.



## REGIONAL EMPLOYMENT

COUNTY	2020				
	RETAIL	MANU- FACTURING	SERVICES	OTHER	TOTAL
Allegheny	114,248	35,109	641,470	65,478	856,305
<i>Pittsburgh City</i>	<i>25,039</i>	<i>5,152</i>	<i>295,090</i>	<i>14,290</i>	<i>339,571</i>
<i>non-Pittsburgh</i>	<i>89,209</i>	<i>29,957</i>	<i>346,380</i>	<i>51,188</i>	<i>516,734</i>
Armstrong	3,780	1,963	12,757	4,215	22,715
Beaver	11,763	6,387	41,185	11,644	70,979
Butler	18,543	11,320	67,869	14,443	112,175
Fayette	8,904	3,587	31,079	6,311	49,881
Greene	2,278	424	8,130	5,239	16,071
Indiana	6,599	2,107	23,534	7,201	39,441
Lawrence	6,273	3,643	22,527	4,900	37,343
Washington	16,293	8,555	66,231	20,364	111,443
Westmoreland	31,828	17,799	98,938	20,193	168,758
<b>TOTAL</b>	<b>220,509</b>	<b>90,894</b>	<b>1,013,720</b>	<b>159,988</b>	<b>1,485,111</b>
COUNTY	2050				
	RETAIL	MANU- FACTURING	SERVICES	OTHER	TOTAL
Allegheny	118,238	47,046	735,972	67,643	968,899
<i>Pittsburgh City</i>	<i>27,238</i>	<i>6,783</i>	<i>332,227</i>	<i>14,881</i>	<i>381,129</i>
<i>non-Pittsburgh</i>	<i>91,000</i>	<i>40,263</i>	<i>403,745</i>	<i>52,762</i>	<i>587,770</i>
Armstrong	3,589	2,455	13,791	4,242	24,077
Beaver	11,125	8,668	44,514	11,573	75,880
Butler	19,971	14,771	80,190	15,397	130,329
Fayette	8,303	4,365	34,698	6,522	53,888
Greene	2,226	560	9,161	5,538	17,485
Indiana	6,389	2,690	25,242	7,357	41,678
Lawrence	6,145	4,424	25,432	5,067	41,068
Washington	17,190	10,861	78,372	20,846	127,269
Westmoreland	32,208	23,016	112,065	20,484	187,773
<b>TOTAL</b>	<b>225,384</b>	<b>118,856</b>	<b>1,159,437</b>	<b>164,669</b>	<b>1,668,346</b>
COUNTY	PERCENT CHANGE 2020-2050				
	RETAIL	MANU- FACTURING	SERVICES	OTHER	TOTAL
Allegheny	3.5%	34.0%	14.7%	3.3%	13.1%
<i>Pittsburgh City</i>	<i>8.8%</i>	<i>31.7%</i>	<i>12.6%</i>	<i>4.1%</i>	<i>12.2%</i>
<i>non-Pittsburgh</i>	<i>2.0%</i>	<i>34.4%</i>	<i>16.6%</i>	<i>3.1%</i>	<i>13.7%</i>
Armstrong	-5.1%	25.1%	8.1%	0.6%	6.0%
Beaver	-5.4%	35.7%	8.1%	-0.6%	6.9%
Butler	7.7%	30.5%	18.2%	6.6%	16.2%
Fayette	-6.7%	21.7%	11.6%	3.3%	8.0%
Greene	-2.3%	32.1%	12.7%	5.7%	8.8%
Indiana	-3.2%	27.7%	7.3%	2.2%	5.7%
Lawrence	-2.0%	21.4%	12.9%	3.4%	10.0%
Washington	5.5%	27.0%	18.3%	2.4%	14.2%
Westmoreland	1.2%	29.3%	13.3%	1.4%	11.3%
<b>TOTAL</b>	<b>2.2%</b>	<b>30.8%</b>	<b>14.4%</b>	<b>2.9%</b>	<b>12.3%</b>

TABLE 3

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2020 and 2050 employment estimates based on REMI forecast.

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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 in the spring of 2023 during development of the Cycle 12 forecasts. The population and employment estimates that are output from the latest REMI model serve as the basis for the Cycle 12 forecasts. These REMI outputs were then allocated to traffic analysis zones through the use of MERLAM.

SPC's 2020 and 2050 Cycle 12 base year estimates and 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 2020 and 2050 based on socio-economic data from SPC's Cycle 12 forecasts. County-level socio-economic data is shown in Table 1 (population), Table 2 (households), and Table 3 (employment).

Travel model outputs were compared to 2020, 2021, and 2022 Census data; traffic counts, VMT, and transit ridership data during development of this conformity assessment. While not a true model validation effort, the comparison of currently observed conditions to the model outputs does give an indication of the Covid-19 impact on travel.

SPC routinely revalidates the travel demand model during development of each new TIP. The revalidation step was not done for development of the 2023-2026 TIP in the spring of 2022, nor for the development of the 2050 Long Range Plan in the spring of 2023. And is not being done during this conformity assessment for development of the 2025-2028 TIP. Travel patterns are still in flux coming out of the Covid-19 pandemic. The model validation discussion in this Section is a comparison of observed 2020, 2021, and 2022 travel patterns, which were significantly impacted by the pandemic, to 2023 travel model outputs based on SPC's Cycle 12 forecast. The modeling anticipates a return to pre-Covid travel levels. The observed to simulated data comparisons should be considered as a report on the impact that Covid had on travel patterns, rather than a true model validation effort. In coming years, as more post-Covid data becomes available, and post-Covid trends can be estimated, informed adjustments to the travel demand model may be in order.

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 12 household data in a cross-classification model stratified by household size and auto ownership. Person trip attractions are estimated by

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applying trip rates stratified by households and by three employment categories. In some instances, attraction trip rates are further stratified by geographic 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 12 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 in 2022 was derived from historic data available from USDOT and the Bureau of Transportation Statistics. The 2022 air enplanement trips were distributed to traffic analysis zones using a gravity model that was calibrated in 2019 with air enplanement data reported for 2018. The 2022 air enplanement 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 2017-2021 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 2017-2021 ACS 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 9.4 percent of 2023 work trips travel in HOVs.

The auto occupancy component of the mode split model could not be used for non-work trips because the JTW survey data includes only work trips. There are no available data sources for calibration of non-work vehicle 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.

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Table 5 compares observed and simulated transit route trips. Simulated network assignment summaries for 2023 and observed data for an average month (March) in 2023 were used for the comparisons. The route trip data and corridor definitions were obtained from Port Authority of Allegheny County (dba Pittsburgh Regional Transit – PRT) and other transit providers in the region. Table 5 shows that, regionally, simulated 2023 route trips are 31 percent higher than the actual 2023, Covid-reduced, daily transit ridership in the region.

## HOV MODEL VALIDATION Auto Person Trip Attractions

County	2017-2021 Census ACS		2023 SPC Simulated		Percent HOV	
	<u>SOV</u>	<u>HOV</u>	<u>SOV</u>	<u>HOV</u>	<u>ACS</u>	<u>SPC</u>
City of Pittsburgh	181,345	23,480	400,100	43,549	11.5%	9.8%
Rest of Allegheny	492,328	53,321	680,913	87,958		
Armstrong	14,713	1,740	45,744	6,776	10.6%	12.9%
Beaver	47,601	5,107	112,513	13,708	9.7%	10.9%
Butler	77,221	6,472	136,073	13,889	7.7%	9.3%
Fayette	33,047	3,238	85,299	8,426	8.9%	9.0%
Greene	11,920	1,136	23,931	2,505	8.7%	9.5%
Indiana	25,990	2,993	56,261	5,297	10.3%	8.6%
Lawrence	23,892	2,948	59,617	5,460	11.0%	8.4%
Washington	74,545	6,662	141,618	16,387	8.2%	10.4%
Westmoreland	119,352	10,802	250,051	27,032	8.3%	9.8%
Outside Allegheny	428,281	41,098	911,107	99,480	8.8%	9.8%
Region Grand Total	1,101,954	117,899	1,311,207	143,029	9.7%	9.8%

TABLE 4

SPC July 2024

## TRANSIT ROUTE TRIP VALIDATION BY CORRIDOR

SUB-CORRIDOR NAME	ACTUAL Mar 2023	ASSIGNMENT 2023	ASSIGN / ACTUAL
ALLEGHENY VALLEY	1,778	2,923	1.64
NORTH HILLS	10,715	22,614	2.11
HOV LANE EXPRESS	712	6,977	9.80
OHIO VALLEY	3,383	5,687	1.68
<b>TOTAL NORTH HILLS</b>	<b>16,588</b>	<b>38,201</b>	<b>2.30</b>
WEST END - CARNEGIE	4,876	6,873	1.41
BANKSVILLE - GREENTREE	860	4,646	5.40
SOUTH HILLS LRV	11,352	9,514	0.84
AIRPORT SERVICE	1,512	2,523	1.67
WEST LIBERTY AVENUE	1,381	1,686	1.22
MT. WASHINGTON - HILLTOP	615	233	0.38
SAW MILL RUN - SOUTH BUSWAY	2,212	2,815	1.27
SOUTHSIDE	7,156	5,139	0.72
<b>TOTAL SOUTH HILLS - WEST END</b>	<b>29,964</b>	<b>33,429</b>	<b>1.12</b>
SECOND AVENUE	2,056	4,336	2.11
MON VALLEY EXPRESS	244	735	3.01
HOMESTEAD LOCAL AND EXPRESS	3,963	3,281	0.83
MCKEESPORT LOCAL	403	508	1.26
MONROEVILLE - EAST PITTSBURGH	0	0	----
<b>TOTAL SOUTHEAST</b>	<b>6,666</b>	<b>8,860</b>	<b>1.33</b>
FIFTH AVENUE	18,318	19,765	1.08
FORBES AVENUE - SQUIRREL HILL	17,251	13,516	0.78
EAST SUBURBAN - BLVD OF ALLIES	5,512	3,775	0.68
EAST BUSWAY	6,525	24,357	3.73
BIGELOW BLVD - PENN HILLS	3,659	4,176	1.14
HILL DISTRICT - CENTER AVENUE	6,343	5,369	0.85
BUTLER STREET - EAST LIBERTY	2,386	4,434	1.86
HOMWOOD - PENN / LIBERTY	3,768	2,850	0.76
<b>TOTAL EAST END</b>	<b>63,762</b>	<b>78,242</b>	<b>1.23</b>
INCLINES	452	16	0.04
OTHER PORT AUTHORITY	5,007	5,869	1.17
<b>TOTAL PORT AUTHORITY SYSTEM</b>	<b>122,439</b>	<b>164,617</b>	<b>1.34</b>
NON-PORT AUTHORITY ROUTES	9,918	8,156	0.82
<b>TOTAL TRANSIT NETWORK</b>	<b>132,357</b>	<b>172,773</b>	<b>1.31</b>

TABLE 5

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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 2021 value using factors supplied by PennDOT. The total simulated 2023 volume regionwide is about nine 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 2021 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 vehicle trips to use HOV facilities. The output from the travel estimation process was compared to 2021 traffic counts at PennDOT's permanent traffic count stations in the region and 2021 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 from 2017 through 2021. All of the traffic counts were factored to 2021 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 2023 volume regionwide is about seventeen percent higher than the factored 2021 volume.

PennDOT maintains eleven permanent traffic count stations in the region as shown on Map 4. Table 8 compares 2021 traffic counts at each location to assigned 2023 link volumes. The total simulated volume for the eleven stations is about twenty percent lower than the observed volume.

VMT, stratified by functional class and county, from a 2023 traffic assignment was compared to 2021 PennDOT estimates. Regionwide, there was a seven percent difference between observed and simulated VMT. That comparison is shown in Table 9.

## TRAVEL MODEL VALIDATION External Cordon Volume Comparisons

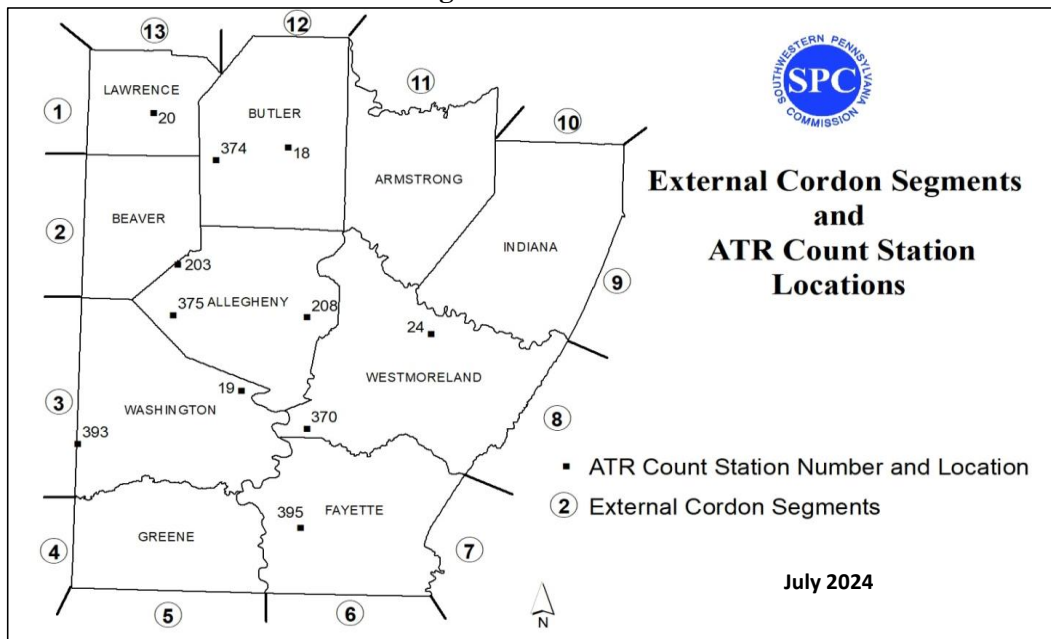
CORDON SEGMENT	COUNTY	OBSERVED VOLUME	SIMULATED VOLUME	SIMULATED / OBSERVED
1	Lawrence	37,018	37,474	1.01
2	Beaver	22,211	30,416	1.37
3	Washington	59,684	63,002	1.06
4	Greene	1,232	2,408	1.95
<b>Western Boundary Total</b>		<b>120,145</b>	<b>133,300</b>	<b>1.11</b>
5	Greene	33,442	28,597	0.86
6	Fayette	17,467	17,995	1.03
<b>Southern Boundary Total</b>		<b>50,909</b>	<b>46,592</b>	<b>0.92</b>
7	Fayette	7,735	11,385	1.47
8	Westmoreland	46,699	35,464	0.76
9	Indiana	25,849	28,137	1.09
<b>Eastern Boundary Total</b>		<b>80,283</b>	<b>74,986</b>	<b>0.93</b>
10	Indiana	10,417	11,414	1.10
11	Armstrong	12,759	20,660	1.62
12	Butler	19,374	29,953	1.55
13	Lawrence	51,455	58,436	1.14
<b>Northern Boundary Total</b>		<b>94,005</b>	<b>120,463</b>	<b>1.28</b>
<b>TOTAL</b>		<b>345,342</b>	<b>375,341</b>	<b>1.09</b>

Table 6

SPC July 2024

Observed volume is from SPC 2005 - 2006 external cordon counts, factored to 2021 values, and from factored PennDOT data.  
Simulated volume from SPC assigned 2023 trips.

## TRAVEL MODEL VALIDATION External Cordon Segments and ATR Count Station Locations



Map 4

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## TRAVEL MODEL VALIDATION River Crossing Volume Comparisons

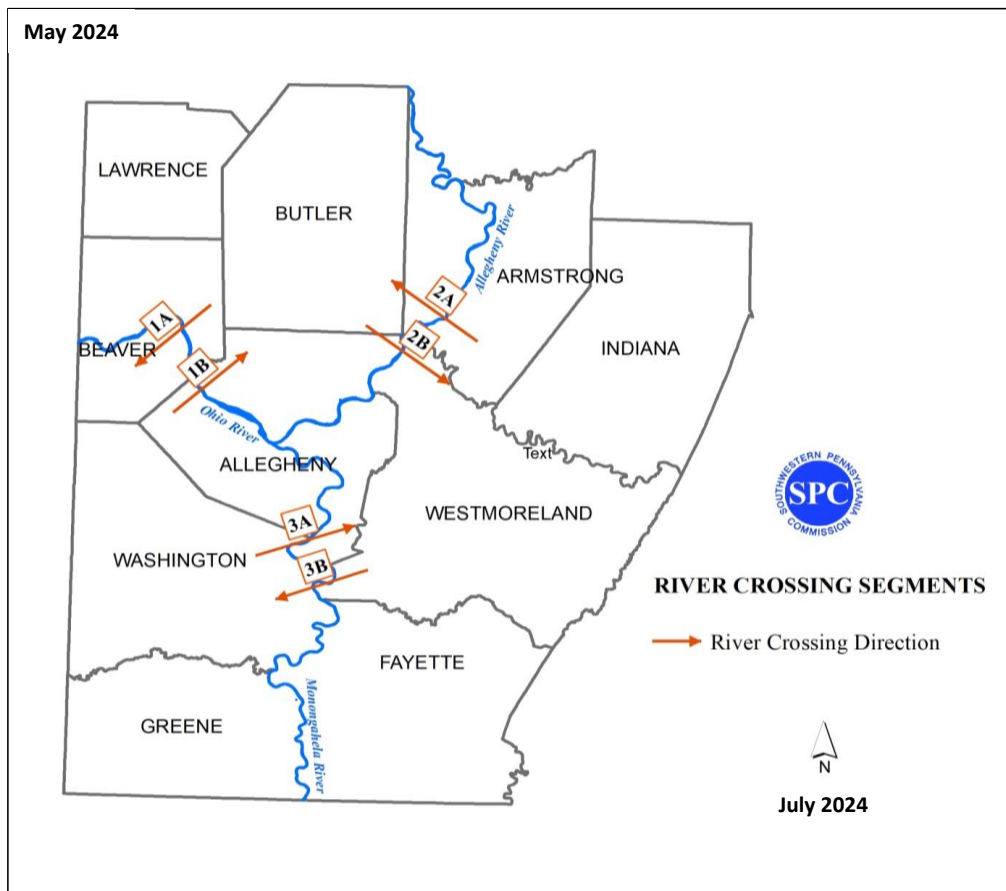
RIVER CROSSING SEGMENT	OBSERVED VOLUME	SIMULATED VOLUME	SIMULATED / OBSERVED
1A	108,215	135,838	1.26
1B	105,959	128,380	1.21
<b>Ohio River Total</b>	<b>214,174</b>	<b>264,218</b>	<b>1.23</b>
2A	200,368	245,462	1.23
2B	210,542	242,084	1.15
<b>Allegheny River Total</b>	<b>410,910</b>	<b>487,546</b>	<b>1.19</b>
3A	231,059	259,406	1.12
3B	229,999	258,411	1.12
<b>Monongahela River Total</b>	<b>461,058</b>	<b>517,817</b>	<b>1.12</b>
<b>TOTAL</b>	<b>1,086,142</b>	<b>1,269,581</b>	<b>1.17</b>

Table 7

SPC July 2024

Observed volume is from SPC 2007 Bridge count, factored to 2021 values,  
and from more recent SPC and PennDOT counts factored to 2021 volumes.  
Simulated volume from SPC assigned 2023 trips.

## TRAVEL MODEL VALIDATION River Crossing Segments



Map 5

SPC July 2024

**TRAVEL MODEL VALIDATION**  
**Traffic Volume Comparisons - ATR Stations**

<b>COUNT STATION</b>	<b>COUNTY</b>	<b>ROUTE</b>	<b>OBSERVED VOLUME</b>	<b>SIMULATED VOLUME</b>	<b>SIM/OBS</b>
18	Butler	PA 38	5,760	4,166	0.72
19	Washington	PA 88	5,200	6,455	1.24
20	Lawrence	PA 65	6,660	10,097	1.52
24	Westmoreland	US 22	20,240	18,419	0.91
203	Allegheny	PA 65	18,872	16,078	0.85
208	Allegheny	I-376	85,580	62,682	0.73
370	Westmoreland	I-70	29,416	12,800	0.44
374	Butler	I-79	32,310	18,834	0.58
375	Allegheny	US 22/30	24,852	32,625	1.31
393	Washington	I-70	31,682	32,720	1.03
395	Fayette	PA 21	8,846	1,628	0.18
<b>TOTAL</b>			<b>269,418</b>	<b>216,504</b>	<b>0.80</b>

**Table 8**

**SPC July 2024**

Observed volume is "Average Weekday Traffic" from 2021 PennDOT data.  
 Simulated volume from SPC assigned 2023 trips.

**TRAVEL MODEL VALIDATION**  
**VMT Comparisons**

COUNTY	Observed VMT (000)			
	INTERSTATE	ARTERIAL	COLLECTOR LOCAL	TOTAL
Allegheny	5,947	12,315	4,226	22,487
Armstrong	0	1,174	410	1,584
Beaver	876	1,750	888	3,514
Butler	1,148	2,620	1,680	5,448
Fayette	0	1,772	1,100	2,872
Greene	487	385	434	1,306
Indiana	0	1,362	728	2,090
Lawrence	531	887	589	2,007
Washington	2,593	2,297	1,353	6,243
Westmoreland	1,878	4,178	2,286	8,342
<b>TOTAL</b>	<b>13,459</b>	<b>28,739</b>	<b>13,694</b>	<b>55,892</b>
COUNTY	Simulated VMT (000)			
	INTERSTATE	ARTERIAL	COLLECTOR LOCAL	TOTAL
Allegheny	3,889	12,835	4,450	21,174
Armstrong	0	954	949	1,903
Beaver	313	2,337	1,284	3,934
Butler	698	2,017	2,065	4,780
Fayette	0	1,253	770	2,024
Greene	329	281	827	1,437
Indiana	0	1,123	1,399	2,522
Lawrence	244	1,234	799	2,276
Washington	1,355	1,973	2,041	5,369
Westmoreland	1,173	3,004	2,186	6,363
<b>TOTAL</b>	<b>8,001</b>	<b>27,011</b>	<b>16,769</b>	<b>51,781</b>
COUNTY	Simulated/Observed VMT			
	INTERSTATE	ARTERIAL	COLLECTOR LOCAL	TOTAL
Allegheny	0.65	1.04	1.05	0.94
Armstrong	---	0.81	2.31	1.20
Beaver	0.36	1.34	1.45	1.12
Butler	0.61	0.77	1.23	0.88
Fayette	---	0.71	0.70	0.70
Greene	0.68	0.73	1.90	1.10
Indiana	---	0.82	1.92	1.21
Lawrence	0.46	1.39	1.36	1.13
Washington	0.52	0.86	1.51	0.86
Westmoreland	0.62	0.72	0.96	0.76
<b>TOTAL</b>	<b>0.59</b>	<b>0.94</b>	<b>1.22</b>	<b>0.93</b>

TABLE 9

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Observed VMT from 2021 PennDOT data.  
Simulated VMT from SPC-assigned 2023 link VMT.

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SPC's travel models were used in this conformity assessment to produce regional person trip matrices for 2020 from the Cycle 12 base year estimates. In addition, trip productions and attractions were generated for 2050 from the Cycle 12 2050 forecast. Prior to trip distribution, productions and attractions for 2025, 2028, 2035, and 2045 were developed by interpolating between 2020 and 2050. 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 12 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 2025 (base year) network are presented in Table 10. The 2050 (Long Range Plan) 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 2025-2028 TIP and 2050 Plan. Table 13 summarizes modeled HOV trips for each scenario.

## 2025 MODAL SPLIT SUMMARY

DISTRICT	2025 Person Trip Attractions			2025 Auto Trip Attractions			2025 Transit Trip Attractions			2025 Transit/2025 Total Person						
	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT				
CBD	124366	77459	31973	233798	57977	43545	25371	126893	51251	11395	2028	64674	41.21%	14.71%	6.34%	27.66%
PGH E	163775	276323	99170	539268	133959	169554	73357	376870	21094	13480	3955	38529	12.88%	4.88%	3.99%	7.14%
PGH S	49634	117287	42870	209791	45046	76833	32707	154586	2010	2328	573	4911	4.05%	1.98%	1.34%	2.34%
PGH N	43621	79602	27032	150255	39934	50326	20487	110747	1483	1352	445	3280	3.40%	1.70%	1.65%	2.18%
PGH TOT	257030	473212	169072	899314	218939	296713	126551	642203	24587	17160	4973	46720	9.57%	3.63%	2.94%	5.20%
ALG E	105008	323165	89944	518117	97917	208783	61663	368363	1887	2246	679	4812	1.80%	0.70%	0.75%	0.93%
ALG N	194742	603873	160170	958785	182563	390107	110059	682729	1801	3038	686	5525	0.92%	0.50%	0.43%	0.58%
ALG S	154504	425958	114699	695161	144380	274161	78769	497310	2677	3559	759	6995	1.73%	0.84%	0.66%	1.01%
ALG W	127486	385077	103016	615579	119659	249961	71062	440682	1102	1656	360	3118	0.86%	0.43%	0.35%	0.51%
ALG TOT	581740	1738073	467829	2787642	544519	1123012	321553	1989084	7467	10499	2484	20450	1.28%	0.60%	0.53%	0.73%
OUTSIDE ALG	866759	2431718	589900	3888377	825507	1606597	420524	2852628	2195	2779	523	5497	0.25%	0.11%	0.09%	0.14%
GRAND TOTAL	1829895	4720462	1258774	7809131	1646942	3069867	893999	5610808	85500	41833	10008	137341	4.67%	0.89%	0.80%	1.76%

**TABLE 10**

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## 2050 MODAL SPLIT SUMMARY

DISTRICT	2050 Person Trip Attractions				2050 Auto Trip Attractions				2050 Transit Trip Attractions				2050 Transit/2050 Total Person			
	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT	HBW	HBO	NHB	TOT
CBD	127590	78893	34046	240529	56780	42602	22842	122224	55855	14301	7209	77365	43.78%	18.13%	21.17%	32.16%
PGH E	171973	288169	107837	567979	132811	174106	72686	379603	30567	17997	13472	62036	17.77%	6.25%	12.49%	10.92%
PGH S	50887	117182	44877	212946	46182	76260	34119	156561	2095	2362	646	5103	4.12%	2.02%	1.44%	2.40%
PGH N	53567	92004	32069	177640	48923	58588	24269	131780	2047	1702	630	4379	3.82%	1.85%	1.96%	2.47%
PGH TOT	276427	497355	184783	958565	227916	308954	131074	667944	34709	22061	14748	71518	12.56%	4.44%	7.98%	7.46%
ALG E	110791	327942	93588	532321	103256	211773	63947	378976	1849	2367	994	5210	1.67%	0.72%	1.06%	0.98%
ALG N	211501	626160	169291	1006952	198307	404403	116158	718868	2061	3338	951	6350	0.97%	0.53%	0.56%	0.63%
ALG S	168991	444538	122074	735603	157775	286006	83936	527717	2975	3746	873	7594	1.76%	0.84%	0.72%	1.03%
ALG W	134632	397013	108726	640371	126500	257570	74950	459020	1126	1724	375	3225	0.84%	0.43%	0.34%	0.50%
ALG TOT	625915	1795653	493679	2915247	585838	1159752	338991	2084581	8011	11175	3193	22379	1.28%	0.62%	0.65%	0.77%
OUTSIDE ALG	931810	2534103	618187	4084100	887768	1675768	441248	3004784	2388	2923	581	5892	0.26%	0.12%	0.09%	0.14%
GRAND TOTAL	1961742	4906004	1330695	8198441	1758302	3187076	934155	5879533	100963	50460	25731	177154	5.15%	1.03%	1.93%	2.16%

**TABLE 11**

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**TRAVEL MODEL RESULTS**  
**Trips By Purpose and Mode**

YEAR	SCENARIO	--- Total Person Trip Attractions ---			
		HBW	HBO	NHB	TOTAL
2025	Existing / Base / Budget Year - PM2.5	1,829,895	4,720,462	1,258,774	7,809,131
2028	2028 TIP Year	1,845,635	4,742,677	1,267,311	7,855,623
2035	2035 Interim Year #1	1,882,860	4,794,896	1,287,788	7,965,544
2045	2045 Interim Year #2	1,935,458	4,868,995	1,316,392	8,120,845
2050	2050 LRP Horizon Year	1,961,742	4,906,004	1,330,695	8,198,441
YEAR	SCENARIO	--- Auto Vehicle Trip Attractions ---			
		HBW	HBO	NHB	TOTAL
2025	Existing / Base / Budget Year - PM2.5	1,646,942	3,069,867	893,999	5,610,808
2028	2028 TIP Year	1,654,685	3,081,390	890,000	5,626,075
2035	2035 Interim Year #1	1,686,165	3,114,693	903,963	5,704,821
2045	2045 Interim Year #2	1,734,641	3,162,987	924,153	5,821,781
2050	2050 LRP Horizon Year	1,758,302	3,187,076	934,155	5,879,533
YEAR	SCENARIO	--- Transit Person Trip Attractions ---			
		HBW	HBO	NHB	TOTAL
2025	Existing / Base / Budget Year - PM2.5	85,500	41,833	10,008	137,341
2028	2028 TIP Year	93,139	46,733	22,989	162,861
2035	2035 Interim Year #1	97,217	48,614	24,274	170,105
2045	2045 Interim Year #2	99,572	49,799	25,191	174,562
2050	2050 LRP Horizon Year	100,963	50,460	25,731	177,154
YEAR	SCENARIO	--- Transit / Total Person Trips ---			
		HBW	HBO	NHB	TOTAL
2025	Existing / Base / Budget Year - PM2.5	4.67%	0.89%	0.80%	1.76%
2028	2028 TIP Year	5.05%	0.99%	1.81%	2.07%
2035	2035 Interim Year #1	5.16%	1.01%	1.88%	2.14%
2045	2045 Interim Year #2	5.14%	1.02%	1.91%	2.15%
2050	2050 LRP Horizon Year	5.15%	1.03%	1.93%	2.16%

TABLE 12

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**HOV MODEL RESULTS**  
**Vehicle Trips By Auto Occupancy Level**  
**(Home-Based Work Trips Only)**

YEAR	SCENARIO	- - - HBW Vehicle Trips by Vehicle Occupancy - - -					TOTAL
		1	2	3	4+		
2025	Existing / Base / Budget Year - PM2.5	1,557,765	82,434	5,386	1,325	1,646,910	
2028	2028 TIP Year	1,565,231	82,684	5,411	1,335	1,654,661	
2035	2035 Interim Year #1	1,595,167	84,138	5,484	1,353	1,686,142	
2045	2045 Interim Year #2	1,641,968	85,742	5,548	1,361	1,734,619	
2050	2050 LRP Horizon Year	1,664,476	86,825	5,624	1,366	1,758,291	

TABLE 13

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### V. Development of Emission Factors

This section summarizes how EPA's MOVES3.1 emissions model was used to develop emission factors for this conformity determination.

MOVES3.1 (Motor Vehicle Emissions Simulator) is the current version of EPA's emissions model. It replaces EPA's MOVES 2014a model. MOVES3.1 is EPA's official model for estimating emissions from highway vehicles for SIP emission inventories and transportation conformity. The methodologies incorporated into the MOVES3.1 model 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 MOVES3 for State Implementation Plan Development, Transportation Conformity, and Other Purposes*, US EPA Office of Transportation and Air Quality, EPA-420-B-20-044, November 2020; *MOVES3 Technical Guidance: Using MOVES3 to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity*. US EPA Office of Transportation and Air Quality, EPA-420-B-20-052, November 2020.

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 run scripts 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 Pennsylvania as well as 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

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data, where available, is recommended for use when conducting a regional transportation 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 MariaDB (the database server for MOVES3) 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, vehicle age, vehicle speed, and fuel type. MOVES produces emission rates for thirteen vehicle source input types and five fuel types. The emissions estimation process includes a method to disaggregate the traffic volumes that are output from SPC's travel demand model to the thirteen vehicle source types. Vehicle type pattern data is used by PPSUITE to distribute the daily roadway segment volumes among the thirteen vehicle source types. Data showing the percent of traffic by hour is then used to develop an hourly traffic volume for each source type. The hourly vehicle type pattern data is developed from several sources including 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 sixth 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 vehicle 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

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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 performance of the 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 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.

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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 (Vehicle Hours of Travel), 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 MariaDB 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 MOVES3.1 data importer files (\*.xml) and run specification files (\*.mrs) are provided in Appendix C.

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### **VI. Transportation Model Application and Results**

Five scenarios were defined by selectively assigning the 2025, 2028, 2035, 2045, and 2050 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 and PM<sub>2.5</sub> NAAQS Budget Year (2025 network, 2025 trips)
2. TIP Build Year (2028 network, 2028 trips)
3. Interim Year #1 (2035 network, 2035 trips)
4. Interim Year #2 (2045 network, 2045 trips)
5. Long Range Plan (2050 network, 2050 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 2050 Plan under the Traffic Operations and Safety Investment Strategy.

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Funding in the 2025-2028 TIP is programmed for the specific TDM projects listed below:

- Pittsburgh Bus Rapid Transit – Pittsburgh Regional Transit, \$291,000,000 (MPMS#110895)
- Wilkinsburg Transit Center – Pittsburgh Regional Transit, \$7,800,000 (MPMS#117269)
- Transit Access Improvements – Pittsburgh Regional Transit, \$3,600,000 (MPMS#117275)
- All Stations Accessibility Program – Pittsburgh Regional Transit, \$35,500,000 (MPMS#121275)
- Park-N-Ride Improvements – Pittsburgh Regional Transit, \$32,000,000 (MPMS#121276)
- Carnegie Park-N-Ride Expansion – Pittsburgh Regional Transit, \$6,325,000 (MPMS#121281)
- Allegheny River Green Boulevard – City of Pittsburgh, \$2,500,000 (MPMS#114290)
- Bus Shelters/Mobility Hubs – City of Pittsburgh, \$3,280,000 (MPMS#114294)
- Monaca Bus Stop Improvements – Beaver Co. Transit Auth., \$75,000 (MPMS#121196)
- SR 356 Park and Ride Lot – PennDOT District 10-0, \$3,921,000 (MPMS#116127)
- Bus Stop Signs – New Castle Area Transit Auth., \$175,000 (MPMS#121270)
- Terminal ADA Improvements – Mid County Transit Auth., \$200,000 (MPMS#121263)
- Bus Shelter Replacement – Mid County Transit Auth., \$60,000 (MPMS#121264)
- Bus Shelter Upgrades – Fayette Area Coordinated Transportation, \$150,000 (MPMS#121223)
- Speers Terminal Construction – Mid Mon Valley Transit Auth., \$350,000 (MPMS#121269)
- Bus Shelters – Washington City Transit, \$100,000 (MPMS#118156)

The total cost identified in the 2025-2028 TIP for these sixteen projects is \$387,036,000. 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 2050 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 MOVES3.1 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<sub>2.5</sub> and 8-hour ozone nonattainment and maintenance area. The summaries were compiled from MOVES model outputs.

## Travel Demand Management Strategies

<b>Strategy</b>	<b>Example</b>
Increased efforts to promote ridesharing, transit, and active transportation (bicycle and walking)	<ul style="list-style-type: none"> <li>- Ride matching services</li> <li>- Preferential (more convenient) parking</li> <li>- Flexible work schedules</li> </ul>
Programs to deter single occupant vehicle work trips	<ul style="list-style-type: none"> <li>- Employer-sponsored benefit programs for employees who carpool, vanpool, ride transit, walk, or bike to work</li> </ul>
Flexible Work Hours, Staggered Work Hours, Compressed Work Weeks	<ul style="list-style-type: none"> <li>- Aggressive promotion with region's employers</li> </ul>
Telecommuting	<ul style="list-style-type: none"> <li>- Work with employers and government agencies to promote and encourage hybrid work schedules and needed infrastructure</li> </ul>
Intelligent Transportation Systems (ITS)	<ul style="list-style-type: none"> <li>- Work to implement projects that provide transportation system users with better information on existing system conditions, congestion and travel choices</li> </ul>

Figure 2

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## **VII. Conformity Determination**

### **PM<sub>2.5</sub> Nonattainment Areas**

Conformity determinations for transportation plans and programs under the PM<sub>2.5</sub> 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<sub>2.5</sub> NAAQS and the 2006 daily PM<sub>2.5</sub> 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<sub>2.5</sub> NAAQS and the 2006 daily PM<sub>2.5</sub> NAAQS is a comparison of future year emissions to approved PM<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub> NAAQS and the 2006 daily PM<sub>2.5</sub> NAAQS is a comparison of future year emissions to approved PM<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub> NAAQS is a comparison of future year emissions to approved PM<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub> Nonattainment Area**

As noted in Section II, MVEBs have been established for use in conformity assessments for the 1997 Annual PM<sub>2.5</sub> and 2006 daily PM<sub>2.5</sub> NAAQS for the Pittsburgh – Beaver Valley PM<sub>2.5</sub> nonattainment area. The PM<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub>) and 4 (NO<sub>x</sub>). 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<sub>2.5</sub> and 2006 daily PM<sub>2.5</sub> 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

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emissions are less than the MVEB. The analysis shows that the criteria for conformity under the 1997 Annual PM<sub>2.5</sub> and 2006 daily PM<sub>2.5</sub> standard have been satisfied.

No goals, directives, recommendations or projects identified in the 2025-2028 TIP or the 2050 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<sub>2.5</sub> Nonattainment Area

As noted in Section II, emission budgets have been established for use in conformity assessments for the 1997 Annual PM<sub>2.5</sub> and 2006 daily PM<sub>2.5</sub> NAAQS for the Indiana County portion of the Johnstown PM<sub>2.5</sub> nonattainment area. The PM<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub>) and 6 (NO<sub>x</sub>). 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<sub>2.5</sub> 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<sub>2.5</sub> and 2006 daily PM<sub>2.5</sub> standard have been satisfied.

No goals, directives, recommendations or projects identified in the 2025-2028 TIP or the 2050 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.

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### **Allegheny County PM<sub>2.5</sub> Nonattainment Area**

As noted in Section II, MVEBs have been established for use in conformity assessments for the 2012 Annual PM<sub>2.5</sub> NAAQS for the Allegheny County PM<sub>2.5</sub> nonattainment area. The VOC and NO<sub>x</sub> 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<sub>2.5</sub> and NO<sub>x</sub> 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<sub>2.5</sub>) and 8 (NO<sub>x</sub>). 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<sub>2.5</sub> 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<sub>2.5</sub> standard have been satisfied.

No goals, directives, recommendations or projects identified in the 2025-2028 TIP or the 2050 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 NO<sub>x</sub> 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 for the Indiana County portion of the Clearfield and Indiana counties 8-hour ozone nonattainment area.

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### **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 NO<sub>x</sub> 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 NO<sub>x</sub> 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 (NO<sub>x</sub>). 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 2025-2028 TIP or the 2050 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 2025-2028 TIP or the 2050 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 Sections I and II, conformity assessments for the Allegheny County carbon monoxide (CO) maintenance area are no longer required.

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### **Liberty – Clairton PM<sub>10</sub> and PM<sub>2.5</sub> Maintenance Areas**

As noted in Section II, EPA has determined that PM<sub>10</sub> and PM<sub>2.5</sub> 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<sub>10</sub> or PM<sub>2.5</sub> transportation conformity budgets. Because the PM<sub>10</sub> and PM<sub>2.5</sub> 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<sub>10</sub> or PM<sub>2.5</sub> impacts is required for transportation 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<sub>10</sub> and PM<sub>2.5</sub> 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 2025-2028 TIP and 2050 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 2025-2028 TIP and the 2050 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 2025-2028 TIP and the 2050 Plan. The 2050 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

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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<sub>2.5</sub> 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 2025-2028 TIP and the 2050 Plan will not worsen the region's air quality.

### Non-Codable Regionally Significant Projects

#### **A. Programmed on 2025-2028 TIP for Completion by 2028**

Liberty Avenue Safety Improvements - MPMS#106773 [City of Pittsburgh – Allegheny Co.]  
Smart PGH-Phase 1 – MPMS#116300 [City of Pittsburgh - Allegheny Co.]  
Smart PGH-Phase 2 – MPMS#116301 [City of Pittsburgh - Allegheny Co.]  
Smart PGH-Phase 3 – MPMS#109691 [City of Pittsburgh - Allegheny Co.]  
Penn Avenue Signal Improvements – MPMS#114288 [City of Pittsburgh - Allegheny Co.]  
SR 4003-East St. to Babcock Blvd. Signals – MPMS#119595 [City of Pittsburgh - Allegheny Co.]  
New Pathways to Equity-Raise Grant Ph-1 – MPMS#120860 [City of Pittsburgh – Allegheny Co.]  
Brownsville Road Safety Improvements – MPMS#120899 [City of Pittsburgh – Allegheny Co.]  
PPC – Marine & Landside Equipment Repower Program – MPMS#117270 [Allegheny Co.]  
SR 3003 Washington Pike Improvements – MPMS#114287 [Allegheny Co.]  
Carnegie Park-N-Ride Expansion – MPMS#121281 [Allegheny Co.]  
Microtransit Pilot Project – MPMS#120905 [Allegheny Co.]  
PAAC – Wilkesburg Transit Center – MPMS#117269 [Allegheny Co.]  
PAAC – Transit Access Improvements – MPMS#117275 [Allegheny Co.]  
Route 837 Transit Improvements – MPMS#118508 [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.]  
SR 4014 @ SR 4012 Roundabout – MPMS#118444 [Allegheny Co.]  
SR 4021 @ SR 4011 Roundabout – MPMS#119187 [Allegheny Co.]  
SR 3010 @ Patterson Road Roundabout – MPMS#119945 [Allegheny Co.]  
Monaca Gateway MTF-TIIF-Smart – MPMS#112022 [Beaver Co.]  
SR 51 @ SR 151 Roundabout – MPMS#118443 [Beaver Co.]  
Jefferson-Cunningham Streets Signal Improvements-MPMS#117264 [Butler Co.]  
Uniontown Corridor 116 CMAQ – MPMS#121190 [Fayette Co.]  
US 19 Adaptive Signals CMAQ Supplement – MPMS#117943 [Washington Co.]  
PA 18 – Main St. to Third St. – MPMS#114561 [Washington Co.]  
119 SW Greensburg CMAQ – MPMS#114560 [Westmoreland Co.]  
SPC Regional Traffic Signal Program Cycle V – MPMS#106593 [10-County Region]

#### **B. Listed on 2050 Long Range Plan for Completion after 2028**

I-376 Parkway East Active Traffic Management – MPMS#94651 [Allegheny Co.]  
SR 30 @ SR 48 Signal Improvement w/D12 – MPMS#116655 [Allegheny Co.]  
PA 50-I-79 to Thom's Run Road – MPMS#109640 [Allegheny Co.]  
PGH CBD Signal Updates Phase-5&6 – MPMS#119613 [City of Pittsburgh – Allegheny Co.]  
PGH CBD Signal Updates Phase-7 – MPMS#119394 [City of Pittsburgh – Allegheny Co.]  
Fifth Avenue Signal Improvement – MPMS#119398 [Oakland/City of Pittsburgh – Allegheny Co.]  
BTA -SR 68 Park-N-Ride Program - MPMS#114742 [Butler Co.]  
SR 21 Operations & Safety – MPMS#119619 [Fayette Co.]  
SR 119 Operations & Safety – MPMS#119622 [Fayette Co.]

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US 19 Adaptive Signals CMAQ Supplement – MPMS#117943 [Washington Co.]  
US 19 Corridor and Intersection Improvements – MPMS#119615 [Washington Co.]  
SR 1002 McMurray Road (SR19 to Morganza Road) – MPMS#119614 [Washington Co.]  
SR 1025 Weavertown Road Corridor (SR 19 to Morganza Road) – MPMS#119618 [Washington Co.]  
SR 1032 Southpoint Blvd. (I-79 to Morganza Road) – MPMS#119624 [Washington Co.]  
I-70 Interstate Detour Improvement Plan & Implementation – MPMS#119641 [Washington Co.]  
I-79 Interstate Detour Improvement Plan & Implementation – MPMS#119639 [Washington Co.]  
US 30 Corridor Improvements-Western Section – MPMS#110900 [Westmoreland Co.]  
US 30 Adaptive Signal Corridor – MPMS#117945 [Westmoreland Co.]

### **Conclusion**

In conclusion, the region's 2025-2028 TIP and updated 2050 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<sub>2.5</sub> NAAQS, the 1997 Annual PM<sub>2.5</sub> NAAQS, the 2012 Annual PM<sub>2.5</sub> NAAQS, and the 1987 PM<sub>10</sub> NAAQS. As noted above and in Sections I and II, a conformity determination for the 1971 carbon monoxide NAAQS is no longer required.

This report has documented the process used by SPC in the spring of 2024 to make its finding of conformity for the 2025-2028 Transportation Improvement Program and updates to the 2050 Plan. SPC's conformity process demonstrates that the 2025-2028 TIP and the updated 2050 Plan satisfy all applicable conformity criteria under the 1997 8-hour ozone NAAQS, the 2008 8-hour ozone NAAQS, the 2006 daily PM<sub>2.5</sub> NAAQS, the 1997 Annual PM<sub>2.5</sub> NAAQS, the 2012 Annual PM<sub>2.5</sub> NAAQS, the 1987 PM<sub>10</sub> NAAQS, and the 1971 carbon monoxide NAAQS.

**Conformity Assessment**  
**Pittsburgh-Beaver Valley PM2.5 Nonattainment Area**  
**Annual VMT and Emissions (Tons/Year)**

<b>Entire Nonattainment Area</b>					
	2025	2028	2035	2045	2050
ANNUAL VMT	17,004,851,534	17,161,760,562	17,353,992,015	17,561,166,872	17,772,196,998
PM 2.5 MVEB	537.000	537.000	537.000	537.000	537.000
PM 2.5	335.878	284.737	228.082	203.229	199.471
NOx MVEB	10,709.000	10,709.000	10,709.000	10,709.000	10,709.000
NOx	7,974.588	6,407.524	4,979.921	4,732.289	4,740.607

**TABLE 14**

**SPC July 2024**



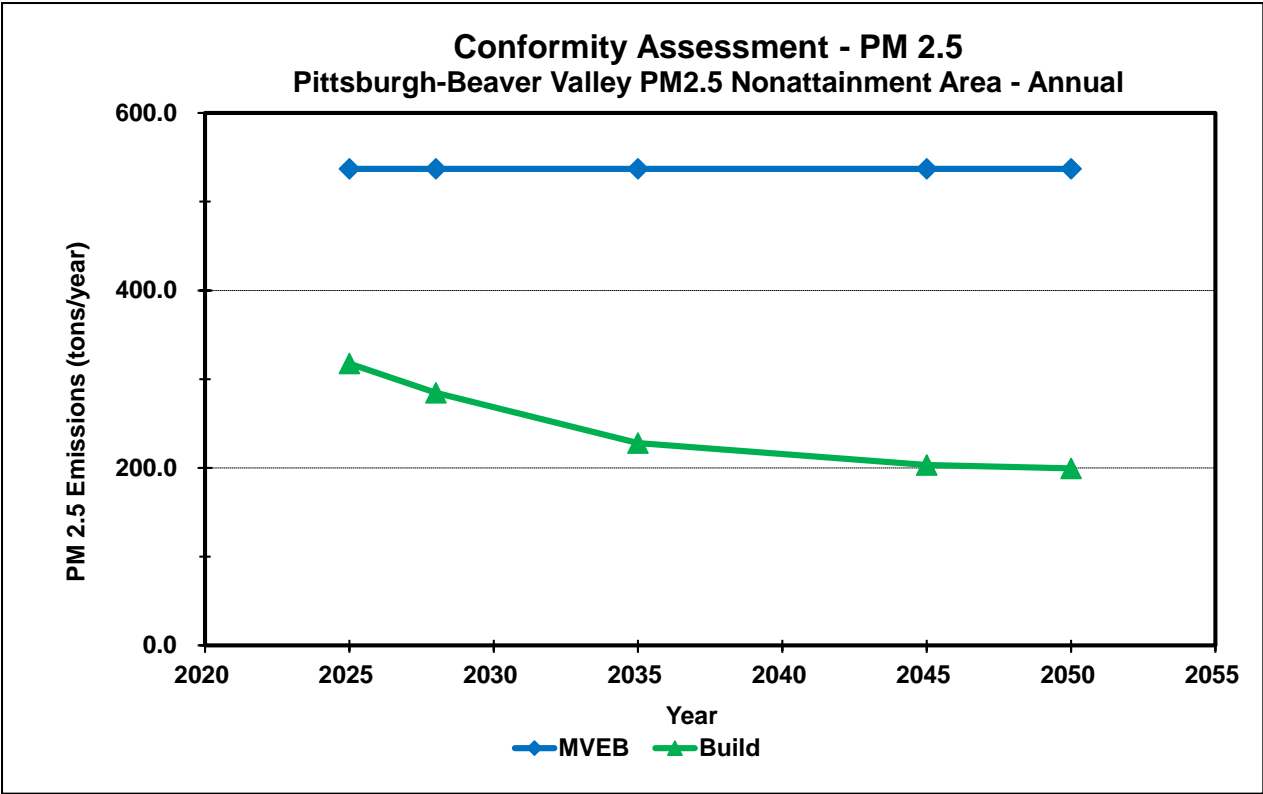


Figure 3

SPC July 2024

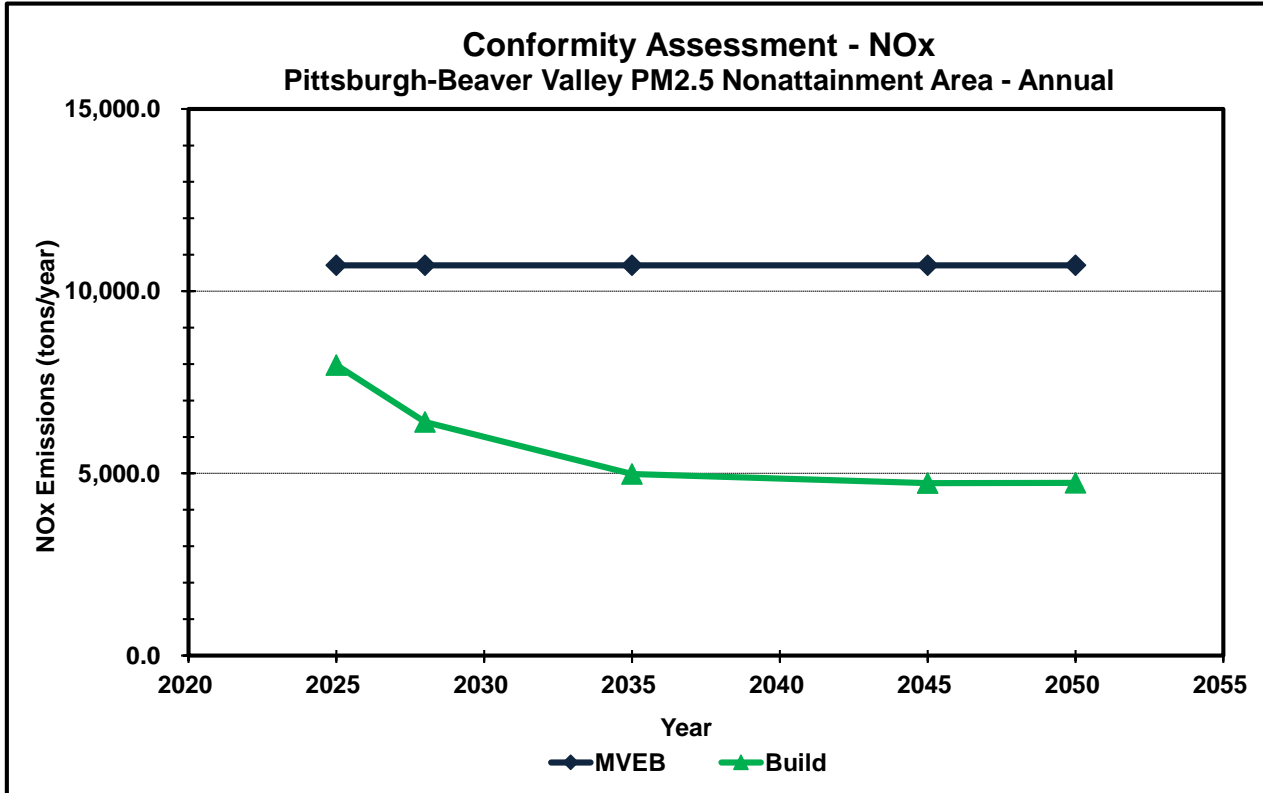


Figure 4

SPC July 2024

**Conformity Assessment**  
**Indiana County Portion of Johnstown PM2.5 Nonattainment Area**  
**Annual VMT and Emissions (Tons/Year)**

<b>Indiana County Portion of Nonattainment Area</b>					
	2025	2028	2035	2045	2050
ANNUAL VMT	153,028,705	154,865,250	156,366,556	161,237,426	162,975,997
PM 2.5 MVEB	4.380	4.380	4.380	4.380	4.380
PM 2.5	2.570	2.092	1.540	1.325	1.285
NOx MVEB	120.980	120.980	120.980	120.980	120.980
NOx	78.406	60.933	43.619	40.633	40.522

TABLE 15

SPC July 2024

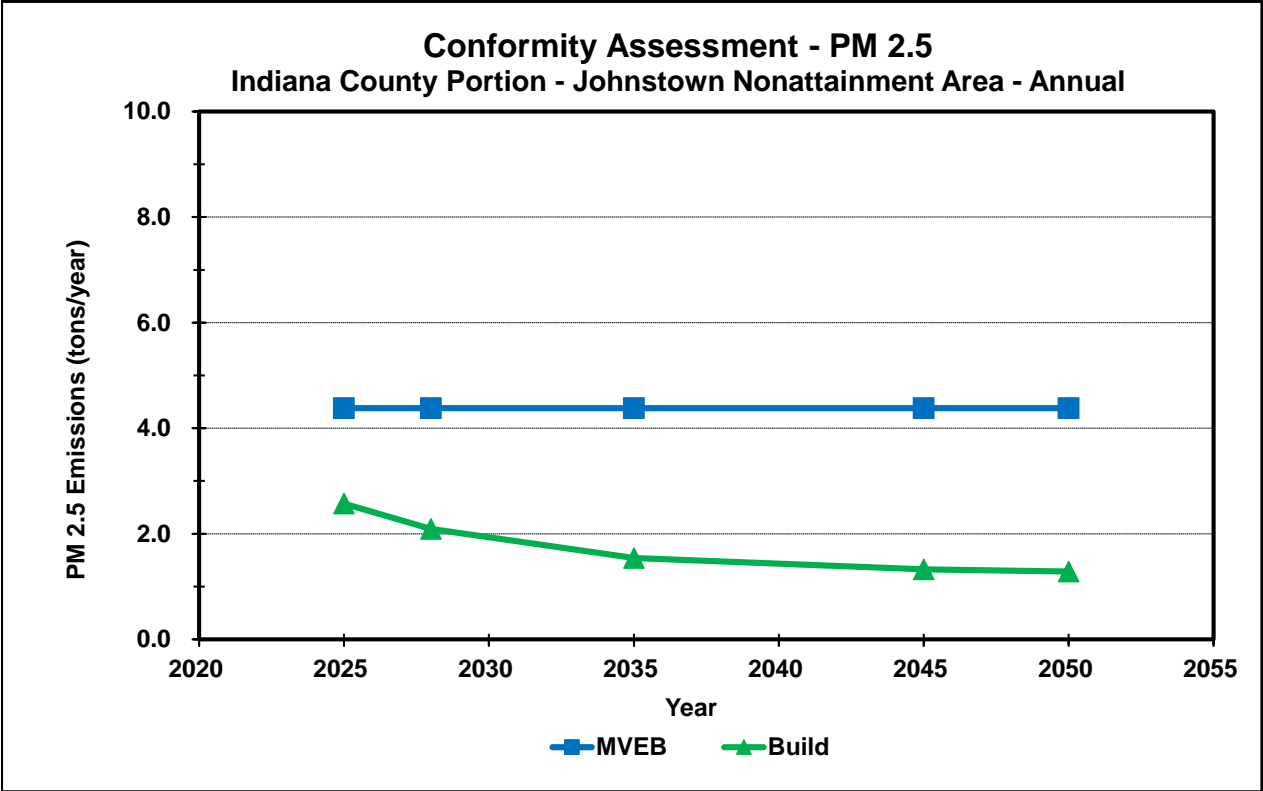


Figure 5

SPC July 2024

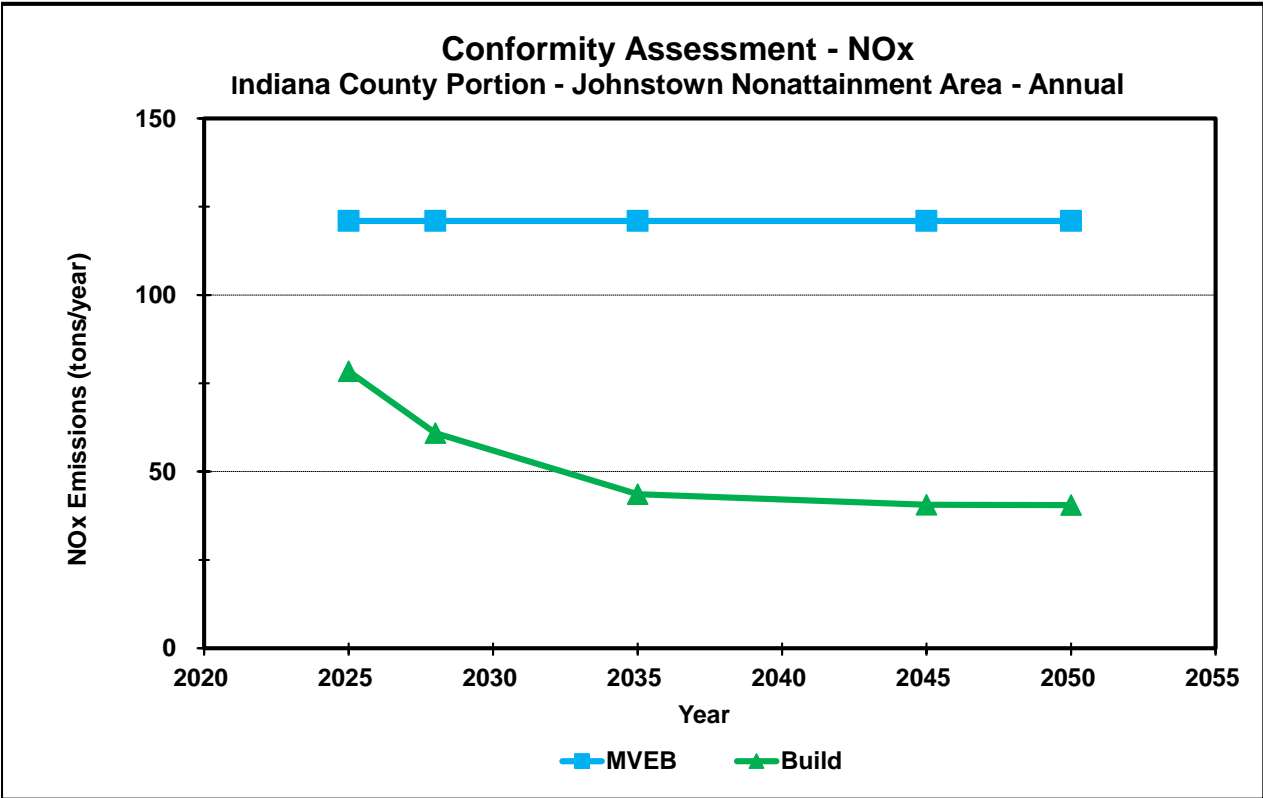


Figure 6

SPC July 2024

**Conformity Assessment**  
**Allegheny County PM2.5 Nonattainment Area**  
**Annual VMT and Emissions (Tons/Year)**

<b>Entire Nonattainment Area</b>					
	2025	2028	2035	2045	2050
ANNUAL VMT	8,258,284,453	8,319,894,388	8,403,811,448	8,481,793,953	8,595,412,601
PM 2.5 MVEB	266.000	266.000	266.000	266.000	266.000
PM 2.5	167.502	144.425	119.924	108.136	106.393
NOx MVEB	5,708.000	5,708.000	5,708.000	5,708.000	5,708.000
NOx	3,518.544	2,817.390	2,214.918	2,121.414	2,132.396

**TABLE 16**

**SPC July 2024**

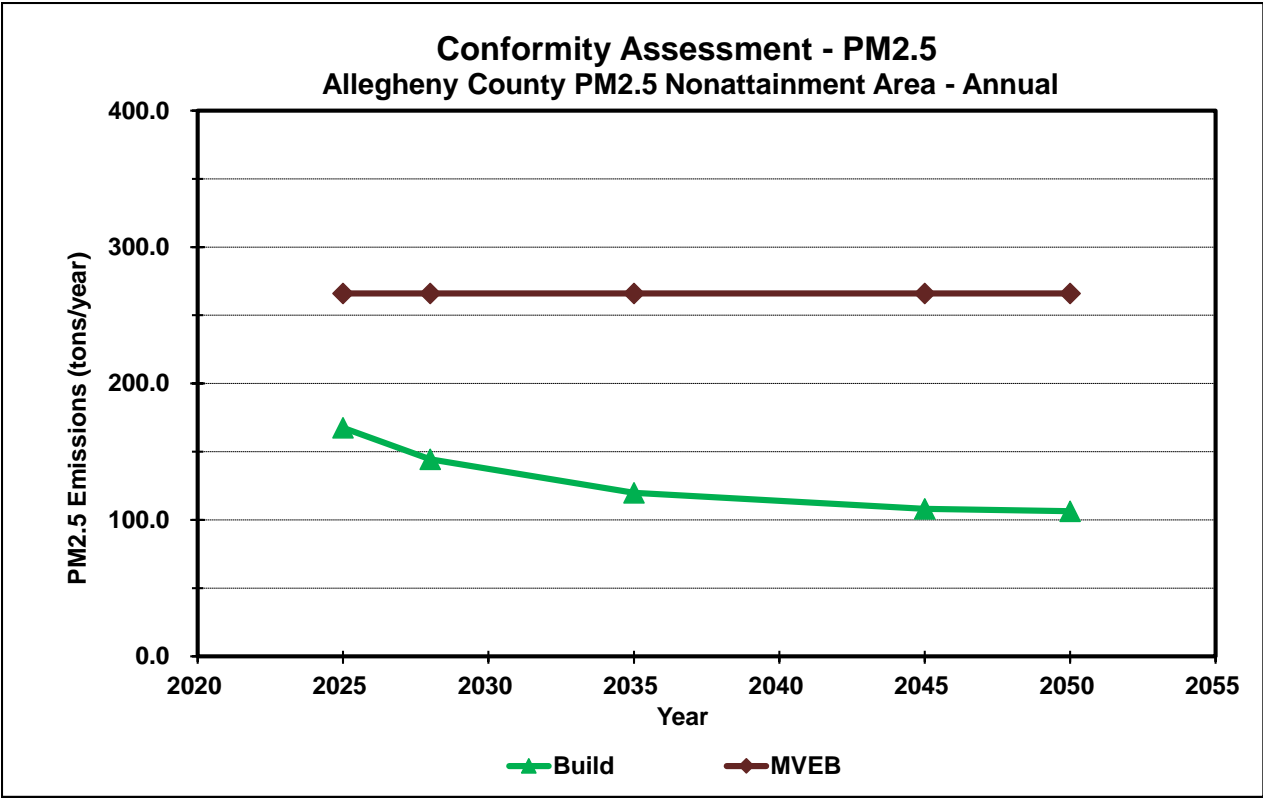


Figure 7

SPC July 2024

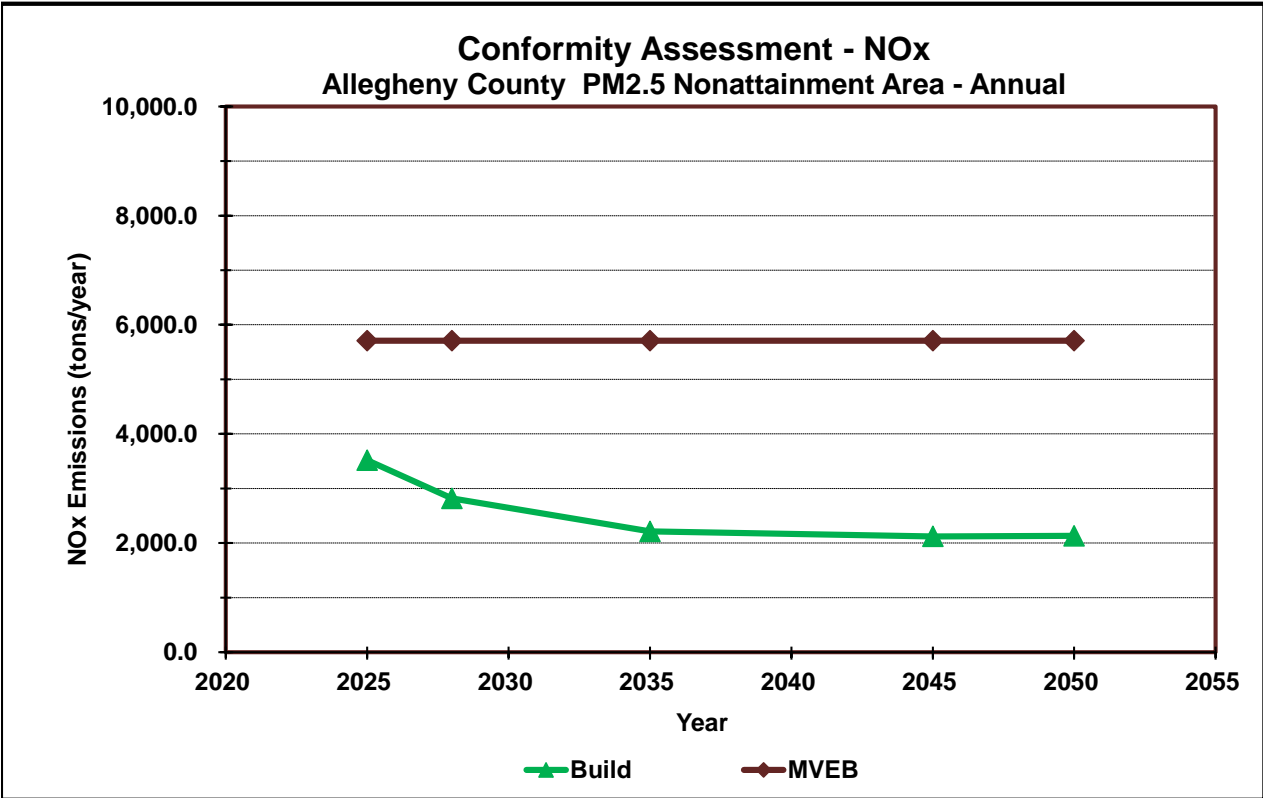


Figure 8

SPC July 2024

**8-Hour Ozone Conformity Assessment  
Pittsburgh-Beaver Valley  
Daily VMT and Emissions (Tons/Day)**

	2025	2028	2035	2045	2050
DAILY VMT	61,585,523	61,844,603	62,854,076	63,638,303	64,386,891
VOC MVEB	45.680	45.680	45.680	45.680	45.680
VOC	12.048	10.285	8.658	7.440	7.396
NOx MVEB	77.090	77.090	77.090	77.090	77.090
NOx	25.690	20.418	15.697	14.826	14.831

TABLE 17

SPC July 2024

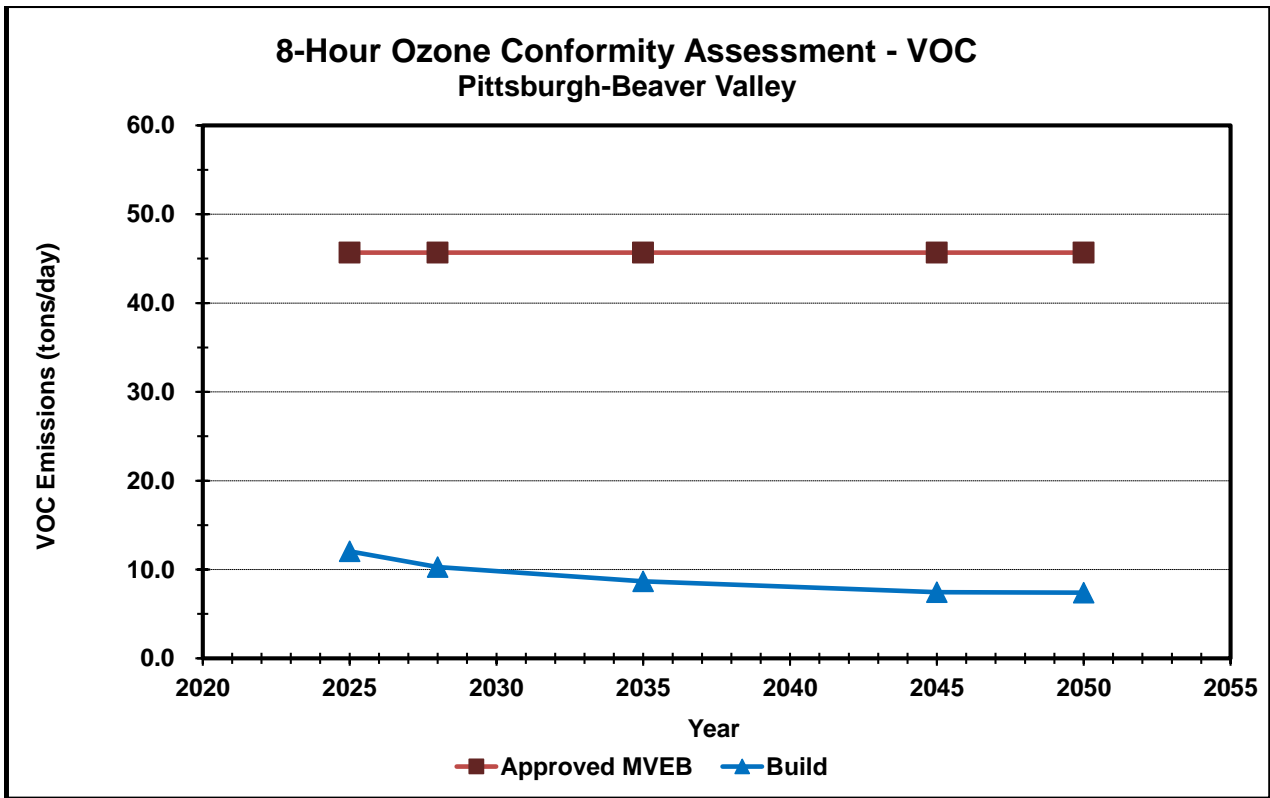


Figure 9

SPC July 2024

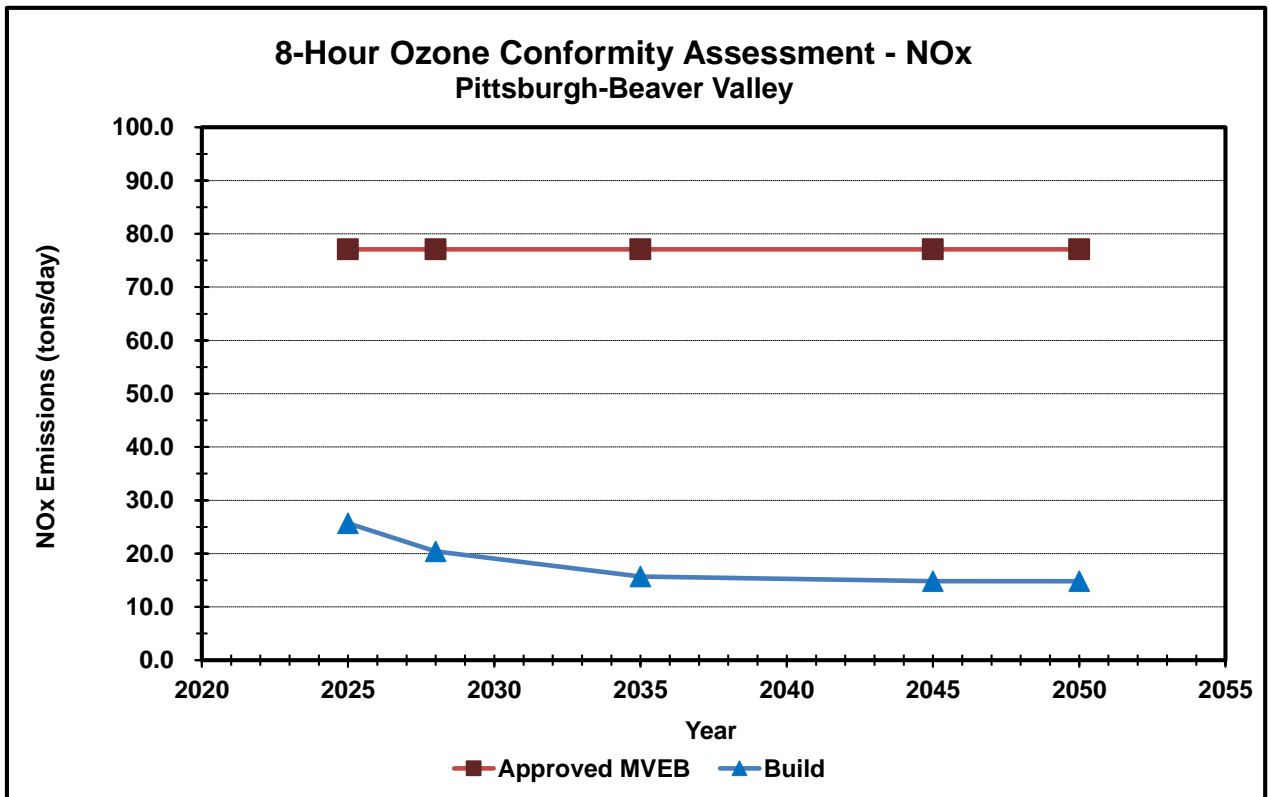


Figure 10

SPC July 2024

**Air Quality Conformity Determination**

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### 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 8, 2024 through June 7, 2024, concurrent with the public comment period for the region's draft 2025-2028 Transportation Improvement Program (TIP), updates to the 2050 Long Range Transportation and Development Plan *SmartMoves For a Changing Region*, and the draft report – *Environmental Justice Benefits and Burdens Assessment*. Electronic versions of these documents are available online at [www.spcregion.org](http://www.spcregion.org), and through the City of Pittsburgh's Department of City Planning, County Planning Departments, and many public libraries throughout Southwestern Pennsylvania.

Eleven public meetings (2 virtual, 2 hybrid, and 7 in-person) were held throughout the region. At each meeting staff provided an overview of the draft documents, updates on project advancement, and opportunities for the public to ask questions and submit comments.

Comments on the draft documents were accepted by SPC representatives at any of the public meetings. Written comments were also accepted via an on-line comment form, e-mail, fax, or by mail.

Complete documentation of the public review and comment period is contained in the companion document *Public Participation Report*, (SPC, July 2024). That document contains copies of the legal notices, newspaper advertisements, SPC webpage text, public meeting 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 2025-2028 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 24, 2024 meeting to make the finding of conformity, required under EPA's Transportation Conformity Rule, for the 2025-2028 Transportation Improvement Program for Southwestern Pennsylvania and for the updated 2050 Transportation Plan for Southwestern Pennsylvania.

Copies of SPC Resolutions 5-24 and 7-24 are included as Appendix F. Resolution 5-24 finds that the 2025-2028 TIP and the updated 2050 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 7-24, SPC adopted the 2025-2028 TIP and the region's updated fiscally constrained 2050 Long Range Transportation Plan.

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## **APPENDIX A**

Identification of Exempt and Regionally Significant Projects  
Included in the 2025-2028 TIP



## **Project Exempt Codes and Classification Codes**

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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 2025-2028 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 2025-2028 TIP. They are also listed in Figure 1 (coded in SPC's travel demand model) or in Section VII (non-codable projects) along with the non-exempt, regionally significant projects that appear on the 2050 Long Range Plan.

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 2050 Plan Update within SPC's 10-county region.

## Project Exempt Codes and Classification Codes

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### Project Classification Code

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

### Project Exempt Code

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

### **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

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### 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

**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title I Programs**

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	75341	Betterment Reserve Allegheny		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	FRT Bus Procurement		C	TRANS	ML0	EX
ALCO	82754	SPC Region TAU Line Item		C	PADOT	X12	EX
ALCO	84078	SPC CMAQ Line Item		C	PADOT		NS
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	106269	Neville Road		E	COUNTY	S10	EX
ALCO	106593	SPC - Traffic Signal 5		E C	SPC		
ALCO	107441	Millvale/Shaler/Etna TRHT Connection		ERC	MUNIC	X12	EX
ALCO	112934	Allegheny Shores ARC		C	MUNIC	A2	EX
ALCO	112950	Bridge Wash 2025		C	PADOT	S19	EX
ALCO	113343	2025 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	116170	Homestead-Duquesne Rd Betterment 2		C	COUNTY	S10	EX
ALCO	117269	FRT Wilkinsburg Transit Center		C	TRANS		
ALCO	117270	PPC- Marine & Landside Equipment Re-Power Progr		C	OTHER		
ALCO	117275	FRT Transit Access Improvement Program		C	TRANS		
ALCO	118508	Route 837 Transit Improvements		C	TRANS		
ALCO	118579	AWEM 2025		C	PADOT	S11	EX
ALCO	118580	AWEM 2026		C	PADOT	S11	EX
ALCO	118781	Utilities Inspection		R	PADOT	S18	EX
ALCO	118971	Bridge Wash 2026		C	PADOT	S19	EX
ALCO	119262	Fifth Ave Reconstruction		ER	COUNTY	S10	EX
ALCO	119281	SPC Regional CRP/CRFU Line Item		C	PADOT		NS
ALCO	119491	Rodi Road Streetscape Phase 1		C	MUNIC	A2	EX
ALCO	120079	Old William Penn Highway		C	MUNIC	S2	EX
ALCO	120128	2026 ADA Curb Ramps Project		E C	PADOT	A2	EX
ALCO	120212	Consultant Services for Local Project Management		E	PADOT		NS
ALCO	120905	Microtransit Pilot Project		C	TRANS		
ALCO	121377	POHC LED Upgrades		C	OTHER	S8	EX
ALCO	100958	62nd Street Bridge	8	E	PADOT	S19	EX
ALCO	117273	SR 8 Signal Upgrades	8	C	PADOT		
ALCO	119183	Route 8 at Wildwood	8	C	MUNIC	R4	EX
ALCO	119941	SR 8 and Sandy Hill Road Widening Project	8	ERC	PADOT	R1	EX
ALCO	81700	SR 19, Gilkeson-McFarland	19	ERC	PADOT	S10	EX
ALCO	27445	22/30 over the Parkway West	22	C	PADOT	S19	EX
ALCO	100768	US Route 22 - Wash County Line to Imperial Int.	22	E	PADOT	S10	EX
ALCO	100769	US 22 - Imperial Interchange to McKee Road	22	E	PADOT	S10	EX
ALCO	74255	PA 28 over Yutes Run	28	ERC	PADOT	S19	EX
ALCO	116655	SR 30/SR 48 Intersection Improvement w/D12	30	R	PADOT		
ALCO	100782	Mosside Blvd-PA 130 to Haymaker	48	C	PADOT	S10	EX
ALCO	108528	SR 48 Mill and Overlay	48	C	PADOT	S10	EX
ALCO	109640	PA 50: I-79 to Thoms Run	50	R	PADOT		
ALCO	117271	SR 50 Signal Upgrades	50	E C	PADOT		
ALCO	105450	PA 51, Hayden Boulevard, M & O	51	E C	PADOT	S10	EX

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## 2025-2028 TIP Projects Funded Through FAST-Act Title I Programs

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	104328	I-79 at PA 910 Interchange	79	C	PADOT		
ALCO	100623	Golden Mile Highway over Abers Creek	286	E	PADOT	S19	EX
ALCO	117274	SR 286 Signal Upgrades	286	E C	PADOT		
ALCO	63306	Tarentum Bridge Ramps A, B, C & D ov Allegheny Riv	366	C	PADOT	S19	EX
ALCO	100624	Tarentum Bridge Over Allegheny River	366	C	PADOT	S19	EX
ALCO	113342	2024 ADA Curb Ramp Project	400	C	PADOT	A2	EX
ALCO	78441	Eighth Ave ov Homestead Run	837	C	PADOT	S19	EX
ALCO	114193	PA 837 Slide Remediation	837	C	PADOT	S2	EX
ALCO	115085	SR 837, North State Street	837	C	PADOT	S10	EX
ALCO	63330	Bateman Road Bridge	978	ER	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	ER	PADOT	S2	EX
ALCO	109549	Highland Park Bridge	1005	ER	PADOT	S19	EX
ALCO	100654	Howes Run Road ov McDowell Run	1033	ER	PADOT	S19	EX
ALCO	74319	Lovedale Rd Br/Wylie Rn	2010	C	PADOT	S19	EX
ALCO	114194	SR 2010, Lovedale Road Wall Remediation	2010	C	PADOT	S2	EX
ALCO	119603	McKeesport Bridge Ramp #1	2027	E	MUNIC	S19	EX
ALCO	28025	2040/Ceco Dr to Brownsville Rd	2040	C	PADOT	S10	EX
ALCO	118570	Skyline Drive Slide	2042	C	PADOT	S2	EX
ALCO	91796	Streets Run Road Flood Control	2046	C	PADOT	X1	EX
ALCO	115070	SR 2046, Streets Run Road Resurfacing	2046	C	PADOT	S10	EX
ALCO	89077	Verona Road Bridge	2058	ER	PADOT	S19	EX
ALCO	113674	Verona Road Over Branch of Sandy Creek	2058	ERC	PADOT	S19	EX
ALCO	115556	Thompson Run Rd & Old William Penn Hwy Brgds	2065	ERC	PADOT	S19	EX
ALCO	78231	Indiana Drive Culvert	2070	ERC	PADOT	S19	EX
ALCO	63583	McKeesport Duquesne Bridge	2114	C	PADOT	S19	EX
ALCO	100955	McKeesport-Duquesne Southern Ramps Deck Repl.	2114	E	PADOT	S19	EX
ALCO	78234	Millers Run Road ov Branch of Millers Run	3001	ERC	PADOT	S19	EX
ALCO	114287	SR 3003 (Washington Pike) Improvements	3003	C	PADOT		
ALCO	63558	McLaughlin Run Rd #2	3004	C	PADOT	S19	EX
ALCO	81780	SR 3009/Baptist Rd, Hamilton Rd to Brownsville Rd	3009	C	PADOT	S10	EX
ALCO	119945	SR 3010 @ Patterson Road Roundabout	3010	ERC	PADOT		
ALCO	105451	SR 3015 ov Lick Run Creek	3015	ERC	PADOT	S19	EX
ALCO	109548	Presto Sygan Road Bridge	3028	ERC	PADOT	S19	EX
ALCO	114195	SR 3034, Chartiers St Slide Remediation	3034	C	PADOT	S2	EX
ALCO	116925	Connor Road Bridge	3038	ERC	PADOT	S19	EX
ALCO	27219	Campbell's Run Road	3041	C	COUNTY		
ALCO	94645	West Liberty Avenue	3069	C	PADOT	S10	EX
ALCO	78152	Ewing Road over Meek Run	3070	C	PADOT	S19	EX
ALCO	115555	MIA Market Place District Improvements Phase 1	3072	C	MUNIC		
ALCO	118571	Ewings Mill Rd Slide	3074	C	PADOT	S2	EX
ALCO	100701	McKees Rocks Bridge Phase 3	3104	E C	PADOT	S19	EX
ALCO	111517	MIA Rouser Road Connector	3109	RC	MUNIC		
ALCO	89155	Rochester Road Culvert	4011	C	PADOT	S19	EX
ALCO	118444	SR 4014 @ SR 4012 Roundabout	4012	ERC	PADOT		
ALCO	119187	SR 4021 @ SR 4011 Roundabout	4021	ERC	PADOT		
ALCO	113629	Babcock Boulevard Culvert	4031	ER	PADOT	S19	EX
ALCO	100722	Shenot Road Bridge	4050	E	PADOT	S19	EX
ALCO	100723	Richard Road over Wexford Run	4053	ER	PADOT	S19	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title I Programs**

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	113631	Bakerstown Road Bridge	4068	R	PADOT	S19	EX
ALCO	109570	Glenfield Viaduct Bridge	4165	C	PADOT	S19	EX
ALCO	117473	Steen Road Bridge	7102	E	MUNIC	S19	EX
ALCO	81708	Flaugherty Run Bridge #7 (FU07)	7103	ER	COUNTY	S19	EX
ALCO	27322	Days Run Bridge No. 3 (DY03)	7104	ERC	COUNTY	S19	EX
ALCO	57066	Crawford Run Bridge (CE02)	7104	ER	COUNTY	S19	EX
ALCO	27316	AL Local BPRS Group 2	7113	C	COUNTY	S19	EX
ALCO	119371	Universal Road Bridge over Union Railroad (BI01)	7113	ER	COUNTY	S19	EX
ALCO	27513	Thompson Rn Rd Br TN02	7116	C	COUNTY	S19	EX
ALCO	27514	Thompson Rn Rd Br (TN03)	7116	C	COUNTY	S19	EX
ALCO	28250	WB11 Wible Run #11	7118	ER	COUNTY	S19	EX
ALCO	88414	PA03 - Painters Run No. 3	7123	RC	COUNTY	S19	EX
ALCO	79894	MC07 McClarens Run #7	7203	C	COUNTY	S19	EX
ALCO	118099	Big Sewickley Creek No. 7	7212	ER	COUNTY	S19	EX
ALCO	118315	Summit Park Drive Bridge	7214	ERC	MUNIC	S19	EX
ALCO	81711	Pine Creek Bridge #9 (EN09)	7216	ER	COUNTY	S19	EX
ALCO	28044	Versailles Avenue Viaduct	7304	ERC	MUNIC	S19	EX
ALCO	121076	McKeesport Bridge Ramp #2	7304	E	MUNIC	S19	EX
ALCO	81714	Spruce Run Bridge #4 (XP04)	7405	ERC	COUNTY	S19	EX
ALCO	28273	ML01 McLaughlin Run #1	7414	ER	COUNTY	S19	EX
ALCO	88398	CM03 - Campbells Run No. 3	7415	ERC	COUNTY	S19	EX
ALCO	28426	AL Local BPRS Group 5	7420	C	COUNTY	S19	EX
ALCO	28323	Thurnbull Drive Bridge	7435	ERC	MUNIC	S19	EX
ALCO	27573	Grant Avenue Bridge ov Girty's Run	7445	ERC	MUNIC	S19	EX
ALCO	27751	Lincoln Ave Bridge 13	7445	ERC	MUNIC	S19	EX
ALCO	119502	Lincoln Avenue Bridge #7 Replacement	7445	ERC	MUNIC	S19	EX
ALCO	56960	Rankin Bridge	7456	E	COUNTY	S19	EX
ALCO	93915	Talbot Ave Ramp Bridge	7456	ERC	COUNTY	S19	EX
ALCO	93371	Patton St Bridge (TL13)	7479	ERC	COUNTY	S19	EX
FGH	27491	Beck's Run Road		ER	COUNTY	S10	EX
FGH	27493	Smithfield St Reconstruct, Ph 1		C	FGH	S10	EX
FGH	27806	Corliss Tunnel		E	FGH	S19	EX
FGH	68252	Pittsburgh City BPRSF Line Item		C	FGH	S19	EX
FGH	69839	Alleg. Co Local Br. (S/L)		C	COUNTY	S19	EX
FGH	83136	Penn Ave Reconstruction, Ph 2		C	FGH	S10	EX
FGH	106773	Liberty Ave		C	FGH		
FGH	109691	Smart FGH (ATCMID) - Phase 3		ERC	FGH		
FGH	114288	Penn Avenue Signal Improvements		E C	FGH		
FGH	114290	Allegheny River Green Boulevard		E C	FGH	A2	EX
FGH	114294	City of Pittsburgh Bus Shelters/Mobility Hubs		C	FGH	M7	EX
FGH	116300	Smart FGH - Phase 1		C	FGH		
FGH	116301	Smart FGH - Phase 2		C	FGH		
FGH	117272	Frankstown Avenue Signal Improvement Project		C	FGH		
FGH	118708	Beaver Avenue Esplanade (Two-Way Conversion)		E	FGH	X1	EX
FGH	118768	New Pathways to Equity - RAISE Grant - Phase 2		E C	FGH	X12	EX
FGH	119399	Grant Street Reconstruction, Ph. 1		E	FGH	S10	EX
FGH	119486	Pittsburgh City Steps - Potomac Avenue		ERC	FGH	A2	EX
FGH	120860	New Pathways to Equity - RAISE Grant - Phase 1		C	FGH		
FGH	120892	Mobility Justice in Micromobility - Pittsburgh		C	FGH	A2	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title I Programs**

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
FGH	120898	University Line Oakland to Squirrel Hill BRT		C	TRANS		
FGH	120899	Brownsville Road Safety Improvement		E C	FGH		
FGH	121295	Pittsburgh City Steps- Clairhaven Street		ERC	FGH	A2	EX
FGH	121296	Pittsburgh City Steps - Dickson Street		ERC	FGH	A2	EX
FGH	121297	Pittsburgh City Steps - Ottawa Street		ERC	FGH	A2	EX
FGH	121298	Pittsburgh City Steps - 56th Street Connection		ERC	FGH	A2	EX
FGH	100956	West End Bridge	19	ERC	PADOT	S19	EX
FGH	100773	PA 28 / East Ohio Street	28	E	PADOT	S10	EX
FGH	117911	Wrong Way Detection System	28	C	PADOT	X11	EX
FGH	100789	Saw Mill Run Blvd: PA 88 to I-376	51	E C	PADOT	S10	EX
FGH	28309	SR 65 Ramps & SR 279 Ft. Duq	65	C	PADOT	S19	EX
FGH	79448	PA 65, Ohio River Boulevard	65	E C	PADOT	S10	EX
FGH	94651	I-376/Parkway East A.T.M	376	E C	PADOT		
FGH	97028	I-376/Banksville Interchange	376	RC	PADOT		
FGH	109383	Bigelow Boulevard	400	ERC	PADOT	S10	EX
FGH	110352	East Carson St Mill and Overlay	837	E C	PADOT	S10	EX
FGH	98125	Bates Street Improvement	885	ER	PADOT		
FGH	119196	SR 2045 Mifflin Road Drainage Study	2045	E	PADOT	X1	EX
FGH	107435	Traffic Services Support	3069	E	PADOT	X2	EX
FGH	110353	SR 4003 - East Street to Babcock Blvd	4003	C	PADOT	S10	EX
FGH	119595	SR 4003 - East St to Babcock Blvd Signal Project	4003	C	PADOT		
FGH	27144	28th Street Bridge	7301	C	FGH	S19	EX
FGH	27747	Swinburne Bridge	7301	C	FGH	S19	EX
FGH	83137	South Negley Ave. Bridge	7301	ERC	FGH	S19	EX
FGH	93394	AL Local BPRS Group 4	7301	C	COUNTY	S19	EX
FGH	103366	Homestead-Grays Bridge Rehabilitation	7301	E	COUNTY	S19	EX
FGH	106386	Larimer Avenue Bridge	7301	ERC	FGH	S19	EX
FGH	114150	Swindell Bridge	7301	ER	FGH	S19	EX
FGH	114266	West Carson Street Bridge	7301	E	FGH	S19	EX
FGH	117365	Maple Ave Bridge	7301	ER	FGH	S19	EX
FGH	117366	Herron Ave Bridge Preservation	7301	ER	FGH	S19	EX
FGH	117367	Elizabeth St Bridge	7301	ER	FGH	S19	EX
FGH	117368	Corley St Bridge	7301	ER	FGH	S19	EX
FGH	117369	Calera St Bridge Replacement	7301	ER	FGH	S19	EX
FGH	117472	Bridge over Route 51 Near Woodruff Street	7301	ERC	FGH	S19	EX
FGH	117889	California Avenue Bridge	7301	ER	FGH	S19	EX
FGH	119986	Chartier Creek Br #3	7421	E	COUNTY	S19	EX
FGH	113632	West End Bridge Ramps	8055	ER	PADOT	S19	EX
FGH	119924	I-279 Southbound Off-Ramp to East Street	8099	E C	PADOT		
ARCO	109622	1/112th Infantry Bridge/Graff Ramp Rehabilitation	66	C	PADOT	S19	EX
ARCO	111826	Armstrong Co. Department Force Bridge Maintenance	68	C	PADOT	S19	EX
ARCO	23978	Graff Bridge Preservation	422	C	PADOT	S19	EX
ARCO	85574	Margaret Rd Intersection	422	C	PADOT	R4	EX
ARCO	98689	Dunbar Dip	422	E	PADOT	S19	EX
ARCO	114936	US 422 County Line East EM	422	C	PADOT	S10	EX
ARCO	114950	US 422 Worthington East EM	422	C	PADOT	S10	EX
ARCO	74205	Echo Church Bridge	1028	ERC	PADOT	S19	EX
ARCO	120768	East of Templeton 1 and 2 Group Bridges	1030	R	PADOT	S19	EX
ARCO	83239	Rayburn Township - North of Kittanning Bridge #2	1036	ER	PADOT	S19	EX

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ARCO	24135	Pyra Road Bridge	2005	C	PADOT	S19	EX
ARCO	91803	McNees Bridge	2008	ERC	PADOT	S19	EX
ARCO	119578	SR 4023 Tarrtown Rd Slides	4023	R	PADOT	S2	EX
ARCO	23833	T-466 Saint Charles Br.	7212	ERC	PADOT	S19	EX
ARCO	117669	T-860 Beagle Club Bridge	7224	E	PADOT	S19	EX
BECO	106494	Beaver Local Bridge Line Item		C	COUNTY	S19	EX
BECO	121091	YSFR - Constitution Blvd		C	OTHER	S8	EX
BECO	101165	Frankfort Road Bridge	18	C	PADOT	S19	EX
BECO	105441	PA 18 Bridge ov Beaver River	18	C	PADOT	S19	EX
BECO	116315	SR 18, Big Beaver Boulevard	18	E C	PADOT	S10	EX
BECO	102661	Aliquippa East End Gateway, Ph 1 TIIIF	51	C	OTHER	X1	EX
BECO	112022	Monaca Gateway MIF-TIIIF-Start	51	C	MUNIC		
BECO	118443	SR 51 @ SR 151 Roundabout	51	ERC	PADOT		
BECO	35156	PA 65, Country Club Bridge	65	C	PADOT	S19	EX
BECO	109356	Midland Beaver Road	68	E C	PADOT	S10	EX
BECO	113650	Midland Beaver Road ov NS RR	68	E	PADOT	S19	EX
BECO	116559	SR 68, Virginia Avenue/Adams Street	68	C	PADOT	S10	EX
BECO	101173	PA 168 over Jordan Run	168	C	PADOT	S19	EX
BECO	120269	I-376 Corridor ITS - Beaver County (Northern Sec)	376	E C	PADOT	X11	EX
BECO	99795	Brush Ck Br/BrBrush Ck	1019	E	PADOT	S19	EX
BECO	101182	Brush Creek Road Bridge	1019	E	PADOT	S19	EX
BECO	93770	Pine Run Road Culvert	1021	C	PADOT	S19	EX
BECO	89157	Reno Street over Dutchmans Run	1037	C	PADOT	S19	EX
BECO	117332	SR 2004 Freedom Crider Rd at Lovi Rd	2004	ERC	PADOT	R1	EX
BECO	118568	Conway-Wallrose Slide	2005	C	PADOT	S2	EX
BECO	113630	Century Farm Road Culvert	3034	C	PADOT	S19	EX
BECO	109391	Brady Run Road Bridge	4012	ER	PADOT	S19	EX
BECO	101198	Shenango Road Bridge	4021	ER	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	101201	Kelly Road over Wolf Run	4043	ER	PADOT	S19	EX
BECO	70793	Georgetown Br over PA 51	4053	ER	PADOT	S19	EX
BECO	113163	Valley Road Bridge	7102	E	MUNIC	S19	EX
BECO	28974	Loughheads Bridge (CB #9)	7201	ER	COUNTY	S19	EX
BUCO	118362	Butler-Freeport Community Trail Stream Bank Stabil		C	PADOT	X12	EX
BUCO	119692	D10/SPC Carbon Reduction Line Item		C	PADOT		NS
BUCO	111827	Butler Co. Department Force Bridge Maintenance	8	C	PADOT	S19	EX
BUCO	113652	General Butler Bridge FM	8	E C	PADOT	S19	EX
BUCO	114789	SR 8 Butler City to SR 308	8	C	PADOT	S10	EX
BUCO	117378	Butler Epoxy Group Bridges	8	C	PADOT	S19	EX
BUCO	121188	Butler Main St. Student and Ped Safety Project	8	C	PADOT	A2	EX
BUCO	117244	Zelienople Bridge #1 Latex Overlay	19	C	PADOT	S19	EX
BUCO	117377	Butler Latex Group Bridges	28	ER	PADOT	S19	EX
BUCO	86105	Kams Crossing Bridge	68	C	PADOT	S19	EX
BUCO	98108	Butler North Resurfacing	68	C	PADOT	S10	EX
BUCO	117264	Jefferson - Cunningham Streets Signal Improvements	68	C	PADOT		
BUCO	24682	Southwest of Euclid Bridge	138	C	PADOT	S19	EX
BUCO	91286	Three Degree Rd Intersection	228	C	PADOT		

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
BUCO	105900	Ekastown West 3R	228	RC	PADOT	S10	EX
BUCO	24409	State Game Lands 95 Br	268	ER	PADOT	S19	EX
BUCO	83317	PA 268 ov Trib.S.Br. Bear Ck	268	ER	PADOT	S19	EX
BUCO	105574	Zelienople Railroad Corridor	288	C	PADOT	S8	EX
BUCO	24759	PA 356 over Tributary to Coal Run	356	C	PADOT	S19	EX
BUCO	106486	PA 356 Corridor Improvements	356	C	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	ERC	PADOT	S19	EX
BUCO	24690	US 422 over SR 4005 Bridge	422	ERC	PADOT	S19	EX
BUCO	83611	US 422 Shawood Pipe	422	C	PADOT	S19	EX
BUCO	98028	Shearer Bridge Pres.	422	C	PADOT	S19	EX
BUCO	115104	US 422 Lawrence County Line East PM	422	C	PADOT	S10	EX
BUCO	117334	US 422 County Line West PM	422	C	PADOT	S10	EX
BUCO	83323	PA 528 over Big Run	528	ER	PADOT	S19	EX
BUCO	24814	Bruin Bridge #5	1004	ER	PADOT	S19	EX
BUCO	24827	Renfrew Bridge	3007	C	PADOT	S19	EX
BUCO	110783	10-2 SR 3021 Corridor Improvements	3021	C	PADOT	S6	EX
BUCO	119717	SR 3022 Rochester Road Widening Study	3022		PADOT	X1	EX
BUCO	24709	Branchton Bridge	4010	ER	PADOT	S19	EX
BUCO	95876	Victory Bridge	7209	ER	PADOT	S19	EX
BUCO	77945	T-603 Saint Joe Bridge	7224	ERC	PADOT	S19	EX
BUCO	56592	T-584 Geibel Road Bridge	7228	C	PADOT	S19	EX
BUCO	120409	South Monroe Street Bridge	7301	ER	PADOT	S19	EX
GRCO	30207	Greene Co Bridge # 35		ERC	PADOT	S19	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	118003	PA 18/PA 21 Safety Improvements	21	C	PADOT	S10	EX
GRCO	116794	Greene County Epoxy Overlay 2028	79	C	PADOT	S19	EX
GRCO	81849	PA 218 ov Br Smith Ck	218	ERC	PADOT	S19	EX
GRCO	116238	2024 Slide Repairs	1003	C	PADOT	S2	EX
GRCO	105401	SR 1008 over Neel Run - DFB	1008	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	C	PADOT		NS
GRCO	98856	SR 2008 ov Dunkard Crk	2008	ERC	PADOT	S19	EX
GRCO	30134	SR 3001 over Wheeling Ck	3001	E C	PADOT	S19	EX
GRCO	120620	SR 3001 over Cook Run- DFB	3001	RC	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
GRCO	74220	SR 3011 over Hargus Creek	3011	ERC	PADOT	S19	EX
GRCO	120621	SR 4017 over Branch of Browns Creek- DFB	4017	RC	PADOT	S19	EX
GRCO	120623	SR 4019 over Br of Browns Creek- DFB	4019	RC	PADOT	S19	EX
GRCO	116469	SR 4031 over Dillie Run-DFB	4031	RC	PADOT	S19	EX
GRCO	106407	Greene Co Bridge #105	7202	ERC	PADOT	S19	EX
GRCO	118488	Districtwide Local Bridge Preservation	7204	C	PADOT	S19	EX
GRCO	120997	Greene County Bridge No. 54	7207	E	PADOT	S19	EX
GRCO	120996	Greene County Bridge #76	7214	E	PADOT	S19	EX

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## 2025-2028 TIP Projects Funded Through FAST-Act Title I Programs

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
FACO	76508	Dist12 Hwy/Brdg Line Item		C	PADOT	S10	EX
FACO	81229	D12 Bridge Preservation Design		E C	PADOT	S19	EX
FACO	101968	D12 Pmnt Presv Design		E	PADOT	S10	EX
FACO	105858	Districtwide DFB Line Item		E C	PADOT	S19	EX
FACO	117112	District 12 Support Services		E	PADOT	X1	EX
FACO	117425	2027 Slide Repairs		C	PADOT	S2	EX
FACO	117429	2025 REM Contract		C	PADOT	S11	EX
FACO	117430	2026 REM Contract		C	PADOT	S11	EX
FACO	117431	2027 REM Contract		C	PADOT	S11	EX
FACO	117432	2028 REM Contract		C	PADOT	S11	EX
FACO	117530	D12 Slide Design		E	PADOT	S2	EX
FACO	117551	D12 Betterment Reserve		C	PADOT	S10	EX
FACO	117558	Expansion Dam 2026		C	PADOT	S19	EX
FACO	117559	Expansion Dam Contract 2027		C	PADOT	S19	EX
FACO	118278	Sheepskin Trail - City of Uniontown Connection		C	PADOT	X12	EX
FACO	120608	2025 Municipal Bridge Program		E C	PADOT	S19	EX
FACO	120609	2026 Municipal Bridge Program		E C	PADOT	S19	EX
FACO	120610	2027 Municipal Bridge Program		E C	PADOT	S19	EX
FACO	120611	2028 Municipal Bridge Program		E	PADOT	S19	EX
FACO	120958	Hydro/Latex 2027		C	PADOT	S19	EX
FACO	120960	Bridge Deck Cleaning & Sealing-2028		C	PADOT	S19	EX
FACO	120961	Bridge Deck Preservation -2028-1		C	PADOT	S19	EX
FACO	120962	Bridge Deck Cleaning & Sealing-2026		C	PADOT	S19	EX
FACO	120963	Arch & Culvert Preservation - 27		C	PADOT	S19	EX
FACO	120964	Stormwater Management 25-26		C	PADOT	S2	EX
FACO	120965	Stormwater Management 27-28		C	PADOT	S2	EX
FACO	120967	D12 Substructure Preservation		C	PADOT	S19	EX
FACO	120970	Districtwide Pipe and Culvert- 12-25-1		C	PADOT	S19	EX
FACO	120971	Districtwide Pipe and Culvert 12-26-1		C	PADOT	S19	EX
FACO	120972	General Preservation 2027-2		C	PADOT	S19	EX
FACO	121012	General Preservation 2025-2		C	PADOT	S19	EX
FACO	116775	Fayette County Epoxy Overlay 2026	21	C	PADOT	S19	EX
FACO	116772	Fayette County Epoxy Overlay 2025	40	C	PADOT	S19	EX
FACO	96661	McClure/Kingview Road Interchange	119	C	PADOT		
FACO	116787	District 12 2025 Arch and Culvert Preservation	166	C	PADOT	S19	EX
FACO	120603	Systemic Curve Improvements	166	C	PADOT	S6	EX
FACO	76006	PA 819 over Trib Yough River	819	ERC	PADOT	S19	EX
FACO	118886	PA 857 over Mountain Creek Deck Replacement	857	C	PADOT	S19	EX
FACO	90802	PA 906 ov Trib Mon River - DFB	906	RC	PADOT	S19	EX
FACO	90801	PA 982 over Spruce Run	982	ER	PADOT	S19	EX
FACO	105387	SR 1005 over Br Back Ck - DFB	1005	RC	PADOT	S19	EX
FACO	119703	SR 1009 over Little Champion Creek-DFB	1009	RC	PADOT	S19	EX
FACO	116189	SR 1020 Gallatin Avenue Betterment	1020	C	PADOT	S10	EX
FACO	99531	SR 1034 ov Breakneck Run-DFB	1034	RC	PADOT	S19	EX
FACO	81951	SR 1039 ov Br Dickerson Run-DFB	1039	RC	PADOT	S19	EX
FACO	121190	Uniontown Corridor 116 CMAQ	2040	ERC	PADOT		
FACO	74185	SR 3005 over Grassy Run- DFB	3005	RC	PADOT	S19	EX
FACO	121014	SR 3009 over North Branch of Browns Run	3009	E	PADOT	S19	EX
FACO	120619	SR 3013 over Br Wallace Run- DFB	3013	RC	PADOT	S19	EX
FACO	118892	2025 D12 Bridge Preservation	4003	C	PADOT	S19	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title I Programs**

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
FACO	81994	SR 4011 over Washwater Run - DFB	4011	RC	PADOT	S19	EX
FACO	76017	SR 4016 over Redstone Ck	4016	ERC	PADOT	S19	EX
FACO	81967	SR4019 over Br Ltl Redstone Ck- DFB	4019	RC	PADOT	S19	EX
FACO	117423	2026 Slide Repairs	4022	C	PADOT	S2	EX
FACO	81192	Layton Bridge	4038	C	PADOT	S19	EX
FACO	120982	Fayette County #3- Braznell Bridge	7216	E	PADOT	S19	EX
FACO	120992	Fayette County Bridge #2 - Linn Station	7216	E	PADOT	S19	EX
FACO	120994	Fayette County Bridge # 155	7216	E	PADOT	S19	EX
FACO	95837	North Gallatin Ave Bridge	7302	RC	PADOT	S19	EX
FACO	111776	Jefferson Street Bridge	7302	ERC	PADOT	S19	EX
INCO	105582	Olson Road Crossing		C	PADOT	S8	EX
INCO	112424	US 22 Penn View PM	22	C	PADOT	S10	EX
INCO	119938	US 22 - SR 403 Underpass Paving	22	C	PADOT	S10	EX
INCO	25621	US 119 over SR 8001 (Northbound and Southbound)	119	C	PADOT	S19	EX
INCO	95852	US 119 over Two Lick Ck.	119	C	PADOT	S19	EX
INCO	101113	Stoney Run Bridge #1	119	C	PADOT	S19	EX
INCO	117248	US 119 over Crooked Creek	119	ER	PADOT	S19	EX
INCO	83255	Rossmoyne Bridge No. 1	210	ERC	PADOT	S19	EX
INCO	25596	PA 286 ovTrib to Cherry Rn	286	C	PADOT	S19	EX
INCO	114423	Jacksonville Bridge #1	286	C	PADOT	S19	EX
INCO	120376	PA 403/US 22 Park and Ride	403	ERC	PADOT		NS
INCO	88615	Indiana US 422 Bypass Repair	422	C	PADOT	S10	EX
INCO	98811	Bridge to Nowhere EB/WB PM	422	C	PADOT	S19	EX
INCO	114605	US 422: Armstrong County Line to Indiana Bypass	422	ER	PADOT	S10	EX
INCO	117247	Indiana Latex Group	422	C	PADOT	S19	EX
INCO	111829	Indiana Co. Department Force Bridge Maintenance	553	C	PADOT	S19	EX
INCO	25411	Yellow Creek #2 Bridge	954	C	PADOT	S19	EX
INCO	25779	Fulton Run Road Bridge	954	ER	PADOT	S19	EX
INCO	25587	Broadhead Run Bridge #2	1045	C	PADOT	S19	EX
INCO	83370	Dilltown Bridge No.3	2012	C	PADOT	S19	EX
INCO	117493	Pleasant Valley Bridge	2012	C	PADOT	S19	EX
INCO	25795	Clarksburg Bridge #1	3007	C	PADOT	S19	EX
INCO	83382	SR 3007 over Marshall Run #1	3007	C	PADOT	S19	EX
INCO	78117	Rearick Road Bridge #1	3010	C	PADOT	S19	EX
INCO	78118	SR 3017 Cherry Run Bridge	3017	ER	PADOT	S19	EX
INCO	25602	Green Valley Bridge #1	3031	C	PADOT	S19	EX
INCO	25802	Anthony Run Bridge #2	3039	C	PADOT	S19	EX
IACO	88721	Hickory View Drive (T-316) Bridge		ER	MUNIC	—	NA
IACO	117261	Union Township TA Project		C	MUNIC	—	NA
IACO	100917	Wilmington Road	18	E	PADOT	—	NA
IACO	109386	Perry Highway 2	19	E	PADOT	—	NA
IACO	109389	Perry Highway	19	E	PADOT	—	NA
IACO	119466	SR 158/North Jefferson Street	158	C	PADOT	—	NA
IACO	116560	SR 422, Benjamin Franklin Hwy	422	E C	PADOT	—	NA
IACO	81639	Frew Mill Road Bridge	1012	ER	PADOT	—	NA
IACO	29468	Liberty Road Over Branch Of Jamison Run	1015	ER	PADOT	—	NA
IACO	29558	Van Gorders Mill Road	2005	E	PADOT	—	NA
IACO	100743	East Washington Street Br	2006	C	PADOT	—	NA

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title I Programs**

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
LACO	117475	River Road Culvert	4005	C	PADOT	—	NA
LACO	29327	Wallace Road Bridge T356	7203	ER	COUNTY	—	NA
LACO	29528	Graceland Rd Br T464	7205	C	MUNIC	—	NA
LACO	113185	Paden Road over Hickory Run	7206	ER	MUNIC	—	NA
LACO	78357	Barkley Road Bridge #3	7207	ER	MUNIC	—	NA
LACO	105601	McCartney Hollow Road Bridge T311	7207	ER	MUNIC	—	NA
LACO	78361	Jefferson Street Bridge	7301	ER	COUNTY	—	NA
LACO	119516	Balgh Avenue Bridge	7301	ER	COUNTY	—	NA
WACO	30989	Gabby Bridge #64		ERC	PADOT	S19	EX
WACO	102154	D12 Construction Mgt		C	PADOT	X1	EX
WACO	117949	MMTA 2022 Bus Replacement		C	PADOT	M10	EX
WACO	118319	National Pike Tunnel Rehabilitation		C	PADOT	X12	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	114561	PA 18: Main Street to Third Street	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	76045	US 40 over Br Buffalo Ck	40	ER	PADOT	S19	EX
WACO	113722	US 40 over Catfish Creek	40	ERC	PADOT	S19	EX
WACO	118574	US 40/SR 3005 Intersection Improvements	40	C	PADOT	R1	EX
WACO	89131	I79 ov Br Chartiers Ck #1	79	ERC	PADOT	S19	EX
WACO	121368	Fiber Installation 1-79	79	C	PADOT	X11	EX
WACO	73058	PA 88 over Peters Creek	88	ERC	PADOT	S19	EX
WACO	105426	Charleroi Bettement	88	C	PADOT	S10	EX
WACO	81943	PA 331 over Br Brush Run #2-DFB	331	RC	PADOT	S19	EX
WACO	90622	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	90757	SR 1006 ov Br Peters Ck - DFB	1006	RC	PADOT	S19	EX
WACO	120605	SR 1010 Flashing Beacon	1010	E C	PADOT	S7	EX
WACO	116850	Donora-Monessen Bridge (Spot Paint/Joints)	1077	C	PADOT	S19	EX
WACO	116370	SR 2005 over Smith Run-DFB	2005	RC	PADOT	S19	EX
WACO	120624	SR 2015 over Branch of Daniels Run-DFB	2015	RC	PADOT	S19	EX
WACO	120580	SR 2023 over Branch of Little Pike Run- DFB	2023	RC	PADOT	S19	EX
WACO	113597	SR 2047 over Little Ternile Creek	2047	ERC	PADOT	S19	EX
WACO	116915	Bridge Scour Mitigation and Preservation	2047	C	PADOT	S19	EX
WACO	118903	2027 D12 Bridge Preservation	2056	C	PADOT	S19	EX
WACO	74234	SR 3009 over Buffalo Creek #1	3009	ERC	PADOT	S19	EX
WACO	103142	SR 4015 over Br Raccoon Creek - DFB	4015	RC	PADOT	S19	EX
WACO	116369	SR 4029 over Burgetts Fork-DFB	4029	RC	PADOT	S19	EX
WACO	118898	2025 D12 Hyro/Latex Bridge Deck Pres	4032	C	PADOT	S19	EX
WACO	105311	SR 4049 over Br Chartiers Ck- DFB	4049	RC	PADOT	S19	EX
WACO	121006	Chartiers Creek #42- Brevard Bridge	7207	E	PADOT	S19	EX
WACO	117314	Cross Creek #33	7208	ERC	PADOT	S19	EX
WACO	31074	Raccoon Bridge #23	7404	ERC	PADOT	S19	EX
WEEO	31689	Ladysmith Road T-470		ERC	PADOT	S19	EX
WEEO	31927	Possum Hollow Road		ER	PADOT	S19	EX
WEEO	110900	US 30 Corridor Impxmts - Western Section	30	C	PADOT	S6	EX
WEEO	120641	US 30 at Cedar Street Improvements	30	C	PADOT	S6	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title I Programs**

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
WEICO	105350	PA 201 Ramp to PA 51 Bridges	51	ER	PADOT	S6	EX
WEICO	116179	PA 66 Paverment Preservation	66	E C	PADOT	S10	EX
WEICO	116461	I-70 @ PA 201 Interchange PEL	70		PADOT	X1	EX
WEICO	114560	119 SW Greensburg CMAQ	119	C	PADOT		
WEICO	119638	PA 130 Corridor Review & Improverments	130	E	PADOT	S10	EX
WEICO	69248	PA 136 over Pollock Run	136	C	PADOT	S19	EX
WEICO	98869	West Newton Bridge	136	C	PADOT	S19	EX
WEICO	116790	Freeport Bridge Truss Preservation	356	C	PADOT	S19	EX
WEICO	91136	PA 906 ov Trib Mon River	906	ER	PADOT	S19	EX
WEICO	108010	LVITP: Norvelt to Pleasant Unity	981	C	PADOT	R4	EX
WEICO	108140	LVITP: Pleasant Unity to Airport	981	C	PADOT	R4	EX
WEICO	105837	PA 982 over Sawmill Run	982	ER	PADOT	S19	EX
WEICO	74437	SR 1014 over McGee Run	1014	C	PADOT	S19	EX
WEICO	113823	Donohoe Road/Georges Station Intersection	1026	RC	PADOT	R1	EX
WEICO	105818	SR 1049 ov Br Ltl Crabtree Ck-DFB	1049	RC	PADOT	S19	EX
WEICO	116465	SR 1049 over Br Little Crabtree Creek (Seg 40)-DFB	1049	RC	PADOT	S19	EX
WEICO	116467	SR 1049 over Br Little Crabtree Creek (Seg 20)-DFB	1049	RC	PADOT	S19	EX
WEICO	120056	SR 3014 over Sewickley Creek	3014	ER	PADOT	S19	EX
WEICO	91121	SR 3024 over Br Long Run- DFB	3024	RC	PADOT	S19	EX
WEICO	74261	SR 3035 over Barren Run- DFB	3035	RC	PADOT	S19	EX
WEICO	98865	SR 3044 ov Ltl Sewickley Crk	3044	ER	PADOT	S19	EX
WEICO	116470	SR 3063 over Andrews Run-DFB	3063	RC	PADOT	S19	EX
WEICO	31637	SR 3073 over Meadow Run- DFB	3073	RC	PADOT	S19	EX
WEICO	120639	SR 4006 Flashing Beacon	4006	E C	PADOT	S7	EX
WEICO	89066	SR 4019 over Brush Creek	4019	ERC	PADOT	S19	EX
WEICO	116471	SR 4041 over Br of Brush Run-DFB	4041	RC	PADOT	S19	EX
WEICO	83686	SR 4073 over PA 56	4073	ERC	PADOT	S19	EX
WEICO	113267	New Kensington Corridor	4087	C	PADOT	S8	EX
WEICO	112902	SR 4091 ov Stream to Kiski River	4091	E	PADOT	S19	EX
WEICO	106406	West Co Local Br Preservation	7204	E C	PADOT	S19	EX
WEICO	121009	T-880 Bridge #2, Donegal Twp	7205	ER	PADOT	S19	EX
WEICO	121011	Bells Mill Bridge	7215	E	PADOT	S19	EX
WEICO	73028	Brewery Street Bridge	7302	ER	PADOT	S19	EX
WEICO	31554	Fourth Street Bridge	7421	C	MUNIC	S19	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title I Programs**  
**Interstate Maintenance Projects**

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES
ALCO	81931	I-79 - Pavement Restoration - Campbells Run - Moon Run	79	C	PADOT	S10 EX
ALCO	81933	I-79 - Pavement Restoration - I-279 to SR 910	79	ERC	PADOT	S10 EX
ALCO	87767	I-376 - Pavement Restoration - Edgewood to Churchill	376	C	PADOT	S10 EX
ALCO	87778	I-376 - Resurface - Churchill to Monroeville	376	C	PADOT	S10 EX
ALCO	97027	I-376 - Carnegie Interchange - Improve / Reconfigure	376	RC	PADOT	R3 EX
ALCO	97029	I-376 - Greentree Interchange - Improve / Reconfigure	376	RC	PADOT	R3 EX
PGH	87754	I-376 - Bridge Preservation - Ft. Pitt Br to Sq. Hill	376	ERC	PADOT	S19 EX
PGH	99874	I-376 - Squirrel Hill Interchange - Improve / Reconfigure	376	ERC	PADOT	R3 EX
PGH	105438	I-376 - Bridge Replacement - Commercial Street Bridge	376	C	PADOT	S19 EX
PGH	109270	I-376 - Ft. Duquesne Br. - Bridge Rehab / Preservation	279	ERC	PADOT	S19 EX
PGH	112249	I-376 - Drainage Imp - "Bath Tub" - Ft Pitt Br to 10th St.	376	E	PADOT	S2 EX
PGH	113362	I-376 - Bridge Improvement - Frazier Street Bridge	376	ERC	PADOT	S19 EX
PGH	119746	I-376 - ITS Maintenance - Traffic Control Center	376	C	PADOT	S7 EX
PGH	120096	I-376 - Median Barrier - Ft. Pitt Bridge to Sq. Hill	376	ERC	PADOT	S9 EX
PGH	121172	I-376 - Banksville Interchange - Improve / Reconfigure	376	C	PADOT	
ECCO	106274	I-79 - Reconstruct-Widen - Cranberry, Jackson Townships	79	ERC	PADOT	
ECCO	120118	I-79 - Pavement Preser. - Cranberry South Concrete Repairs	79	C	PADOT	S10 EX
GRCO	91553	I-79 - Resurface - Waynesburg to Ruff Creek	79	E C	PADOT	S10 EX
WACO	75945	I-70 - Reconstruct - Buffalo, Donegal Townships	70	E C	PADOT	S19 EX
WACO	75981	I-70 - Restoration - Bentleyville to PA 519	70	E C	PADOT	S10 EX
WACO	106919	I-70 - Reconstruct - Belle Vernon Bridge to Bentleyville	70	ERC	PADOT	S10 EX
WECO	88508	I-70 - Arnold City Interchange Reconstruction	70	C	PADOT	R3 EX

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## 2025-2028 TIP

### Regionally Significant Projects Funded by Pennsylvania Turnpike Commission

MEMS COUNTY NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES
ALCO	Allegh.Valley Int. - Pgh Int. - Widen to 6 Lanes (MP 49-57)	76	E	TREK	
ALCO	Pgh Int. to Irwin Int. - Widen to 6 Lanes (MP 57-66)	76	E	TREK	
ALCO	Mon-Fayette Expressway (SR 51 [Large] to SR 837 [Duquesne])		C	TREK	
BECC	Replace Beaver River Bridge - Widen to 6 Lanes (MP 12.5-13.5)	76	C	TREK	
WECC	Mile 99 to Westmoreland/Somerset Co. Line - Widen to 6 Lanes	76	C	TREK	
WECC	New Interchange - I-76 @ SR 130 [Penn Twp.]	76	E	TREK	

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title III Programs**

PROJECT SPONSOR	MEMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
ACTA	106606	Operating Assistance	M1	EX
ACTS	114525	Purchase Small Transit Buses	—	NA
ACTS	118110	Operating Assistance	—	NA
ACTS	121191	Mobile Lifts	—	NA
ACTS	121192	Support Equipment	—	NA
ACTS	121193	Facility Construction	—	NA
ACTS	121194	Office Equipment	—	NA
BCTA	65404	Purchase Paratransit Buses	M10	EX
BCTA	83817	ADP 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	118113	State Funding - Operating Assistance	M1	EX
BCTA	118124	Paratransit Service - Operating Assistance	M1	EX
BCTA	121196	Monaca Bus Stop Improvements	M7	EX
BART	96684	Accessible Vans	M10	EX
BART	121195	Operating Assistance	M1	EX
BTA	77852	Operating Assistance	M1	EX
BTA	118125	Bus Support Equipment / Facilities	M4	EX
BTA	118128	Computer Hardware and Software	M4	EX
BTA	118129	Communications Systems	M4	EX
BTA	118132	Security and Surveillance Equipment	M6	EX
BTA	118133	Shop Equipment	M4	EX
BTA	121197	Bus Replacement	M10	EX
BTA	121198	Bus Maintenance Equipment	M4	EX
BTA	121199	Office Equipment	M4	EX
FACT	65222	Operating Assistance	M1	EX
FACT	90041	Bus Procurement	M10	EX
FACT	114613	Communication Equipment	M5	EX
FACT	118135	Operating Assistance - Shared Ride	M1	EX
FACT	118137	Mini-Van Replacements	M10	EX
FACT	121200	Shop Equipment	M4	EX
FACT	121218	Facility Assessment Study	X1	EX
FACT	121219	Service Equipment	M5	EX
FACT	121220	Facility Capital Improvements	M4	EX
FACT	121221	Service Vehicle	M2	EX
FACT	121222	Upgrade Computers	M4	EX
FACT	121223	Shelter Upgrades	M7	EX
GREENE	118138	Bus Wash	M4	EX
GREENE	118139	Operating Assistances	M1	EX
GREENE	118140	Bus Replacements	M10	EX
GREENE	121224	Facility Improvements	M4	EX
GREENE	121225	Support Equipment	M4	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title III Programs**

PROJECT SPONSOR	MEMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
GREENE	121258	Transit Service Plan	X1	EX
GREENE	121259	Facility Assessment Study	X1	EX
GREENE	121260	Administrative Facility		NS
GREENE	121261	Communications Equipment	M5	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
ICTA	121262	Fare Collection Equipment	M5	EX
MDCO	83884	Operating Assistance	M1	EX
MDCO	118148	Operating Assistance - Shared Ride	M1	EX
MDCO	118160	Small Bus Replacement	M10	EX
MDCO	121263	Terminal ADA Improvements	M4	EX
MDCO	121264	Bus Shelter Replacement	M7	EX
MDCO	121265	Facility Study	X1	EX
MDCO	121266	Facility Construction		NS
MMVTA	65428	Operating Assistance - Urban	M1	EX
MMVTA	118166	Replacement Buses	M10	EX
MMVTA	119316	CMAQ Buses (Bus Replacement)	M10	EX
MMVTA	121267	Support Vehicles and Equipment	M2	EX
MMVTA	121268	Facility Equipment Replacement	M4	EX
MMVTA	121269	Speers Terminal Construction	M7	EX
NCATA	77860	Operating Assistance - Rural	---	NA
NCATA	118167	CNG Buses	---	NA
NCATA	121270	Bus Stop Signs	---	NA
NCATA	121271	Parking Lot Paving	---	NA
NCATA	121272	Office Flooring	---	NA
NCATA	121273	Office Painting	---	NA
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 / IIS Hardware/Software	M4	EX
PAAC	95006	Preventive Maintenance - Rail	M3	EX
PAAC	95007	Shop Equipment	M4	EX
PAAC	106644	Shared Ride Operating Assistance	M1	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title III Programs**

PROJECT SPONSOR	MEMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
PAAC	114536	Fixed Guideway Tunnel Improvements	M9	Ex
PAAC	118171	Light Rail Vehicle Procurement	M10	EX
PAAC	120755	Fare System Refresh	M4	EX
PAAC	121274	Mon Valley TOD	X1	EX
PAAC	121275	All Stations Access Program	M8	EX
PAAC	121276	Park-n-Ride Improvements	M8	EX
PAAC	121277	McKnight Road Corridor Plan	X1	EX
PAAC	121278	Station Area Planning	X1	EX
PAAC	121279	New Facilities Design	X1	EX
PAAC	121280	Ohio River Light Rail	X1	EX
PAAC	121281	Carnegie Park-n-Ride Expansion		
PAAC	121282	Panhandle Bridge Rehabilitation	M9	EX
PAAC	121283	Transit Access Improvement Program		
PAAC	121284	Wilkinsburg Transit Center		
SFC	71104	Capital Cost of Contracting - CommuteInfo	M1	EX
SFC	117531	Ride ACTA Shuttle	M1	EX
SFC	118151	Automatic Passenger Counters	M5	EX
SFC	118153	Marketing Services	A1	EX
SFC	121285	Ride ACTA Fareboxes	M5	EX
WASH	102353	Maintenance 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	118172	Surveillance / Security Systems	M6	EX
WASH	118175	Operating Assistance - Shared Ride	M1	EX
WCTA	65572	Operating Assistance - Rural	M1	EX
WCTA	102359	State Operating Assistance	M1	EX
WCTA	114540	Shared Ride Vehicles	M10	EX
WCTA	118177	Fixed-Route Bus Replacement	M10	EX
WCTA	118178	Operating Assistance - Shared Ride	M1	EX
WCTA	118179	Preventive Maintenance	M3	EX
WCTA	121286	Shared Ride Facility Study	X1	EX
WCTA	121287	EcoLane Tablets	M5	EX
WCTA	121288	Surveillance Cameras	M4	EX
WCTA	121289	Phone System	M4	EX
WCTA	121290	Fare Collection System	M5	EX
WCTA	121291	Resurface Carpenter Lane Park-n-Ride Lot	M8	EX

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**2025-2028 TIP**  
**Projects Funded Through FAST-Act Title III Programs**

PROJECT SPONSOR	MEMS NUMBER	PROJECT NAME	"EXEMPT" CODES
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**Transit Program – Project Sponsors:**

ACTA	Airport Corridor Transportation Association
ACTS	Allied Coordinated Transportation Services (Lawrence County)
BCTA	Beaver County Transit Authority
BART	Butler Area Rural Transit
BTA	Butler Transit Authority
FACT	Fayette Area Coordinated Transportation
GREENE	Greene County Human Services
HHF	Heritage Health Foundation
ICTA	Indiana County Transit Authority (IndiGo)
MDCO	Mid-County Transit Authority (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 – PRT)
SPC	Southwestern Pennsylvania Commission
WASH	Washington County Transportation Authority (Freedom Transit)
WCTA	Westmoreland County Transit Authority

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## **APPENDIX B**

Identification of Exempt and Regionally Significant Projects  
Included in the Fiscally Constrained Portion of the 2050 Plan



**SPC 2050 Long Range Transportation Plan  
Fiscally Constrained Highway/Bridge Project List**

Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
10	Armstrong	1/112th Infantry Bridge and Graff Ramp Rehabilitation*	\$18,351,700	66	Mid-Term (2029-2036)	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	Bridge Rehab/ Reconstruction	Exempt	S19	109622
10	Armstrong	East of Rural Valley Br.	\$3,000,000	85	Mid-Term (2029-2036)	Replacement of existing structure carrying PA 85 over Cowanshannock Creek in Cowanshannock Township, Armstrong County	Bridge Rehab/ Reconstruction	Exempt	S19	98896
10	Armstrong	North of Kittanning Bridge #2	\$4,000,000	1036	Mid-Term (2029-2036)	Replacement of the existing structure carrying SR 1036 over Cowanshannock Creek in Rayburn Township, Armstrong County.	Bridge Rehab/ Reconstruction	Exempt	S19	83239
10	Armstrong	T-466 Saint Charles Br.	\$3,000,000	Local	Mid-Term (2029-2036)	Rehabilitation of existing structure carrying SR 1005/T-466 (Saint Charles Road) over Redbank Creek in Madison Township, Armstrong County	Bridge Rehab/ Reconstruction	Exempt	S19	23833
10	Armstrong	PA 28 Goheenville South PM	\$4,278,560	28	Mid-Term (2029-2036)	Preventative maintenance along SR 28 from South Fork Pine Creek to Goheenville in Boggs, Rayburn and Valley Townships in Armstrong County	Roadway Preservation	Exempt	S10	117687
10	Armstrong	PA 28 - Distant South Microsurface*	\$4,235,550	28	Mid-Term (2029-2036)	Resurfacing and microsurfacing to include milling of existing bituminous wearing courses. Bituminous patching, paving, leveling, binder and wearing courses and minor drainage and guardrail upgrades along SR 28 from SR 1016 (Calhoun School Road) to SR 1025 in Wayne and Mahoning Townships, Armstrong County	Roadway Preservation	Exempt	S10	105894
10	Armstrong	SR 422 Dunbar Dip	\$43,651,100	422	Mid-Term (2029-2036)	This project involves the construction of a three-lane section from the eastern limit of the Kittanning Elementary project and would continue east for approximately two miles. Work would also involve the realignment of several intersections and extensive geometry improvements along US 422 from SR 2012 (Silvis Hollow Road) to Township Road #590 (Simpson Church Road) in Kittanning Township, Armstrong County.	Safety	Exempt	S17	98689
10	Armstrong	SR 422 Worthington No. 1	\$9,076,000	422	Long-Term (2037-2052)	Bridge preservation of the existing structure carrying US 422 over Buffalo Creek in Worthington Borough, Armstrong County	Bridge Preservation	Exempt	S19	202326003
10	Armstrong	SR 28 Buffalo Creek Bridges Rehabilitation*	\$40,314,200	28	Long-Term (2037-2052)	Rehabilitation of the Northbound and Southbound bridges carrying PA 28 over Buffalo Creek in Buffalo Township at the Butler County Line	Bridge Rehab/ Reconstruction	Exempt	S19	121129

\*Multi-modal elements to be determined during project development

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**SPC 2050 Long Range Transportation Plan  
Fiscally Constrained Highway/Bridge Project List**

Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
10	Armstrong	SR 422 Graff Bridge Rehabilitation*	\$92,000,000	422	Long-Term (2037-2052)	Bridge rehabilitation of the existing structure carrying US 422 over the Allegheny River in Franklin Township, Armstrong County	Bridge Rehab/ Reconstruction	Exempt	S19	24158
10	Armstrong	PA 839 Mahoning Cr.*	\$7,137,700	839	Long-Term (2037-2052)	Replacement of the existing structure carrying PA 839 over Mahoning Creek in Wayne Township.	Bridge Rehab/ Reconstruction	Exempt	S19	99129
10	Armstrong	Citizens Bridge over Allegheny*	\$14,852,600	1038	Long-Term (2037-2052)	Bridge rehabilitation of the existing structure carrying SR 1038 over the Allegheny River in Kittanning Borough, Armstrong County	Bridge Rehab/ Reconstruction	Exempt	S19	121130
10	Armstrong	SR 28 & SR 1035 (Oscar Rd) Vertical Improvement	\$18,141,400	28	Long-Term (2037-2052)	Roadway realignment and the intersection improvements at PA 28 and SR 1035 (Oscar Road) in Boggs Township, Armstrong County	Efficiency & Operations	Exempt	R4	119777
10	Armstrong	SR 28 & Sloan Hill Rd & Mechling Rd. - Intersection Improvement	\$1,379,200	28	Long-Term (2037-2052)	Intersection improvements along PA 28 at the intersections of Sloan Hill Road and Mechling Road in Rayburn Township, Armstrong County	Efficiency & Operations	Exempt	R1	121125
10	Armstrong	US 422 & Dutch Ridge Rd Intersection	\$13,791,700	422	Long-Term (2037-2052)	Intersection improvements including addition of turning lanes at Dutch Ridge Road & US 422 in Elderton Borough, Armstrong County	Efficiency & Operations	Exempt	R1	990037
10	Armstrong	PA 28 Resurfacing	\$6,600,000	28	Long-Term (2037-2052)	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.	Roadway Preservation	Exempt	S10	99933
10	Armstrong	SR 28 Hays Run PM	\$2,200,000	28	Long-Term (2037-2052)	Safety improvements including reconstruction, rehabilitation and resurfacing along PA 28 from SR 1028 (Anderson Creek Road) to T-535 (McAuley Falls Road) in Rayburn and Boggs Townships.	Roadway Preservation	Exempt	S10	91262
10	Armstrong	SR 422 Kittanning Bypass PM	\$19,700,000	422	Long-Term (2037-2052)	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.	Roadway Preservation	Exempt	S10	112432

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**SPC 2050 Long Range Transportation Plan  
Fiscally Constrained Highway/Bridge Project List**

Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
10	Armstrong	US 422 Kittanning East PM	\$12,262,000	422	Long-Term (2037-2052)	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	Roadway Preservation	Exempt	S10	115094
10	Armstrong	PA 28 Slabtown South	\$20,157,100	28	Long-Term (2037-2052)	Highway reconstruction along PA 28 between SR 1035 and T-821 (Heffelfinger Road) in Boggs Township.	Roadway Reconstruction	Exempt	S10	101134
10	Armstrong	SR 28 Corridor Improvements - Kittanning to Clarion County Line*	\$77,339,600	28	Long-Term (2037-2052)	Corridor and safety improvements including roadway reconstruction, intersection improvements, and roadway realignments to improve traffic and freight movement operations through the corridor	Safety	Exempt	S6	990038
10	Armstrong	US 422 West Kittanning PM*	\$5,024,800	422	Mid-Term (2029-2036)	Resurfacing including pavement patching, minor drainage improvements, and guiderail upgrades along US 422 in East Franklin Township, Armstrong County	Roadway Preservation	Exempt	S10	119814
10	Butler	General Butler Bridge PM*	\$3,927,800	8	Mid-Term (2029-2036)	Preservation of the existing structure carrying State Route 8 over Connoquenessing Creek, Quarry Street and railroads in Butler City, Butler County	Bridge Preservation	Exempt	S19	113652
10	Butler	Butler Latex Group Bridges*	\$3,500,000	28	Mid-Term (2029-2036)	Preservation of various structures carrying various routes over various features in various municipalities in Butler County	Bridge Preservation	Exempt	S19	117377
10	Butler	NE of Evans City Bridge #1 Preservation*	\$3,450,000	68	Mid-Term (2029-2036)	Preservation of existing structure carrying SR 68 over BANDP RR and Connoquenessing Creek in Forward Township, Butler County	Bridge Preservation	Exempt	S19	121007
10	Butler	Picklegate Bridge Preservation*	\$7,090,000	3001	Mid-Term (2029-2036)	Bridge preservation of the existing structure carrying SR 3001 over SR 8, various Railroads and Connoquenessing Creek in the Butler Township, Butler County	Bridge Preservation	Exempt	S19	112418
10	Butler	PA 8 over Muddy Creek	\$3,967,000	8	Mid-Term (2029-2036)	Replacement of the existing structure carrying PA 8 over Muddy Creek in Clay Township, Butler County.	Bridge Rehab/ Reconstruction	Exempt	S19	24722
10	Butler	US 19 over Coal Run*	\$3,056,000	19	Mid-Term (2029-2036)	Replacement of existing structure carrying US 19 over Coal Run in Cranberry Township, Butler County	Bridge Rehab/ Reconstruction	Exempt	S19	99683

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**SPC 2050 Long Range Transportation Plan  
Fiscally Constrained Highway/Bridge Project List**

Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
10	Butler	Karns Crossing Bridge*	\$17,616,300	68	Mid-Term (2029-2036)	This project includes intersection improvements and the replacement of the 12-span Karns Crossing Bridge which spans over the Bessemer & Lake Erie Railroad and the Buffalo & Pittsburgh Railroad as well as replacement of the twin-cell arch culvert of the existing structure carrying PA 68 over Connoquenessing Creek in Butler and Summit Townships, Butler County	Bridge Rehab/ Reconstruction	Exempt	S19	86105
10	Butler	SR 268, State Game Lands 95 Br	\$7,000,000	268	Mid-Term (2029-2036)	Bridge replacement of the existing structure carrying PA 268 over Bear Creek in Parker Township, Butler County.	Bridge Rehab/ Reconstruction	Exempt	S19	24409
10	Butler	US 422 over PA 356	\$16,161,120	422	Mid-Term (2029-2036)	Replacement of the existing structure carrying US 422 over PA 356 in Butler Township, Butler County.	Bridge Rehab/ Reconstruction	Exempt	S19	24663
10	Butler	US 422 Shawood Pipe	\$10,228,940	422	Mid-Term (2029-2036)	Replacement/repair of the existing culvert carrying a tributary to Muddy Creek beneath US Route 422 in Muddy Creek Township, Butler County.	Bridge Rehab/ Reconstruction	Exempt	S19	83611
10	Butler	US 422 over SR 4005 Bridge	\$7,787,750	422	Mid-Term (2029-2036)	Bridge replacement of the existing structure carrying US 422 over SR 4005 (Pleasant Valley Road) in Muddy Creek Township, Butler County	Bridge Rehab/ Reconstruction	Exempt	S19	24690
10	Butler	PA 528 over Lake Arthur	\$18,314,370	528	Mid-Term (2029-2036)	Reconstruction of the existing structure carrying PA 528 over Lake Arthur in Franklin Township, Butler County.	Bridge Rehab/ Reconstruction	Exempt	S19	24241
10	Butler	T-841 Courtney Mill Br	\$8,420,000	Local	Mid-Term (2029-2036)	Replacement of existing structure carrying T-841 (Browntown Rd) over the Bessemer and Lake Erie Railroad in Mercer Township, Butler County	Bridge Rehab/ Reconstruction	Exempt	S19	95881
10	Butler	356 Corridor Improvements*	\$18,656,500	356	Mid-Term (2029-2036)	Upgrades/improvements to the flow of traffic with the addition of turning and through lanes, signal retiming and signal coordination along PA 356 from Upgrades/improvements to the flow of traffic with the addition of turning and through lanes, signal retiming, and signal coordination along PA 356 from just east of Harbison Road to just east of Younkens Road in Buffalo Township, Butler County.	Efficiency & Operations	Regionally Significant		106486
10	Butler	Mars RR Bridge West Expansion*	\$108,500,000	228	Mid-Term (2029-2036)	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.	New Capacity	Regionally Significant		92908

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**SPC 2050 Long Range Transportation Plan  
Fiscally Constrained Highway/Bridge Project List**

Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
10	Butler	SR 8 Butler City to SR 308*	\$2,157,800	8	Mid-Term (2029-2036)	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	Roadway Preservation	Exempt	S10	114789
10	Butler	US 422 Prospect PM	\$6,490,600	422	Mid-Term (2029-2036)	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 the bridge over Wallace Road, east to the intersection of Greenwood Drive Franklin, Muddy Creek & Butler Townships, Butler County	Roadway Preservation	Exempt	S10	115108
10	Butler	US 422 County Line West PM	\$5,974,370	422	Mid-Term (2029-2036)	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 near the intersection of SR 1015 (Game Reserve Rd) East to the Butler/Armstrong County Line (.3 miles east of Graham Rd) in Clearfield Township, Butler County	Roadway Preservation	Exempt	S10	117334
10	Butler	US 422 Lawrence County Line East PM*	\$4,434,000	422	Mid-Term (2029-2036)	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 the Butler County Line East to near the bridge over Wallace Road, in Muddy Creek Township, Butler County	Roadway Preservation	Exempt	S10	115104
10	Butler	US 422 Bonnie Brook East PM	\$4,233,270	422	Mid-Term (2029-2036)	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 east of the intersection of Bonnie Brook Road east to the intersection of W. Liberty Road in Summit and Clearfield Townships, Butler County	Roadway Preservation	Exempt	S10	115109
10	Butler	SR 422 Moraine EB & WB Bridges	\$21,218,000	422	Long-Term (2037-2052)	Bridge rehabilitation of the Eastbound and Westbound structures over Lake Arthur in Muddy Creek Township, Butler County	Bridge Rehab/ Reconstruction	Exempt	S19	121128
10	Butler	US 422 & Greenwood Drive Intersection	\$5,304,500	422	Long-Term (2037-2052)	Intersection improvements to include congestion reduction at the US 422 and Greenwood Drive intersection in Butler Township, Butler County	Efficiency & Operations	Exempt	R2	121126
10	Butler	Mars RR Bridge West Expansion*	\$14,600,000	228	Long-Term (2037-2052)	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.	New Capacity	Regionally Significant		92908

\*Multi-modal elements to be determined during project development

\*\*Projects funded with additional federal funds to the region in approved

**SPC 2050 Long Range Transportation Plan  
Fiscally Constrained Highway/Bridge Project List**

Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
10	Butler	SR 19 Cranberry PM*	\$26,020,000	19	Long-Term (2037-2052)	Preventative maintenance along SR 19 from the Allegheny/Butler County line north to Zellenople in Cranberry and Jackson Townships, Butler County.	Roadway Preservation	Exempt	S10	112422
10	Butler	SR 422 Butler Bypass PM*	\$29,941,000	422	Long-Term (2037-2052)	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.	Roadway Preservation	Exempt	S10	112434
10	Indiana	SR 56 Buena Vista Bridge Pres.*	\$4,863,000	56	Mid-Term (2029-2036)	Preservation (preventative maintenance) of the existing structure carrying PA 56 over Blacklick Creek and the Conrail Railroad in East Wheatfield Township, Indiana County.	Bridge Preservation	Exempt	S19	98805
10	Indiana	US 119 Hamil Northbound Bridge*	\$6,416,000	119	Mid-Term (2029-2036)	Preservation (preventative maintenance) of the existing structure carrying US 119 northbound over PA 286 in White Township.	Bridge Preservation	Exempt	S19	95727
10	Indiana	US 119 Hamil Southbound Bridge*	\$6,416,000	119	Mid-Term (2029-2036)	Preservation (preventative maintenance) of the existing structure carrying US 119 Southbound over PA 286 in White Township.	Bridge Preservation	Exempt	S19	95728
10	Indiana	US 119 over SR 8001 (Northbound and Southbound)*	\$15,950,710	119	Mid-Term (2029-2036)	Replacement of the existing structures carrying US 119 northbound and southbound over SR 8001 in White Township, Indiana County	Bridge Rehab/ Reconstruction	Exempt	S19	25621
10	Indiana	US 119 over Crooked Creek*	\$12,686,460	119	Mid-Term (2029-2036)	Replacement of the existing structure carrying US 119 over Crooked Creek in Rayne Township, Indiana County.	Bridge Rehab/ Reconstruction	Exempt	S19	117248
10	Indiana	US 119 Sullivan SB Bridge	\$5,390,160	119	Mid-Term (2029-2036)	Reconstruction of the existing structure carrying US 119 southbound over SR 954 in White Township, Indiana County.	Bridge Rehab/ Reconstruction	Exempt	S19	25616
10	Indiana	US 119 Sullivan NB Bridge*	\$5,390,160	119	Mid-Term (2029-2036)	Reconstruction of the existing structure carrying US 119 northbound over SR 954 in White Township, Indiana County.	Bridge Rehab/ Reconstruction	Exempt	S19	112537
10	Indiana	US 119 over Two Lick Ck.*	\$3,157,850	119	Mid-Term (2029-2036)	Rehabilitation of existing structure carrying US 119 over Two Lick Creek in Center Township, Indiana County	Bridge Rehab/ Reconstruction	Exempt	S19	95852
10	Indiana	SR 286 First Sergeant Alexander Kelly Memorial Bridge*	\$15,501,880	286	Mid-Term (2029-2036)	Replacement of the existing structure carrying SR 286 over the Kiskiminetas River in Saltsburg Borough, Indiana County.	Bridge Rehab/ Reconstruction	Exempt	S19	117685

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Fiscally Constrained Highway/Bridge Project List**

Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
10	Indiana	Bridge to Nowhere EB PM & WB PM*	\$15,865,220	422	Mid-Term (2029-2036)	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	Bridge Rehab/ Reconstruction	Exempt	S19	98811, 98827
10	Indiana	US 22 Penn View PM*	\$3,920,740	22	Mid-Term (2029-2036)	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.	Roadway Preservation	Exempt	S10	112424
10	Indiana	US 422 -Armstrong County Line to Indiana Bypass*	\$5,040,000	422	Mid-Term (2029-2036)	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	Roadway Preservation	Exempt	S10	114605
10	Indiana	SR 119 Indiana Bypass Reconstruction*	\$12,148,730	119	Mid-Term (2029-2036)	Highway reconstruction along SR 119 from 1/2 Mile south of the SR 119/422 Interchange, north to the SR 110 Interchange in Center, White and Rayne Townships.	Roadway Reconstruction	Exempt	S10	112431
10	Indiana	SR 286 Oakland Avenue Ped Safety*	\$4,420,000	286	Mid-Term (2029-2036)	Pedestrian safety improvements from IUP (Maple Street) to Plaza Drive in White Township and Indiana Borough, Indiana County.	Safety	Exempt	X12	99709
10	Indiana	US 119 Lutz School Rd NB Bridge*	\$6,806,800	119	Long-Term (2037-2052)	Reconstruction of the existing structure carrying US 119 northbound over SR 1003 (Lutz School Road) in White Township, Indiana County.	Bridge Rehab/ Reconstruction	Exempt	S19	112632
10	Indiana	US 119 Lutz School Rd SB Bridge*	\$6,806,800	119	Long-Term (2037-2052)	Reconstruction of the existing structure carrying US 119 southbound over SR 1003 (Lutz School Road) in White Township, Indiana County.	Bridge Rehab/ Reconstruction	Exempt	S19	112661
10	Indiana	Rossmoyne Bridges 2 and 3 (SR 210)*	\$6,500,000	210	Long-Term (2037-2052)	Replacement of the existing structure carrying SR 210 over a tributary to Ross Run and Ross Run in South Mahoning Township, Indiana County	Bridge Rehab/ Reconstruction	Exempt	S19	83261
10	Indiana	SR 403 Bridges - Dixonville	\$2,652,300	403	Long-Term (2037-2052)	Bridge replacement of a group of three bridges along SR 403 in Green Township, Indiana County	Bridge Rehab/ Reconstruction	Exempt	S19	121149
10	Indiana	US 22 & SR 217 Interchange Improvement*	\$24,400,700	22	Long-Term (2037-2052)	Interchange reconstruction along US 22 and PA 217 in Burrell Township and Blairsville Borough.	Efficiency & Operations	Exempt	R3	25543

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10	Indiana	SR 422 Cheese Rn Rd to Trim Tree Rd	\$18,069,200	422	Long-Term (2037-2052)	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.	Efficiency & Operations	Exempt	R4	100289
10	Indiana	Wayne Ave Safety (From Multimodal Study)*	\$5,304,500	4005	Long-Term (2037-2052)	Safety improvements including pedestrian upgrades along Wayne Avenue in Indiana Borough and White Township, Indiana County	Efficiency & Operations	Exempt	X12	121124
10	Indiana	SR 22 Through Blairsville PM*	\$18,535,000	22	Long-Term (2037-2052)	Preventative maintenance along SR 22 from Blairsville/Westmoreland County Line east to Snyder Lane in Burrell Township, Indiana County.	Roadway Preservation	Exempt	S10	112423
10	Indiana	US 22 Gas Center PM	\$18,151,000	22	Long-Term (2037-2052)	Highway resurfacing Along US 22 from PA 403 east to the Cambria County Line in East Wheatfield Township, Indiana County.	Roadway Preservation	Exempt	S10	99324
10	Indiana	US 22 Clyde PM	\$16,638,100	22	Long-Term (2037-2052)	Concrete preservation, Concrete patching, drainage adjustment, guiderail upgrades and a structural overlay along SR 22 from Kettle Hollow Road to just West of the SR 56 Interchange in West Wheatfield & East Wheatfield Townships, Indiana County	Roadway Preservation	Exempt	S10	112862
10	Indiana	SR 119 South PM*	\$47,050,000	119	Long-Term (2037-2052)	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.	Roadway Preservation	Exempt	S10	112421
10	Indiana	SR 22 Armagh Bypass Reconstruction	\$21,743,000	22	Long-Term (2037-2052)	Highway resurfacing 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.	Roadway Reconstruction	Exempt	S10	97102
10	Indiana	SR 422 Indiana Bypass Reconstruction*	\$53,862,000	422	Long-Term (2037-2052)	Highway reconstruction along SR 422 from the SR 119 Interchange East to 1/2 mile east of SR 553 Interchange in Cherryhill Township.	Roadway Reconstruction	Exempt	S10	112430
10	Armstrong, Butler, Indiana	Bridge NHS Preservation Line Item	\$6,090,200	Various	Mid-Term (2029-2036)	NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
10	Armstrong, Butler, Indiana	Bridge Non NHS Preservation Line Item	\$3,347,000	Various	Mid-Term (2029-2036)	Non NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
10	Armstrong, Butler, Indiana	Local/Off System Bridges	\$39,480,000	Various	Mid-Term (2029-2036)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD

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10	Armstrong, Butler, Indiana	Bridge Non NHS Reconstruction Line Item	\$30,674,380	Various	Mid-Term (2029-2036)	Non NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
10	Armstrong, Butler, Indiana	Efficiency & Operations Line Item	\$2,792,400	Various	Mid-Term (2029-2036)	Efficiency & Operations Reserve	Efficiency & Operations	Exempt	X1	TBD
10	Armstrong, Butler, Indiana	Roadway Non-NHS Preservation Line Item	\$19,400,000	Various	Mid-Term (2029-2036)	Non-NHS Reconstruction Preservation	Roadway Preservation	Exempt	S10	TBD
10	Armstrong, Butler, Indiana	Roadway NHS Preservation Line Item	\$5,110,310	Various	Mid-Term (2029-2036)	NHS Roadway Preservation Reserve	Roadway Preservation	Exempt	S10	TBD
10	Armstrong, Butler, Indiana	Roadway Non NHS Reconstruction	\$15,600,000	Various	Mid-Term (2029-2036)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
10	Armstrong, Butler, Indiana	Roadway NHS Reconstruction Line Item	\$2,951,270	Various	Mid-Term (2029-2036)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
10	Armstrong, Butler, Indiana	Safety Line Item	\$16,180,000	Various	Mid-Term (2029-2036)	Safety Reserve	Safety	Exempt	S6	TBD
10	Armstrong, Butler, Indiana	Bridge NHS Preservation Line Item	\$74,124,000	Various	Long-Term (2037-2052)	NHS Bridge Proconservation Reserve	Bridge Preservation	Exempt	S19	TBD
10	Armstrong, Butler, Indiana	Bridge Non-NHS Preservation Line Item	\$70,600,000	Various	Long-Term (2037-2052)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
10	Armstrong, Butler, Indiana	Bridge Non-NHS Reconstruction Line Item	\$182,510,000	Various	Long-Term (2037-2052)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
10	Armstrong, Butler, Indiana	Local/Off System Bridges	\$114,400,000	Various	Long-Term (2037-2052)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD

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10	Armstrong, Butler, Indiana	Bridge NHS Reconstruction Line Item	\$33,601,600	Various	Long-Term (2037-2052)	NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
10	Armstrong, Butler, Indiana	Roadway Non-NHS Preservation Line Item	\$31,076,600	Various	Long-Term (2037-2052)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	Exempt	S10	TBD
10	Armstrong, Butler, Indiana	Roadway Non-NHS Reconstruction Line Item	\$49,300,000	Various	Long-Term (2037-2052)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
10	Armstrong, Butler, Indiana	Roadway NHS Reconstruction Line Item	\$2,752,400	Various	Long-Term (2037-2052)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
10	Armstrong, Butler, Indiana		\$40,895,500	Various	Long-Term (2037-2052)	Safety Reserve	Safety	Exempt	S6	TBD
10	Armstrong/ Butler	SR 28 AVE Reconstruction*	\$100,785,500	28	Long-Term (2037-2052)	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.	Roadway Reconstruction	Exempt	S10	112427
11	Allegheny	Bridge over Route 51 Near Woodruff St. Demo*	\$1,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge removal over PA 51, Saw Mill Run Boulevard in the City of Pittsburgh, Allegheny County	Bridge Demolition	Exempt	S6	117472
11	Allegheny	West End Bridge*	\$85,000,000	19	Mid-Term (2029-2036)	Bridge preservation and painting of the West End Bridge (US 19) over the Ohio River and CSX Railroad in the City of Pittsburgh, Allegheny County.	Bridge Preservation	Exempt	S19	100956
11	Allegheny	Highland Park Bridge*	\$65,000,000	1005	Mid-Term (2029-2036)	Bridge preservation on SR 1005 (Highland Park) over Allegheny River, Norfolk Southern Railway and AVR Railroad in Sharpsburg Borough, Allegheny County.	Bridge Preservation	Exempt	S19	109549
11	Allegheny	McKees Rocks Bridge Phase 3*	\$20,000,000	3104	Mid-Term (2029-2036)	Bridge preservation on State Route 3104 (McKees Rocks Bridge) over Ohio River and Norfolk Southern Railroad in the City of Pittsburgh, Allegheny County.	Bridge Preservation	Exempt	S19	100701
11	Allegheny	Rankin Bridge*	\$27,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Allegheny County) Bridge preservation over Monongahela River, SR 9111, Union RR, P&LE RR and Kenmawr Avenue in Rankin Borough, Allegheny County	Bridge Preservation	Exempt	S19	56960

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11	Allegheny	Mission St. (West)*	\$19,244,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge preservation on Mission Street between Sterling Street and South 18th Street in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	28279
11	Allegheny	Corliss Tunnel*	\$15,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Tunnel reconstruction and preservation work on the structure that carries Corliss Street from the intersection of West Carson Street westward toward Craffton Heights in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	27806
11	Allegheny	Jacks Run Br 1 (JA01) Bridge Preservation*	\$10,300,000	Local	Mid-Term (2029-2036)	(Sponsor = Allegheny County) Bridge preservation on California Avenue over Farragut Street and Jacks Run in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	117776
11	Allegheny	62nd Street Bridge*	\$45,000,000	8	Mid-Term (2029-2036)	Bridge deck replacement on the 62nd Street Bridge in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	100958
11	Allegheny	SR 65 Fremont Street Bridge Preservation*	\$24,000,000	65	Mid-Term (2029-2036)	Bridge rehabilitation on State Route 65, Ohio River Boulevard over Fremont Street in Bellevue, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	100935
11	Allegheny	Tarentum Bridge ov NS RR*	\$50,000,000	366	Mid-Term (2029-2036)	Bridge restoration/replacement on PA 366, Tarentum Bridge over Norfolk Southern Rail and Allegheny River, in Tarentum Borough, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	100624
11	Allegheny	Tarentum Bridge Ramps A, B, C, D*	\$10,100,000	366	Mid-Term (2029-2036)	Bridge preservation on Ramps A, B, C, an D of the Tarentum Bridge over the Conrail Railroad, 4th Avenue and SR 8088 (Ramp D) in Tarentum Borough, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	63306
11	Allegheny	Streets Run Road Culvert	\$6,100,000	2046	Mid-Term (2029-2036)	Bridge replacement on SR 2046, Streets Run Road over Streets Run in Baldwin Borough, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	74320
11	Allegheny	Electric Ave ov Falls Run*	\$32,400,000	2112	Mid-Term (2029-2036)	Bridge restoration/replacement on SR 2112, Electric Avenue over Falls Run in East Pittsburgh and Turtle Creek Boroughs, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	78232
11	Allegheny	McKeesport-Duquesne Southern Ramps Deck Replacement*	\$48,000,000	2114	Mid-Term (2029-2036)	Bridge rehabilitation on the southern end of the McKeesport-Duquesne Bridge (SR 2114) in the City of McKeesport, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	100955
11	Allegheny	Homestead-Grays Bridge Rehabilitation*	\$90,000,000	7301	Mid-Term (2029-2036)	(Sponsor = Allegheny County) Bridge rehabilitation on Homestead Grays Bridge over parking lot parallel to CSX Railroad in Homestead Borough, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	103366

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11	Allegheny	Swindell Bridge*	\$32,000,000	7301	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) 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	Bridge Rehab/Reconstruction	Exempt	S19	114150
11	Allegheny	McKeesport Bridge Ramp #2*	\$2,500,000	7304	Mid-Term (2029-2036)	Bridge replacement on the McKeesport Bridge Ramps #2 from West 5th Avenue to Pacific Street (10th Ward) in the City of McKeesport, Allegheny County	Bridge Rehab/Reconstruction	Exempt	S19	121076
11	Allegheny	Talbot Avenue Ramp Bridge Rehabilitation*	\$6,531,000	7456	Mid-Term (2029-2036)	(Sponsor = Allegheny County) Bridge rehabilitation on Ramp located on Rankin Bridge to Talbot Ave, over Union RR, in Rankin Borough, Allegheny County	Bridge Rehab/Reconstruction	Exempt	S19	93915
11	Allegheny	Blvd of Allies - Ramp H*	\$21,400,000	8002	Mid-Term (2029-2036)	Deck replacement on Ramp H from Crosstown Blvd. (SR 0579) to Blvd. of the Allies, in the City of Pittsburgh, Allegheny County.	Bridge Rehab/Reconstruction	Exempt	S19	109562
11	Allegheny	California Avenue Bridge*	\$23,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge improvement on California Bridge that connects the Marshall-Shadeland and Brighton Heights neighborhoods within the City of Pittsburgh, Allegheny County	Bridge Rehab/Reconstruction	Exempt	S19	117889
11	Allegheny	Hot Metal Bridge*	\$21,400,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge rehabilitation located on Hot Metal Street between Second Avenue and South Water Street in the City of Pittsburgh, Allegheny County	Bridge Rehab/Reconstruction	Exempt	S19	119367
11	Allegheny	Larimer Avenue Bridge*	\$19,875,000	Local	Mid-Term (2029-2036)	Sponsor = Pittsburgh) Bridge restoration/replacement on Larimer Avenue Bridge over Allegheny Valley Railroad in the City of Pittsburgh, Allegheny County	Bridge Rehab/Reconstruction	Exempt	S19	106386
11	Allegheny	West Carson Street Bridge*	\$10,000,000	Local	Mid-Term (2029-2036)	(Sponsor = City of Pittsburgh) Bridge rehab/replacement on West Carson Street (SR 7301) over Chartiers Creek at its confluence with the Ohio River. The West Carson Street bridge carries traffic between the Sheridan neighborhood of the City of Pittsburgh and McKees Rocks Borough, Allegheny County	Bridge Rehab/Reconstruction	Exempt	S19	114266
11	Allegheny	16th Street Bridge*	\$9,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Allegheny County) Bridge rehabilitation on 16th Street Bridge in the City of Pittsburgh, Allegheny County.	Bridge Rehab/Reconstruction	Exempt	S19	118872
11	Allegheny	McArdle Rdwy over Hillside*	\$8,600,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge rehabilitation on P.J. McArdle Roadway northwest of the Wabash Tunnel in the City of Pittsburgh, Allegheny County.	Bridge Rehab/Reconstruction	Exempt	S19	119376

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11	Allegheny	Bloomfield Bridge*	\$7,100,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge rehabilitation located between Liberty Avenue and Bigelow Boulevard in City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119365
11	Allegheny	Mission St. (East)*	\$6,100,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge rehabilitation on Mission Street between Sterling Street and South 18th Street in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119364
11	Allegheny	McArdle Rdwy over Sycamore*	\$5,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Bridge rehabilitation on P.J. McArdle Roadway over East Sycamore Street in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119375
11	Allegheny	McKeesport Bridge Ramps (10th Ward)*	\$2,500,000	Local	Mid-Term (2029-2036)	(Sponsor = McKeesport) Bridge rehabilitation activities located on the McKeesport Bridge ramps #1 and #2 from West 5th Avenue to Pacific Street (10th Ward) in the City of McKeesport, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	119603
11	Allegheny	I-79 at PA 910	\$6,225,000	79	Mid-Term (2029-2036)	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	Efficiency & Operations	Regionally Significant		104328
11	Allegheny	Fifth Avenue Signal Improvement Project*	\$9,000,000	Local	Mid-Term (2029-2036)	Signal improvements on Fifth Avenue in Oakland in the City of Pittsburgh, Allegheny County	Efficiency & Operations	Regionally Significant		119398
11	Allegheny	Beaver Avenue Esplanade (Two-Way Conversion)*	\$8,250,000	Local	Mid-Term (2029-2036)	Transportation study located on Beaver Avenue in the Chateau Neighborhood along the Ohio River near Pittsburgh's Manchester section, just north of the West End Bridge in the City of Pittsburgh, Allegheny County	Efficiency & Operations	Exempt	X1	118708
11	Allegheny	PGH CBD Signals Phase 5 & 6	\$12,000,000	Various	Mid-Term (2029-2036)	Signal Software and Hardware upgrade/replacement project within the City of Pittsburgh; affected locations not yet determined; Project sponsor is City of Pittsburgh	Efficiency & Operations	Regionally Significant		119613
11	Allegheny	I-376 Arterial Traffic Management**	\$9,079,000	Various	Mid-Term (2029-2036)	Arterial Traffic Management on South Braddock Ave and US Route 30 will allow PennDOT to control two key signalized arterials from their Traffic Management Center as alternative routes during incidents on I-376. Project will upgrade communications and equipment on these corridors, install transit signal priority, and potentially install transit flex lanes in order to encourage modal shift, reduce travel times, and reduce crashes.	Efficiency & Operations	Regionally Significant		121452

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11	Allegheny	US Route 22: Washington County Line to Imperial Interchange*	\$30,256,000	22	Mid-Term (2029-2036)	Crack and seal on US 22, from the Washington County Line to the Imperial Interchange in North Fayette and Findlay Townships, Allegheny County	Roadway Preservation	Exempt	S10	100768
11	Allegheny	US 22 - Imperial Interchange to McKee Rd	\$26,256,000	22	Mid-Term (2029-2036)	Crack and seal on US 22, from Imperial Interchange to McKee Road in North Fayette Township, Allegheny County	Roadway Preservation	Exempt	S10	100769
11	Allegheny	PA 28/East Ohio St*	\$6,000,000	28	Mid-Term (2029-2036)	Patch and overlay on PA 28, from General Robinson Street to Heinz Wall in the City of Pittsburgh, Allegheny County	Roadway Preservation	Exempt	S10	100773
11	Allegheny	SR 60, Steubenville Pike*	\$6,500,000	60	Mid-Term (2029-2036)	Pavement resurfacing on SR 60 (Steubenville Pike) from Lorish Road to SR 22 in Robinson Township, Allegheny County	Roadway Preservation	Exempt	S10	91723
11	Allegheny	PA 65: Fort Duquesne to Kendal*	\$13,000,000	65	Mid-Term (2029-2036)	Milling and resurfacing on SR 65, Ohio River Boulevard in the City of Pittsburgh, Bellevue, Avalon, Ben Avon and Emsworth, Allegheny County	Roadway Preservation	Exempt	S10	79448
11	Allegheny	PA 65: Ohio River Blvd - Ped Walkway*	\$10,200,000	65	Mid-Term (2029-2036)	Resurfacing on PA 65, Ohio River Boulevard from the Pedestrian Walk Way to 200 feet past Eckert Street Bridge in City of Pittsburgh	Roadway Preservation	Exempt	S10	100798
11	Allegheny	PA 65 Emsworth to I-79*	\$10,000,000	65	Mid-Term (2029-2036)	Patch and overlay on PA 65 (Ohio River Blvd) from Emsworth to I-79 in Kilbuck Township and Emsworth and Glenfield Boroughs, Allegheny County	Roadway Preservation	Exempt	S10	109349
11	Allegheny	PA 65: Ohio River Blvd - River Ave*	\$8,280,000	65	Mid-Term (2029-2036)	Resurfacing on PA 65, Ohio River Boulevard from River Avenue to Edgeworth Lane in Edgeworth and Sewickley Boroughs	Roadway Preservation	Exempt	S10	100797
11	Allegheny	Bigelow Boulevard*	\$14,000,000	400	Mid-Term (2029-2036)	Mill and overlay on SR 400 (Bigelow Blvd) from Segment 4 to Segment 20 in the City of Pittsburgh, Allegheny County	Roadway Preservation	Exempt	S10	109383
11	Allegheny	Streets Run Road*	\$14,000,000	2046	Mid-Term (2029-2036)	Drainage investigation on SR 2046 (Streets Run Road) from Prospect Road to Baldwin Road in Baldwin and West Mifflin Boroughs, Allegheny County	Roadway Preservation	Exempt	X1	91796
11	Allegheny	Babcock Boulevard - Three Degree to Evergreen Road	\$16,200,000	Local	Mid-Term (2029-2036)	Pavement resurfacing located on Babcock Boulevard from Three Degree Road to Evergreen Road in McCandless and Ross Townships, Allegheny County	Roadway Preservation	Exempt	S10	119931

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11	Allegheny	Kittanning St Flood Control*	\$21,000,000	1004	Mid-Term (2029-2036)	Culvert replacement and flood mitigation on SR 1004, Kittanning Pike/Kirkwood Drive in O'Hara Township, Allegheny County	Roadway Reconstruction	Exempt	S2	116096
11	Allegheny	Painters Run Rd*	\$33,150,000	Local	Mid-Term (2029-2036)	(Sponsor = Allegheny County) 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.	Roadway Reconstruction	Exempt	S10	118882
11	Allegheny	Grant Street Reconstruction Phase 1*	\$15,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Reconstruction on Grant Street from the Parkway to Fifth Avenue in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	Exempt	S10	119399
11	Allegheny	Penn Avenue Reconstruction Phase 3*	\$11,300,000	Local	Mid-Term (2029-2036)	Highway reconstruction on Penn Avenue from Graham Street to Negley Avenue, in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	Exempt	S10	119433
11	Allegheny	Beck's Run Road*	\$9,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Allegheny County) Highway reconstruction on Beck's Run Road between East Carson Street and Brownsville Road in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	Exempt	S10	27491
11	Allegheny	Neville Road*	\$8,000,000	Local	Mid-Term (2029-2036)	(Sponsor = Allegheny County) Highway restoration on Neville Road from Grand Avenue to the Fleming Park Bridge in Neville Township, Allegheny County	Roadway Reconstruction	Exempt	S10	106269
11	Allegheny	PA 50: i-79 to Thoms Run*	\$12,000,000	50	Mid-Term (2029-2036)	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.	Safety	Regionally Significant		109640
11	Allegheny	i-376/Banksville Interchange	\$66,780,000	376	Mid-Term (2029-2036)	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).	Safety	Regionally Significant		97028
11	Allegheny	SR 885 (Bates Street) Improvement*	\$26,500,000	885	Mid-Term (2029-2036)	Widening from 2 lanes to 4 lanes on S.R. 885 (Bates Street) from Second Ave. to Boulevard of the Allies in the City of Pittsburgh, Allegheny County.	Safety	Regionally Significant		98125

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11	Allegheny	I-376 Inbound Transit Hard Shoulder and off Ramp**	\$44,679,000	376	Mid-Term (2029-2036)	Project will convert I-376 Parkway East inbound shoulder from Exit 77 (Wilkinsburg) to the Chestnut Street Bridge over the Parkway to a hard shoulder allowing for transit bus usage and connection to Edgewood Ave via a new bus-only off ramp. A new off-ramp to Edgewood Avenue will exit westbound I-376 in the vicinity of the Chestnut Street bridge, near an existing crossover entrance to the East Busway.	Transit	Regionally Significant		121447
11	Allegheny	US 30 Westinghouse Bridge*	\$24,304,200	30	Long-Term (2037-2052)	Bridge preservation on US 30, Westinghouse Bridge over Turtle Creek and railroad tracks, one mile west of SR 148 in East Pittsburgh Borough, Allegheny County	Bridge Preservation	Exempt	S19	111624
11	Allegheny	Marshall Ave Interchange - Bridge Preservation*	\$42,436,000	65	Long-Term (2037-2052)	Bridge preservation located on the SR 8049 (Marshall Interchange area at Chateau Street & California Avenue) in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	119021
11	Allegheny	Clairton-Glassport Bridge*	\$20,761,800	2038	Long-Term (2037-2052)	Bridge rehabilitation on SR 2038 over Monongahela River in the City of Clairton, Allegheny County	Bridge Preservation	Exempt	S19	118913
11	Allegheny	SR 2048 Hall Station Bridge*	\$19,475,000	2048	Long-Term (2037-2052)	Bridge preservation on SR 2048 over Thompson Run in Monroeville Borough, Allegheny County	Bridge Preservation	Exempt	S19	111630
11	Allegheny	Hulton Bridge Preservation*	\$14,852,600	2082	Long-Term (2037-2052)	Bridge preservation located on SR 2082 (Hulton Bridge) over the Allegheny River in Harmar Township and Oakmont Borough, Allegheny County	Bridge Preservation	Exempt	S19	119168
11	Allegheny	Liberty Bridge Preservation*	\$25,674,000	3069	Long-Term (2037-2052)	Bridge preservation located on SR 3069 (Liberty Bridge) over the Monongahela River in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	119018
11	Allegheny	Sewickley Bridge Preservation Phase 2*	\$55,804,000	4025	Long-Term (2037-2052)	Bridge rehabilitation on SR 4025, Sewickley Bridge over the Ohio River in Sewickley Boroughs, Allegheny County	Bridge Preservation	Exempt	S19	114106
11	Allegheny	S. Millvale Avenue Bridge*	\$23,263,400	Local	Long-Term (2037-2052)	(Sponsor = Pittsburgh) Bridge preservation on South Millvale Avenue between Yew Street and Morewood Avenue over Gross Street and the East Busway in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	27138
11	Allegheny	Sutersville Bridge*	\$11,225,400	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation on 1st Street (Sutersville Bridge) over Youghiogheny River in Elizabeth Township, Allegheny County. (Sponsor = Allegheny County)	Bridge Preservation	Exempt	S19	93913

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11	Allegheny	Coraopolis Bridge*	\$11,225,400	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation located at the intersection of Grand Ave and Fourth Avenue (Route 51 North) in Coraopolis Borough, Allegheny County	Bridge Preservation	Exempt	S19	119348
11	Allegheny	10th Street Bridge Preservation*	\$8,555,000	Local	Long-Term (2037-2052)	Sponsor = Allegheny County) 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	Bridge Preservation	Exempt	S19	118910
11	Allegheny	Mansfield Bridge*	\$7,790,200	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation on Mansfield Bridge over the Monongahela River in Dravosburg Borough, Allegheny County	Bridge Preservation	Exempt	S19	117775
11	Allegheny	6th Street Bridge Preservation*	\$5,622,800	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation located on 6th Street Bridge (Roberto Clemente Bridge) in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	119363
11	Allegheny	7th Street Bridge Preservation*	\$5,622,800	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation located on 7th Street Bridge (Andy Warhol Bridge) in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	119366
11	Allegheny	9th Street Bridge Preservation*	\$5,622,800	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation located on 9th Street Bridge (Rachel Carson Bridge) in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	119368
11	Allegheny	Shades Run Brdg No. 3*	\$5,304,500	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation located on Lincoln Rd in Penn Hills over Shades Run between Lincoln Ave Ext, Doak St and Fahey St and Riverview Memorial Park, Penn Hill Borough, Allegheny County	Bridge Preservation	Exempt	S19	119349
11	Allegheny	Levi Bird Duff Bridge Preservation*	\$3,182,700	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge preservation located on Center Ave over the Parkway North/I-279 in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	119357
11	Allegheny	SR 28 Deck Replacements*	\$131,595,000	28	Long-Term (2037-2052)	Bridge deck replacements (8 Structures) on SR 28 in Harmar Township, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	100959
11	Allegheny	SR 51 Cloverleaf Bridge Replacement*	\$9,831,400	51	Long-Term (2037-2052)	Bridge rehabilitation on PA 51, Clairton Boulevard over Lebanon Church Road in Pleasant Hills Borough, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	119351

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11	Allegheny	SR 65, Spruce Run Rd Bridge*	\$72,605,000	65	Long-Term (2037-2052)	Bridge replacement on SR 65 (Spruce Run Road) over Spruce Run in Ben Avon Borough, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	56883
11	Allegheny	SR 65, Eckert Street Bridge*	\$55,965,700	65	Long-Term (2037-2052)	Bridge replacement on SR 65 (Ohio River Boulevard) over Eckert Street in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	115421
11	Allegheny	SR 65 over Abandoned Roadway at McKees Rocks Bridge*	\$31,296,500	65	Long-Term (2037-2052)	Bridge replacement on PA 65, Ohio River Boulevard over an abandoned roadway North of the McKees Rocks Bridge in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119352
11	Allegheny	Dilworth Run Bridge Replacement (SR 65)*	\$18,565,800	65	Long-Term (2037-2052)	Bridge Replacement on PA 65, Ohio River Boulevard over Dilworth Run in the Borough of Bellevue, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119353
11	Allegheny	Dilworth Run Bridge No. 3*	\$11,018,000	65	Long-Term (2037-2052)	Bridge rehabilitation located on Ohio River Blvd over Dilworth Run between Home Ave and Riverview Ave in Bellevue Borough, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119355
11	Allegheny	Kennywood Bridge Deck Replacement*	\$30,251,600	837	Long-Term (2037-2052)	Bridge deck replacement located on SR 837 (Duquesne Boulevard) at Kennywood Park Bridge over abandoned Union Railroad yard in West Mifflin Borough and City of Duquesne, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119167
11	Allegheny	Glenwood Bridge*	\$15,913,500	885	Long-Term (2037-2052)	Bridge rehabilitation on Glenwood Bridge located in Baldwin, Pittsburgh and West Homestead, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	118863
11	Allegheny	Highland Park Bridge/Ramps Reconstruction*	\$98,345,400	1005	Long-Term (2037-2052)	Bridge and ramp restoration on SR 1005 (Highland Park Bridge) over the Allegheny River, includes Ramps F and G (SR 8082) in the City of Pittsburgh, O'Hara Township, Sharpsburg Borough, and Indiana Township, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	118946
11	Allegheny	Business 22 over Rodi Rd Replacement*	\$36,301,900	2048	Long-Term (2037-2052)	Bridge replacement on SR 2048, William Penn Highway over Rodi Road and Chalfont Run in Wilkins Township, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119335
11	Allegheny	Birmingham Bridge*	\$72,120,000	2085	Long-Term (2037-2052)	Bridge rehabilitation on SR 2085, Birmingham Bridge in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	118912

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11	Allegheny	Forbes Avenue over South Neville Street*	\$7,956,800	2108	Long-Term (2037-2052)	Bridge rehabilitation on Forbes Avenue over South Neville Street and Hammerslag Drive in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119406
11	Allegheny	40th Street Bridge*	\$51,400,000	2124	Long-Term (2037-2052)	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.	Bridge Rehab/ Reconstruction	Exempt	S19	69071
11	Allegheny	Smithfield Street Bridge Deck Replacement*	\$31,827,000	3027	Long-Term (2037-2052)	Bridge deck replacement located on SR 3027 (Smithfield Street Bridge) which carries Smithfield Street over the Monongahela River in City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	Exempt	S19	119169
11	Allegheny	Liberty Bridge Ramps Deck Replacements*	\$101,343,500	8067	Long-Term (2037-2052)	Bridge improvement on the northern end of the Liberty Bridge (SR 3069) in the City of Pittsburgh, Allegheny County. Includes BRKEYs 45326, 45327, 2731, 2732, 2733, 2739.	Bridge Rehab/ Reconstruction	Exempt	S19	119334
11	Allegheny	Windgap Bridge*	\$26,613,200	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge rehabilitation located over Edmore and Creek Road near Chartiers Creek #2 in McKees Rocks Borough, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	119354
11	Allegheny	Murray Ave over Beechwood Boulevard*	\$16,974,400	Local	Long-Term (2037-2052)	(Sponsor = Pittsburgh) Bridge rehabilitation on Murray Avenue between Burchfield Avenue and Flemington Street over Beechwood Boulevard in the City of Pittsburgh, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	119404
11	Allegheny	Hartman's Run Bridge No. 4*	\$16,641,300	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge rehabilitation located on Congress Street over Hartman's Run, McKeesport Borough, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	119356
11	Allegheny	Fleming Park Bridge*	\$15,914,000	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge rehabilitation (OB04) Fleming Park Bridge over Ohio River Back Channel and Railroad located in Neville Township. Carries Neville Road over a backchannel of the Ohio River. It is located near the intersection of Neville Road and SR 51.	Bridge Rehab/ Reconstruction	Exempt	S19	93418
11	Allegheny	Meadow St over Negley Run Boulevard*	\$13,792,000	Local	Long-Term (2037-2052)	(Sponsor = Pittsburgh) Bridge rehabilitation on Meadow Street between Lenora Street and St. Marie Street over Negley Run Boulevard in the City of Pittsburgh, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	119403
11	Allegheny	16th Street Bridge*	\$11,669,900	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Bridge rehabilitation on 16th Street Bridge in the City of Pittsburgh, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	118872
11	Allegheny	Lincoln Ave over Washington Boulevard*	\$10,095,500	Local	Long-Term (2037-2052)	(Sponsor = Pittsburgh) Bridge rehabilitation on Lincoln Avenue over Washington Boulevard in the City of Pittsburgh, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	119402

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11	Allegheny	Chartiers Ave Bridge over West Busway*	\$5,304,000	Local	Long-Term (2037-2052)	(Sponsor = Pittsburgh) Bridge rehabilitation on Chartiers Avenue between Straka Street and Hillsboro Street over the West Busway in the City of Pittsburgh, Allegheny County.	Bridge Rehab/ Reconstruction	Exempt	S19	83132
11	Allegheny	PGH CBD Signals Phase 7	\$6,500,000	Various	Long-Term (2037-2052)	Signal Software and Hardware upgrade/replacement project within the City of Pittsburgh; affected locations not yet determined; Project sponsor is City of Pittsburgh.	Efficiency & Operations	Regionally Significant		119394
11	Allegheny	PA 51 - Curry Hollow - SR 88*	\$24,238,000	51	Long-Term (2037-2052)	Roadway resurfacing located on PA-51 from SR 2040 (Lebanon Church Road) to SR 88 (Library Road) in Baldwin, Pleasant Hills, Whitehall and Brentwood Boroughs, and the City of Pittsburgh, Allegheny County.	Roadway Preservation	Exempt	S10	100793
11	Allegheny	Greensburg Pike*	\$15,914,000	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Roadway improvements, add sidewalks and bike lanes on Greensburg Pike, Allegheny County.	Roadway Preservation	Exempt	S10	119370
11	Allegheny	SR 8, William Flinn Hwy, Saxonburg to Butler Plank*	\$19,456,900	8	Long-Term (2037-2052)	Reconstruction of SR 8 from Saxonburg Blvd to Butler Plank Road in Shaler Township, Allegheny County.	Roadway Reconstruction	Exempt	S10	119340
11	Allegheny	SR 19, Wexford Flats*	\$18,553,000	19	Long-Term (2037-2052)	Highway reconstruction on Perry Highway, SR 19, from McKnight Rd to Brown Rd. in McCandless and Pine Townships, Allegheny County.	Roadway Reconstruction	Exempt	S10	119337
11	Allegheny	SR 28, Yutes Run to Bull Creek*	\$15,913,500	28	Long-Term (2037-2052)	Highway Reconstruction located on State Route 28 (Allegheny Valley Expressway) from Yutes Run to Bull Creek in Fawn, Frazer, East Deer, Springdale Townships and Tarentum Borough.	Roadway Reconstruction	Exempt	S10	100777
11	Allegheny	PA 28: Millvale-Etna Interchange*	\$10,609,000	28	Long-Term (2037-2052)	Mill and overlay located on SR 28 from Millvale to Etna Interchange in Allegheny County.	Roadway Reconstruction	Exempt	S10	92271
11	Allegheny	US 30 Lincoln Highway, SR 148 to WECCO Line*	\$22,295,000	30	Long-Term (2037-2052)	Reconstruction of US 30 from intersection with SR 148 to Westmoreland County line in North Versailles and East McKeesport, Allegheny County.	Roadway Reconstruction	Exempt	S10	81691
11	Allegheny	SR 65, Ohio River Blvd, MR Bridge to Terrace Dr.*	\$33,643,300	65	Long-Term (2037-2052)	Reconstruction of SR 65 from McKees Rocks Bridge to Terrace Dr. in Emsworth, Allegheny County.	Roadway Reconstruction	Exempt	S10	94646

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11	Allegheny	PA 65: Fort Duquesne Br to Cal Ave	\$18,150,900	65	Long-Term (2037-2052)	Concrete pavement restoration of SR 65 from the Fort Duquesne Bridge to California Avenue in the City of Pittsburgh Allegheny County.	Roadway Reconstruction	Exempt	S10	92279
11	Allegheny	SR 400, Bigelow Blvd, Chatham St to Bloomfield Bridge*	\$18,240,000	400	Long-Term (2037-2052)	Reconstruction of SR 400, Bigelow Blvd from Chatham St to Bloomfield Bridge. Ramps in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	Exempt	S10	119350
11	Allegheny	Lebanon Church Road, Brownsville Rd to Buttermilk Hollow*	\$27,159,000	2040	Long-Term (2037-2052)	Reconstruction of SR2040, Lebanon Church Rd from Brownsville Rd. to Buttermilk Hollow, in South Park Township, Baldwin, Jefferson, Pleasant Hills, and West Mifflin Boroughs Allegheny County.	Roadway Reconstruction	Exempt	S10	119345
11	Allegheny	SR 2046, Streets Run Reconstruction and Flood Mitigation*	\$16,904,000	2046	Long-Term (2037-2052)	Roadway Reconstruction and Flood Mitigation on SR 2046, Streets Run Road from Prospect Road to Mifflin Road in the City of Pittsburgh, Baldwin and West Mifflin Boroughs, Allegheny County.	Roadway Reconstruction	Exempt	S10	119336
11	Allegheny	McKnight Road, Venture to Perrymont*	\$66,272,300	4003	Long-Term (2037-2052)	Reconstruction on SR 4003, McKnight Road, from Venture St. to Perrymont in the City of Pittsburgh, Ross and McCandless Townships, Allegheny County.	Roadway Reconstruction	Exempt	S10	119333
11	Allegheny	Wall Ave, Station to Mosside*	\$10,609,000	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Roadway and sidewalk improvements on Wall Ave from Station St to Mosside Blvd, Allegheny County.	Roadway Reconstruction	Exempt	S10	119372
11	Allegheny	5th Avenue, US 30 to Station St*	\$10,609,000	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Roadway reconstruction located on 5th Avenue from Lincoln Highway (US 30) to Station Street, Allegheny County	Roadway Reconstruction	Exempt	S10	119374
11	Allegheny	Monroeville Blvd*	\$9,935,800	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Roadway reconstruction located on Monroeville Boulevard in Monroeville Borough, Allegheny County.	Roadway Reconstruction	Exempt	S10	119360
11	Allegheny	Warrington Av Reconstruction*	\$7,427,000	Local	Long-Term (2037-2052)	(Sponsor = Pittsburgh) Highway reconstruction on Warrington Avenue in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	Exempt	S10	119407
11	Allegheny	Steuben Street, Crafton/Ingram*	\$7,426,000	Local	Long-Term (2037-2052)	(Sponsor = Allegheny County) Roadway reconstruction located from Union Avenue to Middletown Road in Ingram Borough, City of Pittsburgh and Crafton Borough, Allegheny County.	Roadway Reconstruction	Exempt	S10	119369
11	Allegheny	West End Bridge Ramps	\$7,000,000	8055	Mid-Term (2029-2036)	Bridge preservation located on Ramp B, Ramp D, and Ramp F over Beaver Avenue, SR 65 and West End Bridge in City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	113632

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11	Allegheny	Herron Ave Bridge Preservation*	\$6,000,000	Local	Mid-Term (2029-2036)	Bridge preservation on Herron Avenue over NSRC and CSX RR in the City of Pittsburgh, Allegheny County	Bridge Preservation	Exempt	S19	117366
11	Allegheny	22/30 over Parkway West*	\$6,498,000	22	Mid-Term (2029-2036)	Reconfiguration of the SR 22/30 Steubenville Pike over I-376 Interchange to a Diverging Diamond, located in Robinson Township, Allegheny County. This project will include a bridge replacement on SR 22/30 over I-376	Bridge Rehab/ Reconstruction	Exempt	R3	27445
11	Allegheny	SR 30/SR 48 Intersection Improvement w/D12*	\$19,500,000	30	Mid-Term (2029-2036)	Intersection improvements and flood mitigation on SR 30 and SR 48 in North Versailles Township, Allegheny County	Efficiency & Operations	Regionally Significant		116655
11	Allegheny	PA 51, Hayden Boulevard*	\$14,420,000	51	Mid-Term (2029-2036)	Mill and overlay on PA 51, Hayden Boulevard, from Aery Road to Hutchinson Road in Forward and Elizabeth Townships, Allegheny County	Roadway Preservation	Exempt	S10	105450
11	Allegheny	Banksville Road Reconstruction*	\$18,335,000	19	Mid-Term (2029-2036)	Reconstruction of SR 19 from McFarland Rd to I-376 in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	Exempt	S10	119343
11	Allegheny	US 22 - McKee Road to Parkway*	\$9,750,000	22	Mid-Term (2029-2036)	Reconstruction on US 22 from McKee Road to the Parkway in Robinson Township, Allegheny County	Roadway Reconstruction	Exempt	S10	100770
11	Allegheny	Saw Mill Run Blvd: PA 88 to US 19	\$30,000,000	51	Mid-Term (2029-2036)	Reconstruction of Saw Mill Run Boulevard from PA 88 (Library Road) to I-376 in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	Exempt	S10	100789
11	Allegheny	Smithfield St Phase 2 - Fort Pitt Blvd to Forbes*	\$13,250,000	Local	Mid-Term (2029-2036)	(Sponsor = Pittsburgh) Reconstruction on Smithfield Street from Fort Pitt Boulevard to Forbes Avenue in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	Exempt	S10	102645
11	Allegheny	Grand Avenue - Roadway Reconstruction*	\$8,250,000	Local	Mid-Term (2029-2036)	Roadway reconstruction located on Grand Avenue in Neville Township, Allegheny County	Roadway Reconstruction	Exempt	S10	119359
11	Allegheny	SR 28: Resurfacing and Bridge Preservation*	\$29,504,000	28	Long-Term (2037-2052)	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, Allegheny County.	Roadway Preservation	Exempt	S10	118921
11	Allegheny	PA 51 - Cloverleaf to Liberty Tunnels*	\$21,218,000	51	Long-Term (2037-2052)	Pavement preservation on SR 51, Saw Mill Run Boulevard, from the Cloverleaf to the Liberty Tunnels in the City of Pittsburgh, Allegheny County	Roadway Preservation	Exempt	S10	119224
11	Allegheny	PA 51 - Whited Street to Bausman Street*	\$21,218,000	51	Long-Term (2037-2052)	Roadway work on SR 51, Saw Mill Run Boulevard, from Whited Street to Bausman Street, in the City of Pittsburgh, Allegheny County	Roadway Preservation	Exempt	S10	119225

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11	Allegheny	Washington Blvd Reconstruction*	\$21,854,500	8	Long-Term (2037-2052)	Reconstruction of Washington Boulevard to improve flooding conditions in City of Pittsburgh, Allegheny County. Contingent upon study recommendations	Roadway Reconstruction	Exempt	S10	118819
11	Allegheny	SR 28, Allegheny Valley Expressway, HP Bridge to RIDC*	\$33,967,900	28	Long-Term (2037-2052)	Reconstruction of SR 28 from Highland Park Interchange to RIDC Park in the city of Pittsburgh, Allegheny County.	Roadway Reconstruction	Exempt	S10	119344
11	Allegheny	SR 28, Allegheny Valley Expressway, SR 8 to HP Bridge*	\$13,052,300	28	Long-Term (2037-2052)	Reconstruction located on SR 28 from SR 8 to the Highland Park Interchange, in Sharpsburg and Aspinwall, Allegheny County.	Roadway Reconstruction	Exempt	S10	119338
11	Allegheny	SR 51 - Clairton Blvd, Coal Valley to Lebanon Ch Rd*	\$22,699,000	51	Long-Term (2037-2052)	Reconstruction and Flood Mitigation for SR 51, Clairton Blvd from Coal Valley Road to Lebanon Church Cloverleaf in Pleasant Hills and Jefferson Boroughs, Allegheny County	Roadway Reconstruction	Exempt	S10	88454
11	Allegheny	SR 88 - Conner Road to Park Ent.*	\$14,003,900	88	Long-Term (2037-2052)	Highway reconstruction on Sr 88 (Library Road) from Connor Road to entrance of South Park at South Park Road in the borough of Bethel Park, Allegheny County.	Roadway Reconstruction	Exempt	S10	119163
11	Allegheny	Babcock Blvd, McKnight to Three Degree*	\$6,050,300	4011	Long-Term (2037-2052)	Pavement reconstruction located on SR 4009 (Babcock Boulevard) from McKnight Road to 3 Degree (Duncan Avenue Intersection) in McCandless Township, Allegheny County.	Roadway Reconstruction	Exempt	S10	91805
11	Allegheny	Smallman Street Reconstruction*	\$12,020,000	Local	Long-Term (2037-2052)	Sponsor = Pittsburgh) Highway reconstruction on Smallman Street from 31st Street to 21st Street in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	Exempt	S10	118879
11	Allegheny	ALCO Roads (Bethel Ch., Lebanon Ch., McKees Rks, Strochein Rd, Haymaker Rd.	\$71,027,200	Various	Long-Term (2037-2052)	(Sponsor = Allegheny County) Roadway restoration of various roadways (Bethel Ch, Lebanon Ch, McKees Rks, Strochein Rd, Haymaker Rd) in Allegheny County	Roadway Reconstruction	Exempt	S10	118877
11	Beaver	SR 51, Beaver Rochester Bridge*	\$25,000,000	51	Mid-Term (2029-2036)	Bridge replacement on SR 51 over Beaver River in Beaver Borough, Beaver County	Bridge Preservation	Exempt	S19	111604
11	Beaver	SR 68 Glasgow Bridge*	\$3,700,000	68	Mid-Term (2029-2036)	Bridge preservation on SR 68 over Little Beaver River in Glasgow Boro, Beaver County	Bridge Preservation	Exempt	S19	117006
11	Beaver	SR 4042, Old Rochester-Bridgewater Rd Bridge*	\$6,100,000	4042	Mid-Term (2029-2036)	Bridge preservation on SR 4042, Old Rochester-Bridgewater Rd over Beaver River and Norfolk Southern Railroad in Rochester and Bridgewater Boroughs, Beaver County	Bridge Preservation	Exempt	S19	28918

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11	Beaver	SR 18 Tornado Bridge*	\$6,550,000	18	Mid-Term (2029-2036)	Bridge replacement on SR 18, Big Beaver Boulevard over Service Road and Wallace Run in City of Beaver Falls, Beaver County	Bridge Rehab/ Reconstruction	Exempt	S19	113669
11	Beaver	SR 1005 Chapel Drive over Brush Creek	\$6,150,000	1005	Mid-Term (2029-2036)	Bridge replacement on SR 1005, Chapel Drive over Brush Creek, in North Sewickley Township, Beaver County	Bridge Rehab/ Reconstruction	Exempt	S19	78326
11	Beaver	Ambridge-Aliquippa Bridge*	\$30,900,000	3052	Mid-Term (2029-2036)	Bridge replacement on SR 3052 over the Ohio River in Ambridge and Aliquippa Boroughs, Beaver County	Bridge Rehab/ Reconstruction	Exempt	S19	117987
11	Beaver	SR 18, Big Beaver Boulevard*	\$9,000,000	18	Mid-Term (2029-2036)	Mill and overlay on SR 18, Big Beaver Boulevard, from SR 551 to SR 351 in Big Beaver, Homewood and Koppel Boros, Beaver County	Roadway Preservation	Exempt	S10	116315
11	Beaver	SR 51, Constitution Boulevard - Mill and Overlay*	\$6,000,000	51	Mid-Term (2029-2036)	Mill and overlay on SR 51, Constitution Boulevard, between Beaver Rochester Road to Brady's Run Creek in Fallston Borough, Beaver County	Roadway Preservation	Exempt	S10	115203
11	Beaver	Midland Beaver Road*	\$14,950,000	68	Mid-Term (2029-2036)	Mill and overlay on SR 68, Midland Beaver Road from Segment 10 to Segment 210 in Center and Chippewa Townships, Beaver County	Roadway Preservation	Exempt	S10	109356
11	Beaver	SR 51, Constitution Boulevard - Darlington*	\$11,330,000	51	Mid-Term (2029-2036)	Mill and overlay located on State Route 51 (Constitution Boulevard) between Dilworth Run and Branch Small Run in Darlington Township, Beaver County.	Roadway Reconstruction	Exempt	S10	116588
11	Beaver	SR 51, Constitution Boulevard - CPR*	\$6,265,000	51	Mid-Term (2029-2036)	Concrete pavement reconstruction located on SR 51 (Constitution Boulevard) in the City of Aliquippa, Beaver County	Roadway Reconstruction	Exempt	S10	116587
11	Beaver	Shippingport Bridge (SR 168)*	\$17,504,900	168	Long-Term (2037-2052)	Bridge preservation located on SR 168 (Shippingport Bridge) carrying Shippingport Bridge Hill Road over the Ohio River in Shippingport and Industry Boroughs, Beaver County	Bridge Preservation	Exempt	S19	119016
11	Beaver	Ambridge-Aliquippa Bridge*	\$15,000,000	3052	Long-Term (2037-2052)	Bridge replacement on SR 3052 over the Ohio River in Ambridge and Aliquippa Boroughs, Beaver County	Bridge Rehab/ Reconstruction	Exempt	S19	117987
11	Beaver	Ramp E to Monaca-Rochester Super Replacement (SR 8037)*	\$13,261,200	8037	Long-Term (2037-2052)	Bridge rehabilitation on SR 8037, Ramp E Road, over SR 65 Northbound in Rochester Borough, Beaver County	Bridge Rehab/ Reconstruction	Exempt	S19	113635

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11	Beaver	Intersection of SR 151/SR 3007/SR 3038 (Brodhead Rd)*	\$15,000,000	151	Long-Term (2037-2052)	Develop and reconstruction of intersection located at the intersection of State Route 151 (Laurel/Gringo-Clinton Road), State Route 3038 (Heights Road), and State Route 3007 (Broadhead Road) in Hopewell Township, Beaver County.	Efficiency & Operations	Exempt	R2	119188
11	Beaver	SR 51 Constitution Blvd, Rochester Br to I-376*	\$33,643,300	51	Long-Term (2037-2052)	Constitution Boulevard, SR 51, from the Rochester Beaver Bridge to I-376 interchange in Bridgewater, Fallston, Chippewa and Patterson, Beaver county	Roadway Reconstruction	Exempt	S10	88442
11	Beaver	SR 65, Ohio River Blvd, 19th to Crows Run*	\$39,723,300	65	Long-Term (2037-2052)	Reconstruction of SR 65 from 19th St. in Ambridge to Crows Run, Beaver County.	Roadway Reconstruction	Exempt	S10	94647
11	Beaver	SR 151 @ Brodhead Road Slide/Roadway Recon*	\$22,278,900	3007	Long-Term (2037-2052)	Highway restoration/reconstruction on SR 3007, Brodhead Road from Frankfort Road to Allegheny County line in City of Aliquippa, Hopewell and Center Townships, Beaver County.	Roadway Reconstruction	Exempt	S10	119339
11	Lawrence	Mahoning Ave Viaduct*	\$50,971,000	18	Mid-Term (2029-2036)	Bridge replacement located on State Route 18 (Mahoning Ave. Viaduct) over the Shenango River in the City of New Castle, Lawrence County	Bridge Rehab/ Reconstruction	NA		119017
11	Lawrence	Rose Point Bridge	\$4,800,000	Local	Mid-Term (2029-2036)	Bridge replacement or restoration on Old Route 422 (T-741) over Slippery Rock Creek in Slippery Rock Township, Lawrence County	Bridge Rehab/ Reconstruction	NA		29402
11	Lawrence	PA 18/Beaver Co - Mahoning River Resurfacing*	\$10,000,000	18	Mid-Term (2029-2036)	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	Roadway Preservation	NA		100916
11	Lawrence	PA 18, Wilmington Road*	\$5,500,000	18	Mid-Term (2029-2036)	Mill and overlay on SR 18, Wilmington Road in Wilmington and Neshannock Townships, Lawrence County	Roadway Preservation	NA		100917
11	Lawrence	SR 19, Perry Highway*	\$8,000,000	19	Mid-Term (2029-2036)	Mill and overlay on SR 19, Perry Highway, from Segment 90 to Segment 200 in Scott Township, Lawrence County	Roadway Preservation	NA		109389
11	Lawrence	PA 19: Perry Highway 2*	\$4,500,000	19	Mid-Term (2029-2036)	Mill and overlay on SR 19, Perry Highway, from Segment 10 to Segment 80 in Shenango and Slippery Rock Townships, Lawrence County	Roadway Preservation	NA		109386
11	Lawrence	SR 422, Benjamin Franklin Hwy*	\$10,506,000	422	Mid-Term (2029-2036)	Mill and overlay on US 422 from New Butler Road intersection to US 19 intersection in Shenango, Union, and Slippery Rock Townships, Lawrence County	Roadway Preservation	NA		116560

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11	Lawrence	SR 956 Mercer Rd - New Wilim Twp Line - Safety Improvements*	\$6,800,000	956	Mid-Term (2029-2036)	Corridor and safety improvements along SR 956 from Mercer Road to the New Wilmington Township, Lawrence County, including roadway reconstruction to accommodate 11 ft lanes and 8 ft shoulders	Safety	NA		118141
11	Lawrence	SR 422 over Shenango River and SR 18 Super Replacements*	\$105,881,000	422	Long-Term (2037-2052)	Bridge rehabilitation located on US 422 (Benjamin Franklin Highway) in Taylor Township, Union Township, Mahoning Township, and the City of New Castle, Lawrence County	Bridge Rehab/ Reconstruction	NA		118853
11	Lawrence	SR 18 Jefferson St/Wilmington Rd*	\$26,347,500	18	Long-Term (2037-2052)	Reconstruction of SR 18, from Mahoning Ave to Mitchell Road in the City of New Castle and Neshannock Township, Lawrence County.	Roadway Reconstruction	NA		119342
11	Lawrence	SR 18, Columbus Innerbelt*	\$8,488,000	18	Long-Term (2037-2052)	Highway reconstruction from its intersection with SR 18 (Moravia Street) to its intersection with SR 224 (Falls Street) in the City of New Castle, Lawrence County.	Roadway Reconstruction	NA		110891
11	Lawrence	SR 422, Benjamin Franklin Highway, Ohio Line to I-376*	\$38,102,200	422	Long-Term (2037-2052)	Reconstruction on SR 422 from Ohio State Line to I-376, in Union, Pulaski and Mahoning Townships, Lawrence County.	Roadway Reconstruction	NA		92281
11	Allegheny, Beaver, Lawrence	Bridge Non-NHS Preservation Line Item	\$119,631,000	Various	Mid-Term (2029-2036)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
11	Allegheny, Beaver, Lawrence	Bridge Non-NHS Preservation Line Item	\$4,000,000	Various	Mid-Term (2029-2036)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
11	Allegheny, Beaver, Lawrence	Local/Off System Bridges	\$15,750,000	Various	Mid-Term (2029-2036)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
11	Allegheny, Beaver, Lawrence	Roadway Non-NHS Reconstruction Line Item	\$40,702,000	Various	Mid-Term (2029-2036)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
11	Allegheny, Beaver, Lawrence	Local, County, and State Slide Remediation & Reconstruction	\$30,000,000	Various	Mid-Term (2029-2036)	Funds anticipated for slide remediation and road reconstruction in Allegheny, Beaver, Lawrence Counties	Roadway Reconstruction	Exempt	S2	TBD

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11	Allegheny, Beaver, Lawrence	Safety Line Item	\$37,145,000	Various	Mid-Term (2029-2036)	Safety Reserve	Safety	Exempt	S6	TBD
11	Allegheny, Beaver, Lawrence	District 11 Roundabout(s) TBD	\$10,000,000	Various	Mid-Term (2029-2036)	This project is for potential roundabout(s) locations within District 11.	Safety	Exempt	X1	TBD
11	Allegheny, Beaver, Lawrence	Bridge Non-NHS Preservation Line Item	\$206,880,600	Various	Long-Term (2037-2052)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
11	Allegheny, Beaver, Lawrence	Bridge Non-NHS Reconstruction Line Item	\$468,211,300	Various	Long-Term (2037-2052)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/Reconstruction	Exempt	S19	TBD
11	Allegheny, Beaver, Lawrence	Local/Off System Bridges	\$211,097,000	Various	Long-Term (2037-2052)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/Reconstruction	Exempt	S19	TBD
11	Allegheny, Beaver, Lawrence	Efficiency & Operations NHS Line Item	\$313,900,000	Various	Long-Term (2037-2052)	NHS Efficiency & Operations Reserve	Efficiency & Operations	Exempt	X1	TBD
11	Allegheny, Beaver, Lawrence	Roadway Non-NHS Preservation Line Item	\$221,669,000	Various	Long-Term (2037-2052)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	Exempt	S10	TBD
11	Allegheny, Beaver, Lawrence	Roadway NHS Preservation Line Item	\$28,596,000	Various	Long-Term (2037-2052)	NHS Roadway Preservation Reserve	Roadway Preservation	Exempt	S10	TBD
11	Allegheny, Beaver, Lawrence	Roadway Non-NHS Reconstruction Line Item	\$109,690,000	Various	Long-Term (2037-2052)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
11	Allegheny, Beaver, Lawrence	Local, County, and State Slide Remediation & Reconstruction	\$106,090,000	Various	Long-Term (2037-2052)	Funds anticipated for slide remediation and road reconstruction in Allegheny, Beaver, Lawrence Counties	Roadway Reconstruction	Exempt	S2	TBD
11	Allegheny, Beaver, Lawrence	Safety Line Item	\$116,900,000	Various	Long-Term (2037-2052)	Safety Reserve	Safety	Exempt	S6	TBD

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11	Allegheny, Beaver, Lawrence	District 11 Roundabout(s) TBD	\$10,000,000	Various	Long-Term (2037-2052)	This project is for potential roundabout(s) locations within District 11.	Safety	Exempt	X1	TBD
12	Fayette	SR 819 over Yough River - Bearing Replacement*	\$1,500,000	819	Mid-Term (2029-2036)	This project is for preservation activities for the structure carrying State Route 819 (Liberty Street) over the Youghiogheny River in Dunbar Township, Fayette County. *No new capacity will be added*	Bridge Preservation	Exempt	S19	116917
12	Fayette	Layton Bridge*	\$10,000,000	4038	Mid-Term (2029-2036)	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*	Bridge Rehab/ Reconstruction	Exempt	S19	81192
12	Fayette	PA 21 Safety Improvements Fayette County	\$20,000,000	21	Mid-Term (2029-2036)	This project is for spot safety improvements along PA 21 from the Masontown Bridge to the town of Revere in various municipalities throughout Fayette County	Safety	Exempt	S6	119636
12	Fayette	SR 119 McClure/Kingview Road Interchange*	\$12,000,000	119	Mid-Term (2029-2036)	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.	Safety	Regionally Significant		96661
12	Fayette	SR 119 Cheat River Bridge Preservation*	\$5,516,700	119	Long-Term (2037-2052)	This project is for preservation activities on the structure carrying US 119 over Cheat River in Point Marion Borough, Fayette County.	Bridge Preservation	Exempt	S19	98546
12	Fayette	US 40 ov Yough River Dam	\$15,000,000	40	Long-Term (2037-2052)	This project is for improvements to the structure carrying US 40 over the Youghiogheny River Dam in Somerfield Township, Fayette County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	Exempt	S19	98734
12	Fayette	SR 21 Operational & Safety (Also see New Cap)*	\$32,782,000	21	Long-Term (2037-2052)	This project is for corridor operation and safety improvements along SR 21 in various locations and municipalities in Fayette County.	Efficiency & Operations	Regionally Significant		119619
12	Fayette	US 119 Operations & Safety*	\$54,636,000	119	Long-Term (2037-2052)	This project is for corridor operation and safety improvements along US 119 in various locations and municipalities in Fayette County.	Efficiency & Operations	Regionally Significant		119622

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12	Fayette	US 40/ US 119 Interchange Reconstruction*	\$42,436,000	40 & 119	Long-Term (2037-2052)	This project is for interchange improvements to the intersection of US 40 and US 119 and the surrounding roadway network in the City of Uniontown, Fayette County. Study is currently underway to determine scope and other factors.	Efficiency & Operations	Exempt	X1	119651
12	Fayette	US 119 Uniontown Bypass*	\$12,832,000	119	Long-Term (2037-2052)	This project is for the pavement preservation of the US 119 Uniontown Bypass in the City of Uniontown and South Union Township, Fayette County.	Roadway Preservation	Exempt	S10	119629
12	Fayette	PA 21 Corridor - S&T Drive to Thompson Crossroads*	\$8,487,000	21	Long-Term (2037-2052)	This project is for roadway improvements to PA 21 (McClellandtown Road) from S&T Drive to Thompson Crossroads in Fayette County.	Roadway Reconstruction	Exempt	S10	119643
12	Fayette	US Route 119 Reconstruction: Uniontown to Penn State*	\$95,481,000	119	Long-Term (2037-2052)	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	Roadway Reconstruction	Exempt	S10	119653
12	Fayette	US Route 119 Reconstruction: Connellsville to Kingview*	\$95,481,000	119	Long-Term (2037-2052)	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	Roadway Reconstruction	Exempt	S10	119652
12	Fayette	Fayette County Concrete Patching Line Item	\$5,750,000	Various	Mid-Term (2029-2036)	Fayette County Concrete Patching Reserve	Roadway Preservation	Exempt	S10	119655
12	Fayette/Greene	PA 21 Widening	\$50,000,000	21	Long-Term (2037-2052)	The 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 Fayette County Line in Franklin, Jefferson, Cumberland and Monongahela Townships, Greene County	New Capacity	Regionally Significant		TBD
12	Fayette/Westmoreland	SR 119 Bridge Rehab*	\$6,050,000	119	Mid-Term (2029-2036)	This project is for the rehabilitation of (9) structures located on US 119 and ramps in New Stanton Borough and Hempfield Township, Westmoreland County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	Exempt	S19	119610
12	Greene	Greene County Bridge #76	\$2,400,000	Local	Mid-Term (2029-2036)	This project is for improvements to the structure carrying Township Road 456 (Boulder Road) over Browns Creek in Morris Township, Greene County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	Exempt	S19	120996

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12	Greene	Greene County Bridge #54	\$2,400,000	Local	Mid-Term (2029-2036)	Bridge replacement carrying Township Road 716 (Pumpkin Run Rd) over PA Fork of Dunkard Creek in Gilmore Township, Greene County	Bridge Rehab/ Reconstruction	Exempt	S19	120997
12	Greene	Greene County Concrete Patching Line Item	\$5,750,000	Various	Mid-Term (2029-2036)	Greene County Concrete Patching Reserve	Roadway Preservation	Exempt	S10	119656
12	Greene	SR 21 Safety Improvements Greene County	\$7,000,000	21	Mid-Term (2029-2036)	This project is for spot safety improvements along State Route 21 from Waynesburg Borough to Masontown Bridge in various municipalities throughout Greene County	Safety	Exempt	S6	119632
12	Greene	Point Marion Bridge*	\$5,516,700	88	Long-Term (2037-2052)	This project is for 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*	Bridge Preservation	Exempt	S19	112387
12	Greene	PA 21 Corridor - Masontown Bridge to Khedive*	\$47,741,000	21	Long-Term (2037-2052)	The project is for improvements to PA 21 from the Masontown Bridge to Khedive in Monongahela, Cumberland, and Jefferson Townships, Greene County.	Roadway Reconstruction	Exempt	S10	119650
12	Greene	PA 19/221 Ruff Creek Int*	\$6,000,000	19	Long-Term (2037-2052)	This project is the study to determine if improvements need made to the PA 19 (Washington Road) and PA 221 (Dunn Station Road/Lippencott Road) intersection in Washington Township, Greene County.	Safety	Exempt	X1	105358
12	Greene	SR 21 Khedive to I-79 Safety Improvements*	\$21,218,000	21	Long-Term (2037-2052)	This project is for safety improvements along SR 21 (Roy E Furman Hwy ) to I-79 in Jefferson Township, Greene County.	Safety	Exempt	S6	119612
12	Greene	SR 88 Safety Improvements at SR 2016 and 2014*	\$6,556,000	88	Long-Term (2037-2052)	This project is for safety improvements on SR 88 at two intersections: Maple Town Crossroads (SR 2016) and Fieldson's Crossroads (SR 2014) in Monongahela Township, Greene County.	Safety	Exempt	S6	990032
12	Greene	I-79 Mt. Morris Interchange Area Improvements	\$7,649,000	Various	Long-Term (2037-2052)	The project is for safety improvements on the local road system surrounding the Mt. Morris interchange in Mt. Morris Township, Greene County.	Safety	Exempt	S6	990033
12	Washington	B'ville High Level Brdg*	\$20,326,730	40	Mid-Term (2029-2036)	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 4036 (Market Street) and 2 railroads in West Brownsville Borough, Fayette County and Brownsville Borough, Washington County	Bridge Preservation	Exempt	S19	98847

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12	Washington	PA 18 over Chartiers Ck-1	\$5,000,000	18	Mid-Term (2029-2036)	This project is the replacement/rehabilitation of structure carrying PA 18 (Park Avenue) over Chartiers Creek in South Franklin Township, Washington County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	Exempt	S19	79365
12	Washington	US 40 over Br Buffalo Ck*	\$7,000,000	40	Mid-Term (2029-2036)	Structure replacement on US 40 over Br Buffalo Ck in Buffalo Township, Washington County	Bridge Rehab/ Reconstruction	Exempt	S19	76045
12	Washington	SR 2067, Old B'ville Bridge Rehab*	\$6,875,000	2067	Mid-Term (2029-2036)	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*	Bridge Rehab/ Reconstruction	Exempt	S19	91135
12	Washington	Washington Road US 19/Weavertown Rd*	\$1,331,000	19	Mid-Term (2029-2036)	This project is for roadway improvements at US 19 (Washington Road) and SR 1025 (Weavertown Road) in North Strabane, Washington County.	Efficiency & Operations	Exempt	X1	119628
12	Washington	SR 3005/US 40 Interchange*	\$12,100,000	40	Mid-Term (2029-2036)	This project is for roadway/intersection improvements at State Route 3005 (Liberty Road) and US 40 interchange in Donegal Township, Washington County.	Efficiency & Operations	Exempt	R2	119635
12	Washington	Weavertown Rd SR 1025/I-79 NB Exit Ramp/Hook St*	\$7,000,000	1025	Mid-Term (2029-2036)	This project is for roadway improvements along SR 1025 (Weavertown Road) with the I-79 Northbound Exit Ramp and Hook St in North Strabane Township, Washington County	Efficiency & Operations	Exempt	X1	119627
12	Washington	I-70 Interstate Detour Improvement Plan Implementation	\$10,000,000	Various	Mid-Term (2029-2036)	This project is for the I-70 Detour Improvement Plan Implementation in Washington County.	Efficiency & Operations	Regionally Significant		119641
12	Washington	I-79 Interstate Detour Improvement Plan Implementation	\$9,800,000	Various	Mid-Term (2029-2036)	This project is for the I-79 Interstate Detour Improvement Plan Implementation in Washington County.	Efficiency & Operations	Regionally Significant		119639
12	Washington	SR 1055: I-70 to Dual Lane Roundabout*	\$3,614,000	1055	Mid-Term (2029-2036)	This project is for the pavement preservation of SR 1055 (Brownlee Road) from Interstate 70 to the Dual Roundabout in Eighty-Four Borough, Washington County.	Roadway Preservation	Exempt	S10	119634
12	Washington	Washington County Concrete Patching Line Item	\$5,750,000	Various	Mid-Term (2029-2036)	Washington County Concrete Patching Reserve	Roadway Preservation	Exempt	S10	119658
12	Washington	PA 136 Reconstruction & Realignment*	\$12,100,000	136	Mid-Term (2029-2036)	This project is for the reconstruction and realignment of PA 136 (Dry Run Road) in Carroll Township, Washington County.	Roadway Reconstruction	Exempt	S10	119630

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**SPC 2050 Long Range Transportation Plan  
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Dist	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	AQ Status	Exempt Code	MPMS/GIS ID
12	Washington	I-70 Belle Vernon Bridge (2038 Preservation)*	\$40,000,000	70	Long-Term (2037-2052)	This project is for preservation activities to the structure carrying Interstate 70 over the Monongahela River and other features in Speers Borough, Washington County. *No new capacity will be added*	Bridge Preservation	Exempt	S19	121323
12	Washington	I-70 Belle Vernon Bridge (2048 Preservation)*	\$7,000,000	70	Long-Term (2037-2052)	The project is for preservation activities to the structure carrying Interstate 70 over the Monongahela River and other features in Speers Borough, Washington County. *No new capacity will be added*	Bridge Preservation	Exempt	S19	121325
12	Washington	I-70 over SR 4051 & Alghy Val RR (Molicorp Bridge)	\$5,304,500	70	Long-Term (2037-2052)	This project is for improvements to the structures carrying Interstate 70 over SR 4051 and the Allegheny Valley Railroad in Canton Township, Washington County. *No new capacity will be added*	Bridge Preservation	Exempt	S19	119620
12	Washington	Donora-Monessen High Bridge Preservation*	\$10,078,550	1077	Long-Term (2037-2052)	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*	Bridge Preservation	Exempt	S19	112389
12	Washington	US 19 Corridor and Intersection Improvement (Old Oak - Waterdam)*	\$10,482,000	19	Long-Term (2037-2052)	This project is for roadway improvements on US 19 (Washington Road) from SR 1053 (Waterdam Road) to Old Oak Road in North Strabane and Peters Townships, Washington County.	Efficiency & Operations	Regionally Significant		119615
12	Washington	McMurray Rd US 19 to Morganza Rd*	\$12,553,000	1002	Long-Term (2037-2052)	This project is for roadway/intersection improvements on SR 1002 (McMurray Road), US 19 and SR 1009 (Morganza Road) in Peters Township, Washington County.	Efficiency & Operations	Regionally Significant		119614
12	Washington	Weavertown Rd Corridor from US 19 to Morganza Rd (Concept 7)*	\$17,712,000	1025	Long-Term (2037-2052)	This project is for roadway improvements along SR 1025 (Weavertown Road) from US 19 (Washington Road) to SR 1009 (Morganza Road) in North Strabane Township, Washington County.	Efficiency & Operations	Regionally Significant		119618
12	Washington	SR 1032 Southpointe Blvd from I-79 to Morganza Rd (Concept 4)*	\$16,391,000	1032	Long-Term (2037-2052)	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.	Efficiency & Operations	Regionally Significant		119624
12	Washington	US 19/40: I-79 to Chestnut Street*	\$9,452,000	19 & 40	Long-Term (2037-2052)	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.	Roadway Preservation	Exempt	S10	105493
12	Washington	SR 18: Within Burgettstown Borough*	\$14,205,000	18	Long-Term (2037-2052)	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.	Roadway Reconstruction	Exempt	S10	119642

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12	Washington	I-79 Ramp at McClelland Rd	\$6,528,000	79	Long-Term (2037-2052)	This project is for intersection improvements to the I-79 Ramp to SR 1023 (McClelland Road) Intersection in North Strabane Township, Washington County.	Safety	Exempt	S6	105352
12	Westmoreland	SR 56, Vandergrift Bridge*	\$6,504,550	8	Mid-Term (2029-2036)	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*	Bridge Preservation	Exempt	S19	112391
12	Westmoreland	US 30 over SR 3077 Preservation*	\$9,476,000	30	Mid-Term (2029-2036)	This project is for the preservation of the structure carrying US 30 (Lincoln Highway) over SR 3077 in Hempfield Township, Westmoreland County. *No new capacity will be added*	Bridge Preservation	Exempt	S19	119608
12	Westmoreland	SR 356, Freeport Bridge Truss Preservation*	\$3,000,000	356	Mid-Term (2029-2036)	This project is for truss preservation activities to the Freeport Bridge carrying PA 356 over the Kiskiminetas River in Allegheny Township, Westmoreland County	Bridge Preservation	Exempt	S19	116790
12	Westmoreland	SR 4093, W Leechburg Bridge (Full Paint/Deck/Barrier)*	\$4,600,000	4093	Mid-Term (2029-2036)	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*	Bridge Preservation	Exempt	S19	112395
12	Westmoreland	PA 366 over PA 400/380*	\$26,049,000	366	Mid-Term (2029-2036)	Improvements to the structure carrying PA 366 over PA 400 and PA 380 in Murrysville Borough, Westmoreland County	Bridge Rehab/ Reconstruction	Exempt	S19	88617
12	Westmoreland	North Greengate Road SR 4002 RR Tunnel	\$24,000,000	4002	Mid-Term (2029-2036)	This project is for the reconfiguration of SR 4002 (North Greengate Road) in the vicinity of a railroad overpass in Hempfield Township, Westmoreland County.	Bridge Rehab/ Reconstruction	Exempt	S19	119609
12	Westmoreland	SR 4073 over PA 56*	\$4,000,000	4073	Mid-Term (2029-2036)	This project is for the rehabilitation of the structure on State Route 4073 (White Cloud Road) over PA 56 in Allegheny Township, Westmoreland County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	Exempt	S19	83686
12	Westmoreland	PA 130 Corridor Review & Improvements*	\$10,000,000	130	Mid-Term (2029-2036)	This project is for roadway improvements along the PA 130 corridor in Westmoreland County.	Efficiency & Operations	Exempt	X1	119638

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12	Westmoreland	LVTIP: Norvelt to Pleasant Unity*	\$14,750,000	981	Mid-Term (2029-2036)	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.	Efficiency & Operations	Exempt	R4	108010
12	Westmoreland	US 119 West Tec Drive*	\$5,310,000	119	Mid-Term (2029-2036)	This project is for the highway restoration of US 119 in the West Tec Drive exit area in East Huntingdon and Hempfield Townships, Westmoreland County.	Roadway Preservation	Exempt	S10	119625
12	Westmoreland	SR 66: US 22 to County Line*	\$8,724,100	66	Mid-Term (2029-2036)	This project is for the reconstruction of PA 66 from the intersection with US 22 to the Indiana County Line, through various municipalities in Westmoreland County.	Roadway Reconstruction	Exempt	S10	119637
12	Westmoreland	SR 4032 Reconstruction: 7th Street to Turkey Ridge Road*	\$6,200,000	4032	Mid-Term (2029-2036)	This project is for the reconstruction of SR 4032 (Hunt Valley Drive and Camp Nancy Road) from Seventh Street to Turkey Ridge Road in Washington Township, Westmoreland County.	Roadway Reconstruction	Exempt	S10	119640
12	Westmoreland	US 30 Corridor Impvmtms - Western Section*	\$11,000,000	30	Mid-Term (2029-2036)	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.	Safety	Regionally Significant		110900
12	Westmoreland	PA 201 Ramp to PA 51 South*	\$6,000,000	201	Mid-Term (2029-2036)	This project is for intersection safety improvements at the PA 201 & Ramp SR 8011 to PA 51 South intersections in Rostraver Township, Westmoreland County.	Safety	Exempt	S6	105350
12	Westmoreland	Avonmore Bridge*	\$6,365,400	156	Long-Term (2037-2052)	This project is for the replacement/rehabilitation of the Avonmore Bridge carrying PA 156 over the Kiskiminetas River in Avonmore Borough, Westmoreland County.	Bridge Preservation	Exempt	S19	112392
12	Westmoreland	US 30 Walworth Viaduct*	\$18,827,800	30	Long-Term (2037-2052)	This project is for the replacement/rehabilitation of the Walworth Viaduct on US 30 (Lincoln Highway) in Hempfield Township, Westmoreland County.	Bridge Rehab/ Reconstruction	Exempt	S19	20192103

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12	Westmoreland	PA 819 over Jacobs Creek*	\$4,000,000	819	Long-Term (2037-2052)	This project is for improvements to the structure carrying PA 819 over Jacobs Creek in South Huntingdon Township, Westmoreland County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	Exempt	S19	121327
12	Westmoreland	PA 981 over Yough River*	\$10,000,000	981	Long-Term (2037-2052)	This project is for improvements to the structure carrying PA 981 over the Youghiogheny River and Bike Trail in Rostraver Township, Westmoreland County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	Exempt	S19	121329
12	Westmoreland	Larimer Bridge*	\$5,516,700	993	Long-Term (2037-2052)	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*	Bridge Rehab/ Reconstruction	Exempt	S19	112394
12	Westmoreland	US 30 Operation & Safety*	\$52,451,000	30	Long-Term (2037-2052)	This project is for corridor operation and safety improvements along US 30 in various locations and municipalities in Westmoreland County.	Efficiency & Operations	Exempt	S6	119621
12	Westmoreland	Route 30 Interchange with Donohoe Road*	\$31,827,000	30	Long-Term (2037-2052)	This project is for roadway improvements at US 30 and SR 1026 (Donohoe Road) in Hempfield Township, Westmoreland County.	Efficiency & Operations	Exempt	R1	119626
12	Westmoreland	US 30 & Georges Station Intersection*	\$31,380,000	30	Long-Term (2037-2052)	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.	Efficiency & Operations	Exempt	R1	114390
12	Westmoreland	PA 366: Allegheny Co Line to PA 66*	\$7,649,000	366	Long-Term (2037-2052)	This project is for the preservation of PA 366 from the Allegheny County Line to PA 66 in multiple municipalities in Westmoreland County.	Roadway Preservation	Exempt	S10	119646
12	Westmoreland	Westmoreland County Concrete Patching Line Item	\$8,198,000	Various	Long-Term (2037-2052)	Westmoreland County Concrete Patching Reserve	Roadway Preservation	Exempt	S10	119659
12	Westmoreland	US Route 30 Reconstruction, Ledger to Lincoln*	\$49,120,000	30	Long-Term (2037-2052)	This project is for the reconstruction of US 30 (Lincoln Highway) from Ledger Road to Lincoln Way in North Huntingdon Township, Westmoreland County.	Roadway Reconstruction	Exempt	S10	119647
12	Westmoreland	US Route 30 Reconstruction, Lincoln to Irwin*	\$49,120,000	30	Long-Term (2037-2052)	This project is the reconstruction of US 30 (Lincoln Highway) from Lincoln Way to Irwin Borough limits in North Huntingdon Township, Westmoreland County.	Roadway Reconstruction	Exempt	S10	119649
12	Westmoreland	SR 119 Sony to Youngwood*	\$118,821,000	119	Long-Term (2037-2052)	This projects for roadway improvements on US 119 from Sony to Youngwood Borough in Westmoreland County.	Roadway Reconstruction	Exempt	S10	119648

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12	Westmoreland	US 119: Youngwood to US 30 Interchange*	\$26,523,000	119	Long-Term (2037-2052)	This project is for roadway improvements on US 119 from Youngwood Borough to the US 30 Interchange in South Greensburg, Westmoreland County.	Roadway Reconstruction	Exempt	S10	119645
12	Westmoreland	PA 286: Allegheny Co Line to Indiana Co Line*	\$14,205,000	286	Long-Term (2037-2052)	This project is for pavement preservation activities on PA 286 from the Allegheny County Line to the Indiana County Line in various municipalities throughout Westmoreland County.	Roadway Reconstruction	Exempt	S10	119644
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Preservation Line Item	\$76,300,000	Various	Mid-Term (2029-2036)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Bridge NHS Preservation Line Item	\$35,692,720	Various	Mid-Term (2029-2036)	NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Municipal Bridge Preservation Program	\$17,000,000	Various	Mid-Term (2029-2036)	District Wide Municipal Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	120611-120615
12	Fayette, Greene, Washington, Westmoreland	Local/Off System Bridges	\$81,600,000	Various	Mid-Term (2029-2036)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Reconstruction Line Item	\$41,925,000	Various	Mid-Term (2029-2036)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Bridge NHS Reconstruction Line Item	\$33,501,000	Various	Mid-Term (2029-2036)	NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Efficiency & Operations Line Item	\$23,419,000	Various	Mid-Term (2029-2036)	Efficiency & Operations Reserve	Efficiency & Operations	Exempt	X1	TBD
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Preservation Line Item	\$100,886,000	Various	Mid-Term (2029-2036)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	Exempt	S10	TBD

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12	Fayette, Greene, Washington, Westmoreland	Roadway NHS Preservation Line Item	\$66,240,000	Various	Mid-Term (2029-2036)	NHS Roadway Preservation Reserve	Roadway Preservation	Exempt	S10	TBD
12	Fayette, Greene, Washington, Westmoreland	Roadway NHS Reconstruction Line Item	\$42,375,900	Various	Mid-Term (2029-2036)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
12	Fayette, Greene, Washington, Westmoreland	Slide Remediation & Reconstruction	\$28,000,000	Various	Mid-Term (2029-2036)	District Wide Slide Reserve Contract for FFY 2027-2034	Roadway Reconstruction	Exempt	S2	117425-117428
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Reconstruction Line Item	\$23,800,000	Various	Mid-Term (2029-2036)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
12	Fayette, Greene, Washington, Westmoreland	Safety Line Item	\$34,700,000	Various	Mid-Term (2029-2036)	Safety Reserve	Safety	Exempt	S6	TBD
12	Fayette, Greene, Washington, Westmoreland	District 12 Roundabout(s) TBD	\$10,000,000	Various	Mid-Term (2029-2036)	This project is for potential roundabout(s) locations within District 12.	Safety	Exempt	X1	119631
12	Fayette, Greene, Washington, Westmoreland	Interstate Bridge Preservation I-79 & I-70	\$48,801,400	79 & 70	Long-Term (2037-2052)	This project is for the preservation of numerous structures on Interstate 70 and 79 in various municipalities in Greene, Washington, and Westmoreland Counties.	Bridge Preservation	Exempt	S19	119616
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Preservation Line Item	\$115,217,900	Various	Long-Term (2037-2052)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Bridge NHS Preservation Line Item	\$17,398,850	Various	Long-Term (2037-2052)	NHS Bridge Preservation Reserve	Bridge Preservation	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Reconstruction Line Item	\$202,783,300	Various	Long-Term (2037-2052)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/Reconstruction	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Local/Off System Bridges	\$194,000,000	Various	Long-Term (2037-2052)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/Reconstruction	Exempt	S19	TBD

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12	Fayette, Greene, Washington, Westmoreland	Bridge NHS Reconstruction Line Item	\$170,272,200	Various	Long-Term (2037-2052)	NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	Exempt	S19	TBD
12	Fayette, Greene, Washington, Westmoreland	Efficiency & Operations NHS Line Item	\$16,509,000	Various	Long-Term (2037-2052)	NHS Efficiency & Operations Reserve	Efficiency & Operations	Exempt	X1	TBD
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Preservation Line Item	\$105,426,000	Various	Long-Term (2037-2052)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	Exempt	S10	TBD
12	Fayette, Greene, Washington, Westmoreland	Local, County, and State Slide Remediation & Reconstruction	\$81,955,000	Various	Long-Term (2037-2052)	Funds anticipated for slide remediation and road reconstruction in Fayette, Greene, Washington, Westmoreland Counties	Roadway Reconstruction	Exempt	S2	119660
12	Fayette, Greene, Washington, Westmoreland	Roadway NHS Preservation Line Item	\$37,169,000	Various	Long-Term (2037-2052)	NHS Roadway Preservation Reserve	Roadway Reconstruction	Exempt	S10	TBD
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Reconstruction Line Item	\$6,935,000	Various	Long-Term (2037-2052)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	Exempt	S10	TBD
12	Fayette, Greene, Washington, Westmoreland	Safety Line Item	\$23,581,000	Various	Long-Term (2037-2052)	Safety Reserve	Safety	Exempt	S6	TBD
12	Fayette, Greene, Washington, Westmoreland	District 12 Roundabout(s) TBD	\$10,609,000	Various	Long-Term (2037-2052)	This project is for potential roundabout(s) locations within District 12.	Safety	Exempt	X1	119631
N/A	Region	CMAQ/CRP/TA/Smart Regional Line Item	\$300,364,000	NA	Mid-Term (2029-2036)	Reserve Line Item for: the SPC Regional Congestion Mitigation & Air Quality (CMAQ) program, the SPC Regional Carbon Reduction program (CRP), the SPC Transportation Alternatives Set Aside Program (TA) and the SPC Smart Transportation Program (Smart). Projects to be determined through future TIP processes.	CMAQ/CRP/TA/Smart	NS		TBD
N/A	Region	CMAQ/CRP/TA/Smart Regional Line Item	\$674,779,000	NA	Long-Term (2037-2052)	Reserve Line Item for: the SPC Regional Congestion Mitigation & Air Quality (CMAQ) program, the SPC Regional Carbon Reduction program (CRP), the SPC Transportation Alternatives Set Aside Program (TA) and the SPC Smart Transportation Program (Smart). Projects to be determined through future TIP processes.	CMAQ/CRP/TA/Smart	NS		TBD

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## PA. Turnpike Commission (Programming / Planning)

Widening & Maintenance Projects - (Mainline) I-76		25-28 TIP Phases	Est. Comp. Year	Exist. #Lanes	Improved #Lanes	Total Cost Estimate	Regional Conformity		
							Status	Determination Exempt Code	
County	MilePost#	Project Name / Description / Notes						Status	Determination Exempt Code
BECO	13.21	Replacement of Beaver River Bridge (Widening from 4 lanes to 6 lanes)	C	2028	4	6	\$355,000,000.00	Significant	
ALCO	49-53	Total Reconstruction (Allegheny Valley Int. to Pittsburgh Int.) (Widening from 4 lanes to 6 lanes)	C	2033	4	6	\$55,000,000.00	Significant	
ALCO	53-57	Total Reconstruction (Allegheny Valley Int. to Pittsburgh Int.) (Widening from 4 lanes to 6 lanes)	C	2033	4	6	\$200,235,000.00	Significant	
WECO	63.1	Interchange at SR 130 (new interchange to connect SR 130 to the main line)	E	2033	4	4	\$44,720,222.00	Significant	
ALCO WECO	57-66	Total Reconstruction (Pittsburgh Int. to Irwin Int.) (Widening from 4 lanes to 6 lanes)	C	2033	4	6	\$430,325,000.00	Significant	
WECO	99-109	Total Reconstruction (Widening from 4 lanes to 6 lanes) -NOTE: only 1 mile of this is in SPC region	C	2026	4	6	\$222,646,000.00	Significant	
Regional	Line Item	Overlay, Resurfacing, Bridge Rehabilitation, Maintenance	C	2026	4	4	\$14,500,000.00	Exempt	S6, S7, S10 S11, S19

New Projects (new capacity) - PA. Turnpike		25-28 TIP Phases	Est. Comp. Year	Exist. #Lanes	Total Lanes	Total Cost Estimate	Regional Conformity		
							Status	Determination Exempt Code	
County	MilePost#	Project Name / Description / Notes						Status	Determination Exempt Code
ALCO		Mon-Fayette Expressway (SR 51 to SR 837) (Construct new 4-lane highway) - Section 53A1	C	2027	0	4	\$280,000,000.00	Significant	
ALCO		Mon-Fayette Expressway (SR 51 to SR 837) (Construct new 4-lane highway) - Section 53A2	C	2027	0	4	\$220,000,000.00	Significant	
ALCO		Mon-Fayette Expressway (SR 51 to SR 837) (Construct new 4-lane highway) - Section 53B1A	E C	2027 2032	0	4	\$152,000,000.00	Significant	
ALCO		Mon-Fayette Expressway (SR 51 to SR 837) (Construct new 4-lane highway) - Sections 53B2, 53C1, 53C2, 53C3	C	2035	0	4	NA	Significant	
ALCO		Mon-Fayette Expressway (SR 837 to I-376) (Construct new 4-lane highway)	C	2045	0	4	NA	Significant	

SPC - July 2024

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

## 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
Pittsburgh Regional Transit	110895	<b>Bus Rapid Transit Project</b> New Service additions and extensions to East End destinations.	ALCO	2030	Non-Attain	Non-Attain	Significant	
Pittsburgh Regional Transit	119328	<b>SR 837 Transit Improvements (CORRIDOR R)</b> Construct enhanced bus stop facilities and transit signal priority, along PA routes 837 and 148 from McKeesport to Homestead.	ALCO	2030	Non-Attain	Non-Attain	Significant	
Regional Line item		<b>Transit Vehicle Replacement</b> Purchase of transit vehicles according to the current Fleet Replacement Schedule. Years 2027-2050.	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	M10
Regional Line item		<b>Transit Vehicle Preservation &amp; Rehab</b> Preservation and rehabilitation of existing vehicles. Years 2027-2050.	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	M3
Regional Line item		<b>Transit Capital Maintenance</b> 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 2027-2050.	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	M2, M6, M7, M8, M9, X11, X12
Regional Line item		<b>Transit Studies / Facility Planning</b> Studies for Multimodal Improvements and TOD. New Facilities Planning & Design. Years 2027-2050.	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	X1
Regional Line item		<b>Transit Operations</b> Expenses associated with the provision of public transit service including personnel salaries and benefits, fuel, materials & supplies, and routine minor maintenance expenses. Years 2027-2050.	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	A1, M1, M4, M5



## **APPENDIX C**

Sample MOVES3 Files



# Sample MOVES Input Files – PM2.5 Runs

## 1. MOVES County Data Manager Importer File PM2.5 Annual Run (MOVESIMPORTER.XML)

Sample for 2050 Run for Pittsburgh-Beaver Valley 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>
    </filters>
    <timespan>
      <year key="2050"/>
      <month id="00"/>
      <day id="2"/>
      <day id="5"/>
      <beginhour id="1"/>
      <endhour id="24"/>
      <aggregateBy key="Hour"/>
    </timespan>
    <onroadvehicleselections>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetyponame="Combination Long-haul Truck"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetyponame="Combination Short-haul Truck"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetyponame="Intercity Bus"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetyponame="Light Commercial Truck"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetyponame="Motor Home"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11" sourcetyponame="Motorcycle"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetyponame="Passenger Car"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetyponame="Passenger Truck"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetyponame="Refuse Truck"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetyponame="School Bus"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetyponame="Single Unit Long-haul Truck"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetyponame="Single Unit Short-haul Truck"/>
      <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetyponame="Transit Bus"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="62" sourcetyponame="Combination Long-haul Truck"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61" sourcetyponame="Combination Short-haul Truck"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetyponame="Intercity Bus"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetyponame="Light Commercial Truck"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetyponame="Motor Home"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetyponame="Motorcycle"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetyponame="Passenger Car"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetyponame="Passenger Truck"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetyponame="Refuse Truck"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetyponame="School Bus"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetyponame="Single Unit Long-haul Truck"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetyponame="Single Unit Short-haul Truck"/>
      <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetyponame="Transit Bus"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62" sourcetyponame="Combination
Long-haul Truck"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetyponame="Combination
Short-haul Truck"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetyponame="Intercity Bus"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32" sourcetyponame="Light Commercial
Truck"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetyponame="Motor Home"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="11" sourcetyponame="Motorcycle"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="21" sourcetyponame="Passenger Car"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="31" sourcetyponame="Passenger
Truck"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetyponame="Refuse Truck"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetyponame="School Bus"/>
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haul Truck"/>
      <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetyponame="Single Unit
Short-haul Truck"/>
    </onroadvehicleselections>
  </importer >
</moves>
```

## Sample MOVES Input Files – PM2.5 Runs

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<onroadvehicselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42" sourcetyname="Transit Bus"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="41" sourcetyname="Intercity Bus"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="32" sourcetyname="Light Commercial Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="54" sourcetyname="Motor Home"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="11" sourcetyname="Motorcycle"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21" sourcetyname="Passenger Car"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31" sourcetyname="Passenger Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="51" sourcetyname="Refuse Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="43" sourcetyname="School Bus"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="52" sourcetyname="Single Unit Short-haul Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="42" sourcetyname="Transit Bus"/>
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</offroadvehicselections>
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</offroadvehicscs>
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  <roadtype roadtypeid="2" roadtyname="Rural Restricted Access"/>
  <roadtype roadtypeid="3" roadtyname="Rural Unrestricted Access"/>
  <roadtype roadtypeid="4" roadtyname="Urban Restricted Access"/>
  <roadtype roadtypeid="5" roadtyname="Urban Unrestricted Access"/>
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</filters>
<databaseselection servername="localhost" databasename="42003_2050_00_05_D5_2050_PMAPG_mi"/>
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  <description><![CDATA[]]></description>
  <parts>
    <sourceTypeAgeDistribution>
<filename>C:\SPCMOVES3\AQIN\MOVES\AgeDistribution\MOVES2014a\17Reg_RepCty\2050\42019_2050_SourceTypeAgeDistribution.csv</filename>
    </sourceTypeAgeDistribution>
  </parts>
</agedistribution>

<avgspeeddistribution>
  <description><![CDATA[]]></description>
  <parts>
    <avgSpeedDistribution>
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    </avgSpeedDistribution>
  </parts>
</avgspeeddistribution>

<imcoverage>
  <description><![CDATA[]]></description>
  <parts>
    <imcoverage>
      <filename>C:\SPCMOVES3\AQIN\MOVES\IM\MOVES4_21Report_M3_v2\42000_2050_IMCoverage.csv</filename>
    </imcoverage>
  </parts>
</imcoverage>

<fuel>
  <description><![CDATA[]]></description>
  <parts>
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      <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_fuelsupply_MOVES3Default_G3.csv</filename>
    </FuelSupply>
    <FuelFormulation>
      <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_fuelformulaiton_M3_Default.csv</filename>
    </FuelFormulation>
    <FuelUsageFraction>
```



## Sample MOVES Input Files – PM2.5 Runs

---

```
<filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_FuelUsageFraction_M3.csv</filename>
</FuelUsageFraction>
<AVFT>
  <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\default_avft.txt</filename>
</AVFT>
</parts>
</fuel>

<zonemonthhour>
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  <parts>
    <zoneMonthHour>
      <filename>C:\SPCMOVES3\AQIN\MOVES\Meteorology\2008\42003_2008_met.csv</filename>
    </zoneMonthHour>
  </parts>
</zonemonthhour>

<roadtypedistribution>
  <description><![CDATA[]]></description>
  <parts>
    <roadTypeDistribution>
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    </roadTypeDistribution>
  </parts>
</roadtypedistribution>

<sourcetypepopulation>
  <description><![CDATA[]]></description>
  <parts>
    <sourceTypeYear>
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    </sourceTypeYear>
  </parts>
</sourcetypepopulation>

<vehicletypevmt>
  <description><![CDATA[]]></description>
  <parts>
    <hpmsVTypeYear>
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    </hpmsVTypeYear>
    <monthvmtfraction>
      <filename>C:\SPCMOVES3\AQIN\MOVES\MonthDayHourFractions\2017_MonthFraction\42003_2017_MonthVMTFraction.csv</filename>
    </monthvmtfraction>
    <dayvmtfraction>
      <filename>C:\SPCMOVES3\AQIN\MOVES\MonthDayHourFractions\dayvmtfraction_avgday.csv</filename>
    </dayvmtfraction>
    <hourvmtfraction>
      <filename>C:\SPCMOVES3\CBD5\PMAPG\D5_2050\42003_2050_00_05_D5_2050\CDM\hourvmtfraction.csv</filename>
    </hourvmtfraction>
  </parts>
</vehicletypevmt>

<starts>
  <description><![CDATA[]]></description>
  <parts>
    <startsPerDay>
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    </startsPerDay>
    <startsHourFraction>
      <filename></filename>
    </startsHourFraction>
    <startsSourceTypeFraction>
      <filename></filename>
    </startsSourceTypeFraction>
    <startsMonthAdjust>
```

## Sample MOVES Input Files – PM2.5 Runs

---

```
<filename></filename>
  </startsMonthAdjust>
  <importStartsOpModeDistribution>
<filename></filename>
  </importStartsOpModeDistribution>
  <Starts>
<filename></filename>
  </Starts>
</parts>
</starts>

<hotelling>
  <description><![CDATA[]]></description>
  <parts>
    <hotellingHoursPerDay>
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    </hotellingHoursPerDay>
    <hotellingHourFraction>
      <filename></filename>
    </hotellingHourFraction>
    <hotellingAgeFraction>
      <filename></filename>
    </hotellingAgeFraction>
    <hotellingMonthAdjust>
      <filename></filename>
    </hotellingMonthAdjust>
    <hotellingActivityDistribution>
<filename></filename>
  </hotellingActivityDistribution>
</parts>
</hotelling>

<onroadretrofit>
  <description><![CDATA[]]></description>
  <parts>
    <onRoadRetrofit>
      <filename></filename>
    </onRoadRetrofit>
  </parts>
</onroadretrofit>

<generic>
  <description><![CDATA[]]></description>
  <parts>
    <anytable>
      <tablename>regioncounty</tablename>
      <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_RegionCounty_MOVES3Default.csv</filename>
    </anytable>
  </parts>
</generic>
  </importer>
</moves>
```

## Sample MOVES Input Files – PM2.5 Runs

---

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

Sample for 2050 Run for Pittsburgh-Beaver Valley nonattainment area – Allegheny County.  
Separate MRS file for each county in the analysis.

```
<runspec version="MOVES3.0.2">
<description><![CDATA[MOVES3-0-2 RunSpec Created by CENTRAL4 Scenario: ALLE 2050 ANNAV5 D5_2050 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="Allegheny County, PA (42003)"/>
</geographicselections>
<timespan>
  <year key="2050"/>

<month id="1"/>
<month id="2"/>
<month id="3"/>
<month id="4"/>
<month id="5"/>
<month id="6"/>
<month id="7"/>
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<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>
<onroadvehicselections>

<onroadvehicselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetype="Passenger Car"/>
<onroadvehicselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetype="Passenger Truck"/>
<onroadvehicselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetype="Light Commercial Truck"/>
<onroadvehicselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetype="Motorcycle"/>
<onroadvehicselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetype="Passenger Car"/>
<onroadvehicselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetype="Passenger Truck"/>
<onroadvehicselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetype="Light Commercial Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21" sourcetype="Passenger Car"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31" sourcetype="Passenger Truck"/>
<onroadvehicselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="32" sourcetype="Light Commercial Truck"/>

<onroadvehicselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42" sourcetype="Transit Bus"/>
<onroadvehicselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetype="Other Buses"/>
<onroadvehicselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetype="School Bus"/>
<onroadvehicselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetype="Other Buses"/>
<onroadvehicselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetype="Transit Bus"/>
<onroadvehicselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetype="School Bus"/>
<onroadvehicselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetype="Other Buses"/>
<onroadvehicselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetype="Transit Bus"/>
<onroadvehicselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetype="School Bus"/>

<onroadvehicselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetype="Refuse Truck"/>
<onroadvehicselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetype="Single Unit Short-haul
Truck"/>
<onroadvehicselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetype="Single Unit Long-haul
Truck"/>
```

## Sample MOVES Input Files – PM2.5 Runs

```
<onroadvehicseleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetyname="Motor Home"/>
<onroadvehicseleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetyname="Combination Short-haul
Truck"/>
<onroadvehicseleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetyname="Refuse Truck"/>
<onroadvehicseleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetyname="Single Unit Short-haul Truck"/>
<onroadvehicseleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
<onroadvehicseleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetyname="Motor Home"/>
<onroadvehicseleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
<onroadvehicseleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
<onroadvehicseleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetyname="Refuse Truck"/>
<onroadvehicseleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetyname="Single Unit Short-haul Truck"/>
<onroadvehicseleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
<onroadvehicseleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetyname="Motor Home"/>
<onroadvehicseleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>

</onroadvehicseleselections>
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</offroadvehicseleselections>
<offroadvehicseleselections>
</offroadvehicseleselections>
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  <roadtype roadtypeid="1" roadtyname="Off-Network" modelCombination="M1"/>
  <roadtype roadtypeid="2" roadtyname="Rural Restricted Access" modelCombination="M1"/>
  <roadtype roadtypeid="3" roadtyname="Rural Unrestricted Access" modelCombination="M1"/>
  <roadtype roadtypeid="4" roadtyname="Urban Restricted Access" modelCombination="M1"/>
  <roadtype roadtypeid="5" roadtyname="Urban Unrestricted Access" modelCombination="M1"/>
</roadtypes>
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<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="15" processname="Crankcase Running Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="16" processname="Crankcase Start Exhaust"/>
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Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="91" processname="Auxiliary Power Exhaust"/>
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<pollutantprocessassociation pollutantkey="118" pollutantname="Composite - NonECPM" processkey="2" processname="Start Exhaust"/>
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<pollutantprocessassociation pollutantkey="110" pollutantname="Primary Exhaust PM2.5 - Total" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="110" pollutantname="Primary Exhaust PM2.5 - Total" processkey="15" processname="Crankcase Running
Exhaust"/>
<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"/>
<pollutantprocessassociation pollutantkey="116" pollutantname="Primary PM2.5 - Brakewear Particulate" processkey="9" processname="Brakewear"/>
<pollutantprocessassociation pollutantkey="117" pollutantname="Primary PM2.5 - Tirewear Particulate" processkey="10" processname="Tirewear"/>
<pollutantprocessassociation pollutantkey="115" pollutantname="Sulfate Particulate" processkey="1" processname="Running Exhaust"/>
<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"/>
```

## Sample MOVES Input Files – PM2.5 Runs

---

```
</pollutantprocessassociations>
<databaseselections>

<databaseselection servername="" databasename="MOVES3_early_NLEV" description=""/>
<databaseselection servername="" databasename="MOVES3_calevii08" description=""/>

</databaseselections>
  <internalcontrolstrategies>
</internalcontrolstrategies>
  <inputdatabase servername="" databasename="" description=""/>
  <uncertaintyparameters uncertaintymodeenabled="false" numberofrunpersimulation="0" numberofsimulations="0"/>
<geographicoutputdetail description="COUNTY"/>
  <outputemissionsbreakdownselection>
<modelyear selected="false"/>
<fueltype selected="false"/>
<fuelsubtype selected="false"/>
<emissionprocess selected="true"/>
  <onroadoffroad selected="false"/>
<roadtype selected="true"/>
<sourceusetype selected="true"/>
  <movesvehicletype selected="false"/>
<onroadscv selected="false"/>
  <estimateuncertainty selected="false" numberOfIterations="2" keepSampledData="false" keepIterations="false"/>
  <sector selected="false"/>
  <engtechid selected="false"/>
  <hpclass selected="false"/>
  <regclassid selected="false"/>
</outputemissionsbreakdownselection>
  <outputdatabase servername="localhost" databasename="42003_2050_00_05_D5_2050_PMAPG_mo" description=""/>
<outputtimestep value="24-Hour Day"/>
  <outputvmtdata value="true"/>
  <outputsho value="true"/>
  <outputsh value="true"/>
  <outputshp value="true"/>
  <outputshidling value="true"/>
  <outputstarts value="true"/>
  <outputpopulation value="true"/>
  <scaleinputdatabase servername="localhost" databasename="42003_2050_00_05_D5_2050_PMAPG_mi" description=""/>
  <pmsize value="0"/>
  <outputfactors>
    <timefactors selected="true" units="Hours"/>
    <distancefactors selected="true" units="Miles"/>
    <massfactors selected="true" units="Grams" energyunits="Million BTU"/>
  </outputfactors>

  <savedata>
</savedata>

  <donotexecute>
</donotexecute>

  <generatordatabase shouldsave="false" servername="" databasename="" description=""/>
  <donotperformfinalaggregation selected="false"/>
<lookuptableflags scenarioid="" truncateoutput="true" truncateactivity="true" truncatebaserates="true"/>
</runspec>
```

## Sample MOVES Input Files – PM2.5 Runs

---

## Sample MOVES Input Files – Ozone Runs

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

Sample for 2050 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="2050"/>
    <month id="07"/>
    <day id="2"/>
    <day id="5"/>
    <beginhour id="1"/>
    <endhour id="24"/>
    <aggregateBy key="Hour"/>
  </timespan>
  <onroadvehicleselections>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetyname="Intercity Bus"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetyname="Light Commercial Truck"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetyname="Motor Home"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11" sourcetyname="Motorcycle"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetyname="Passenger Car"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetyname="Passenger Truck"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetyname="Refuse Truck"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetyname="School Bus"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetyname="Single Unit Short-haul Truck"/>
    <onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetyname="Transit Bus"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetyname="Intercity Bus"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetyname="Light Commercial Truck"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetyname="Motor Home"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetyname="Motorcycle"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetyname="Passenger Car"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetyname="Passenger Truck"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetyname="Refuse Truck"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetyname="School Bus"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetyname="Single Unit Short-haul Truck"/>
    <onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetyname="Transit Bus"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetyname="Intercity Bus"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32" sourcetyname="Light Commercial Truck"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetyname="Motor Home"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="11" sourcetyname="Motorcycle"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="21" sourcetyname="Passenger Car"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="31" sourcetyname="Passenger Truck"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetyname="Refuse Truck"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetyname="School Bus"/>
    <onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
  </onroadvehicleselections>
</moves>
```

## Sample MOVES Input Files – Ozone Runs

```
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetyponame="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42" sourcetyponame="Transit Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="62" sourcetyponame="Combination Long-haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="61" sourcetyponame="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="41" sourcetyponame="Intercity Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="32" sourcetyponame="Light Commercial Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="54" sourcetyponame="Motor Home"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="11" sourcetyponame="Motorcycle"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21" sourcetyponame="Passenger Car"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31" sourcetyponame="Passenger Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="51" sourcetyponame="Refuse Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="43" sourcetyponame="School Bus"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="53" sourcetyponame="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="52" sourcetyponame="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="42" sourcetyponame="Transit Bus"/>
</onroadvehicleselections>
<offroadvehicleselections>
</offroadvehicleselections>
<offroadvehiclesccs>
</offroadvehiclesccs>
<roadtypes>
  <roadtype roadtypeid="1" roadtyponame="Off-Network"/>
  <roadtype roadtypeid="2" roadtyponame="Rural Restricted Access"/>
  <roadtype roadtypeid="3" roadtyponame="Rural Unrestricted Access"/>
  <roadtype roadtypeid="4" roadtyponame="Urban Restricted Access"/>
  <roadtype roadtypeid="5" roadtyponame="Urban Unrestricted Access"/>
</roadtypes>
</filters>
<databaseselection servername="localhost" databasename="42003_2050_07_05_D5_2050_OZALL_mi"/>
<agedistribution>
  <description><![CDATA[]]></description>
  <parts>
    <sourceTypeAgeDistribution>
</sourceTypeAgeDistribution>
</parts>
</agedistribution>
<avg speeddistribution>
  <description><![CDATA[]]></description>
  <parts>
    <avgSpeedDistribution>
      <filename>C:\SPCMOVES3\AQIN\MOVES\IM\MOVES4_21Report_M3_v2\42000_2050_IMCoverage.csv</filename>
    </avgSpeedDistribution>
  </parts>
</avg speeddistribution>
<imcoverage>
  <description><![CDATA[]]></description>
  <parts>
    <imcoverage>
      <filename>C:\SPCMOVES3\AQIN\MOVES\IM\MOVES4_21Report_M3_v2\42000_2050_IMCoverage.csv</filename>
    </imcoverage>
  </parts>
</imcoverage>
<fuel>
  <description><![CDATA[]]></description>
  <parts>
    <FuelSupply>
      <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_fuelsupply_MOVES3Default_G3.csv</filename>
    </FuelSupply>
    <FuelFormulation>
      <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_fuelformulaiton_M3_Default.csv</filename>
  </parts>
</fuel>
```



## Sample MOVES Input Files – Ozone Runs

```
</FuelFormulation>
<FuelUsageFraction>
  <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_FuelUsageFraction_M3.csv</filename>
</FuelUsageFraction>
<AVFT>
  <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\default_avft.txt</filename>
</AVFT>
</parts>
</fuel>

<zonemonthhour>
  <description><![CDATA[]]></description>
  <parts>
    <zoneMonthHour>
      <filename>C:\SPCMOVES3\AQIN\MOVES\Meteorology\2008\42003_2008_met.csv</filename>
    </zoneMonthHour>
  </parts>
</zonemonthhour>

<roadtypedistribution>
  <description><![CDATA[]]></description>
  <parts>
    <roadTypeDistribution>
      <filename>C:\SPCMOVES3\CBD5\OZALL\D5_2050\42003_2050_07_05_D5_2050\CDM\roadTypeDistribution.csv</filename>
    </roadTypeDistribution>
  </parts>
</roadtypedistribution>

<sourcetypepopulation>
  <description><![CDATA[]]></description>
  <parts>
    <sourceTypeYear>
      <filename>C:\SPCMOVES3\CBD5\OZALL\D5_2050\42003_2050_07_05_D5_2050\CDM\SourceTypePopulation.csv</filename>
    </sourceTypeYear>
  </parts>
</sourcetypepopulation>

<vehicletypevmt>
  <description><![CDATA[]]></description>
  <parts>
    <hpmsVTypeYear>
      <filename>C:\SPCMOVES3\CBD5\OZALL\D5_2050\42003_2050_07_05_D5_2050\CDM\hpmsVTypeYear.csv</filename>
    </hpmsVTypeYear>
    <monthvmtfraction>
<filename>C:\SPCMOVES3\AQIN\MOVES\MonthDayHourFractions\2017_MonthFraction\42003_2017_MonthVMTFraction.csv</filename>
    </monthvmtfraction>
    <dayvmtfraction>
      <filename>C:\SPCMOVES3\AQIN\MOVES\MonthDayHourFractions\2017_DayFraction\42003_2017_dayvmtfraction.csv</filename>
    </dayvmtfraction>
    <hourvmtfraction>
      <filename>C:\SPCMOVES3\CBD5\OZALL\D5_2050\42003_2050_07_05_D5_2050\CDM\hourvmtfraction.csv</filename>
    </hourvmtfraction>
  </parts>
</vehicletypevmt>

<starts>
  <description><![CDATA[]]></description>
  <parts>
    <startsPerDay>
<filename></filename>
    </startsPerDay>
    <startsHourFraction>
<filename></filename>
    </startsHourFraction>
    <startsSourceTypeFraction>
<filename></filename>
```

## Sample MOVES Input Files – Ozone Runs

```

    </startsSourceTypeFraction>
    <startsMonthAdjust>
<filename></filename>
    </startsMonthAdjust>
    <importStartsOpModeDistribution>
<filename></filename>
    </importStartsOpModeDistribution>
    <Starts>
<filename></filename>
    </Starts>
  </parts>
</starts>

  <hotelling>
    <description><![CDATA[]]></description>
    <parts>
      <hotellingHoursPerDay>
        <filename></filename>
      </hotellingHoursPerDay>
      <hotellingHourFraction>
        <filename></filename>
      </hotellingHourFraction>
      <hotellingAgeFraction>
        <filename></filename>
      </hotellingAgeFraction>
      <hotellingMonthAdjust>
        <filename></filename>
      </hotellingMonthAdjust>
      <hotellingActivityDistribution>
<filename></filename>
        </hotellingActivityDistribution>
    </parts>
  </hotelling>

  <onroadretrofit>
    <description><![CDATA[]]></description>
    <parts>
      <onRoadRetrofit>
        <filename></filename>
      </onRoadRetrofit>
    </parts>
  </onroadretrofit>

  <generic>
    <description><![CDATA[]]></description>
    <parts>
      <anytable>
        <tablename>regioncounty</tablename>
        <filename>C:\SPCMOVES3\AQIN\MOVES\Fuel\MOVES3\MOVESDefaults\42000_RegionCounty_MOVES3Default.csv</filename>
      </anytable>
    </parts>
  </generic>
  </importer>
</moves>
```

## Sample MOVES Input Files – Ozone Runs

### 4. MOVES Run Specification File – Ozone July Weekday Run (MOVESRUN.MRS)

Sample for 2050 Run for Pittsburgh-Beaver Valley nonattainment area – Allegheny County.  
Separate MRS file for each county in the analysis.

```
<runspec version="MOVES3.0.2">
<description><![CDATA[MOVES3-0-2 RunSpec Created by CENTRAL4 Scenario: ALLE 2050 JULWKD D5_2050 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="Allegheny County, PA (42003)"/>
</geographicselections>
<timespan>
  <year key="2050"/>
<month id="07"/>
<day id="5"/>
  <beginhour id="1"/>
  <endhour id="24"/>
<aggregateBy key="Hour"/>
</timespan>
<onroadvehicleselections>

<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetyponame="Passenger Car"/>`
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetyponame="Passenger Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetyponame="Light Commercial Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetyponame="Motorcycle"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetyponame="Passenger Car"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetyponame="Passenger Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetyponame="Light Commercial Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="21" sourcetyponame="Passenger Car"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="31" sourcetyponame="Passenger Truck"/>
<onroadvehicleselection fueltypeid="5" fueltypedesc="Ethanol (E-85)" sourcetypeid="32" sourcetyponame="Light Commercial Truck"/>

<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="42" sourcetyponame="Transit Bus"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetyponame="Other Buses"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetyponame="School Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetyponame="Other Buses"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetyponame="Transit Bus"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetyponame="School Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetyponame="Other Buses"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetyponame="Transit Bus"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetyponame="School Bus"/>

<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetyponame="Refuse Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="52" sourcetyponame="Single Unit Short-haul
Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetyponame="Single Unit Long-haul
Truck"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetyponame="Motor Home"/>
<onroadvehicleselection fueltypeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetyponame="Combination Short-haul
Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetyponame="Refuse Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetyponame="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetyponame="Single Unit Long-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetyponame="Motor Home"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetyponame="Combination Short-haul Truck"/>
<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetyponame="Combination Long-haul Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetyponame="Refuse Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetyponame="Single Unit Short-haul Truck"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetyponame="Single Unit Long-haul Truck"/>

```

## Sample MOVES Input Files – Ozone Runs

```
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetype="Motor Home"/>
<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="61" sourcetype="Combination Short-haul Truck"/>

</onroadvehicleselections>
<offroadvehicleselections>
</offroadvehicleselections>
<offroadvehiclesccs>
</offroadvehiclesccs>
<roadtypes>
  <roadtype roadtypeid="1" roadtypename="Off-Network" modelCombination="M1"/>
  <roadtype roadtypeid="2" roadtypename="Rural Restricted Access" modelCombination="M1"/>
  <roadtype roadtypeid="3" roadtypename="Rural Unrestricted Access" modelCombination="M1"/>
  <roadtype roadtypeid="4" roadtypename="Urban Restricted Access" modelCombination="M1"/>
  <roadtype roadtypeid="5" roadtypename="Urban Unrestricted Access" modelCombination="M1"/>
</roadtypes>
<pollutantprocessassociations>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="15" processname="Crankcase Running Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="16" processname="Crankcase Start Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="17" processname="Crankcase Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="3" pollutantname="Oxides of Nitrogen (NOx)" processkey="91" processname="Auxiliary Power Exhaust"/>
<pollutantprocessassociation pollutantkey="79" pollutantname="Non-Methane Hydrocarbons" processkey="1" processname="Running Exhaust"/>
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## Sample MOVES Input Files – Ozone Runs

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## Sample MOVES Input Files – Ozone Runs

## **APPENDIX D**

County and Facility Type Summaries  
VMT, Speed, Emissions





**Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary**  
**2025 Existing / Base / Budget Year - PM2.5 NAAQS (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny (Partial)	Off-Network	N/A	N/A	717.54	34.42
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,777,442	40.1	1.89	0.09
	Urban Restricted	2,862,237,213	48.5	883.24	32.79
	Urban UnRestricted	5,252,871,070	28.5	1,864.00	97.38
	<i>Subtotal</i>	<i>8,122,885,725</i>		<i>3,466.68</i>	<i>164.70</i>
Armstrong (Partial)	Off-Network	N/A	N/A	3.55	0.14
	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	43,753,729	44.8	16.51	0.61
	<i>Subtotal</i>	<i>43,753,729</i>		<i>20.06</i>	<i>0.75</i>
Beaver	Off-Network	N/A	N/A	109.95	5.65
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	12,538,253	37.9	3.77	0.17
	Urban Restricted	321,094,376	56.8	79.21	2.72
	Urban UnRestricted	954,602,660	37.2	269.66	12.89
	<i>Subtotal</i>	<i>1,288,235,288</i>		<i>462.58</i>	<i>21.44</i>
Butler	Off-Network	N/A	N/A	182.29	7.60
	Rural Restricted	68,247,613	47.7	21.77	0.79
	Rural UnRestricted	141,959,161	34.7	45.53	2.15
	Urban Restricted	486,423,975	56.4	214.01	6.31
	Urban UnRestricted	1,366,288,813	37.6	464.67	20.11
	<i>Subtotal</i>	<i>2,062,919,562</i>		<i>928.27</i>	<i>36.96</i>
Washington	Off-Network	N/A	N/A	232.64	8.79
	Rural Restricted	195,368,782	56.9	53.41	1.77
	Rural UnRestricted	121,449,399	36.2	34.83	1.71
	Urban Restricted	982,729,662	56.8	555.51	15.75
	Urban UnRestricted	1,061,168,585	37.3	365.23	16.02
	<i>Subtotal</i>	<i>2,360,716,427</i>		<i>1,241.62</i>	<i>44.05</i>
Westmoreland	Off-Network	N/A	N/A	343.99	13.66
	Rural Restricted	52,801,223	53.0	17.91	0.59
	Rural UnRestricted	125,840,195	30.7	52.74	2.45
	Urban Restricted	897,196,254	56.9	568.33	15.70
	Urban UnRestricted	2,013,536,209	36.9	856.39	34.97
	<i>Subtotal</i>	<i>3,089,373,881</i>		<i>1,839.36</i>	<i>67.37</i>
Greene (Partial)	Off-Network	N/A	N/A	1.60	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	21,913,462	44.3	8.17	0.30
	<i>Subtotal</i>	<i>21,913,462</i>		<i>9.77</i>	<i>0.36</i>
Lawrence (Partial)	Off-Network	N/A	N/A	1.06	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	351,023	25.0	0.22	0.01
	Urban UnRestricted	14,702,437	42.3	4.96	0.20
	<i>Subtotal</i>	<i>15,053,460</i>		<i>6.24</i>	<i>0.25</i>
Region Subtotal		17,004,851,534		7,974.59	335.88
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>17,004,851,534</b>	<b>(Kg/Year)</b>	<b>7,974.59</b>	<b>335.88</b>
				<b>7,234,427</b>	<b>304,704</b>

**Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary**  
**2028 TIP Year (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny (Partial)	Off-Network	N/A	N/A	625.55	32.67
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,847,551	40.1	1.43	0.08
	Urban Restricted	2,887,821,601	48.4	669.30	26.32
	Urban UnRestricted	5,287,739,028	28.4	1,479.40	82.90
	<i>Subtotal</i>	<i>8,183,408,181</i>		<i>2,775.68</i>	<i>141.96</i>
Armstrong (Partial)	Off-Network	N/A	N/A	3.26	0.14
	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	43,978,015	44.9	12.66	0.48
	<i>Subtotal</i>	<i>43,978,015</i>		<i>15.91</i>	<i>0.62</i>
Beaver	Off-Network	N/A	N/A	97.94	5.60
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	12,659,978	37.9	2.93	0.15
	Urban Restricted	327,004,629	56.8	57.91	2.20
	Urban UnRestricted	969,555,259	37.2	209.57	10.95
	<i>Subtotal</i>	<i>1,309,219,865</i>		<i>368.36</i>	<i>18.89</i>
Butler	Off-Network	N/A	N/A	161.72	7.21
	Rural Restricted	68,840,086	47.8	16.43	0.64
	Rural UnRestricted	142,680,217	34.8	35.38	1.81
	Urban Restricted	492,770,789	56.4	163.16	4.81
	Urban UnRestricted	1,379,825,358	37.6	364.48	16.74
	<i>Subtotal</i>	<i>2,084,116,451</i>		<i>741.17</i>	<i>31.20</i>
Washington	Off-Network	N/A	N/A	207.65	8.08
	Rural Restricted	197,291,663	56.9	39.18	1.40
	Rural UnRestricted	122,211,998	36.2	26.96	1.44
	Urban Restricted	991,053,296	56.8	430.28	11.74
	Urban UnRestricted	1,068,178,438	37.3	287.46	13.27
	<i>Subtotal</i>	<i>2,378,735,395</i>		<i>991.53</i>	<i>35.93</i>
Westmoreland	Off-Network	N/A	N/A	307.64	12.69
	Rural Restricted	53,129,942	53.1	13.37	0.46
	Rural UnRestricted	126,351,728	30.6	43.14	2.05
	Urban Restricted	905,978,179	56.9	442.95	11.64
	Urban UnRestricted	2,039,407,366	36.9	695.35	28.77
	<i>Subtotal</i>	<i>3,124,867,215</i>		<i>1,502.45</i>	<i>55.61</i>
Greene (Partial)	Off-Network	N/A	N/A	1.41	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	22,163,918	44.3	6.18	0.24
	<i>Subtotal</i>	<i>22,163,918</i>		<i>7.59</i>	<i>0.30</i>
Lawrence (Partial)	Off-Network	N/A	N/A	0.93	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	354,032	25.0	0.18	0.01
	Urban UnRestricted	14,917,489	42.3	3.71	0.16
	<i>Subtotal</i>	<i>15,271,521</i>		<i>4.82</i>	<i>0.21</i>
Region Subtotal		17,161,760,562		6,407.52	284.74
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>17,161,760,562</b>	<b>(Kg/Year)</b>	<b>6,407.52</b>	<b>284.74</b>
				<b>5,812,809</b>	<b>258,309</b>

**Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary**  
**2035 Interim Year #1 (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny (Partial)	Off-Network	N/A	N/A	564.00	31.26
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,144,148	39.6	0.91	0.06
	Urban Restricted	2,966,197,293	48.6	477.48	19.40
	Urban UnRestricted	5,301,978,613	28.4	1,141.41	67.21
	<i>Subtotal</i>	<i>8,275,320,054</i>		<i>2,183.80</i>	<i>117.93</i>
Armstrong (Partial)	Off-Network	N/A	N/A	2.83	0.12
	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	43,978,484	44.9	9.01	0.34
	<i>Subtotal</i>	<i>43,978,484</i>		<i>11.84</i>	<i>0.47</i>
Beaver	Off-Network	N/A	N/A	84.26	5.07
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	12,997,308	37.8	2.24	0.12
	Urban Restricted	337,664,498	56.7	38.15	1.60
	Urban UnRestricted	995,148,888	37.4	155.51	8.76
	<i>Subtotal</i>	<i>1,345,810,693</i>		<i>280.15</i>	<i>15.55</i>
Butler	Off-Network	N/A	N/A	135.38	6.05
	Rural Restricted	67,975,671	47.8	11.21	0.45
	Rural UnRestricted	143,252,004	34.8	26.26	1.43
	Urban Restricted	498,749,544	56.4	113.18	3.20
	Urban UnRestricted	1,390,730,301	37.6	270.22	12.99
	<i>Subtotal</i>	<i>2,100,707,521</i>		<i>556.24</i>	<i>24.12</i>
Washington	Off-Network	N/A	N/A	177.55	6.50
	Rural Restricted	233,739,147	57.4	29.86	1.14
	Rural UnRestricted	120,698,334	36.1	19.75	1.12
	Urban Restricted	930,551,403	56.3	304.74	7.34
	Urban UnRestricted	1,116,681,386	38.0	223.26	10.46
	<i>Subtotal</i>	<i>2,401,670,270</i>		<i>755.16</i>	<i>26.56</i>
Westmoreland	Off-Network	N/A	N/A	277.26	11.68
	Rural Restricted	50,901,121	52.8	8.75	0.31
	Rural UnRestricted	125,079,167	30.6	34.10	1.61
	Urban Restricted	922,137,428	56.9	319.99	7.45
	Urban UnRestricted	2,052,458,931	36.8	543.89	22.02
	<i>Subtotal</i>	<i>3,150,576,647</i>		<i>1,183.99</i>	<i>43.06</i>
Greene (Partial)	Off-Network	N/A	N/A	1.20	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	22,581,058	44.4	4.41	0.18
	<i>Subtotal</i>	<i>22,581,058</i>		<i>5.61</i>	<i>0.24</i>
Lawrence (Partial)	Off-Network	N/A	N/A	0.73	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	404,735	25.0	0.17	0.01
	Urban UnRestricted	12,942,553	42.6	2.21	0.10
	<i>Subtotal</i>	<i>13,347,289</i>		<i>3.11</i>	<i>0.15</i>
Region Subtotal		17,353,992,015		4,979.92	228.08
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>17,353,992,015</b>	<b>(Kg/Year)</b>	<b>4,979.92</b>	<b>228.08</b>
				<b>4,517,709</b>	<b>206,912</b>

**Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary**  
**2045 Interim Year #2 (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny (Partial)	Off-Network	N/A	N/A	561.17	24.02
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,404,559	40.2	0.95	0.06
	Urban Restricted	3,034,301,056	48.1	445.41	18.04
	Urban UnRestricted	5,315,010,945	28.0	1,084.30	64.21
	<i>Subtotal</i>	<i>8,357,716,561</i>		<i>2,091.84</i>	<i>106.33</i>
Armstrong (Partial)	Off-Network	N/A	N/A	2.85	0.09
	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	45,441,536	45.0	8.41	0.32
	<i>Subtotal</i>	<i>45,441,536</i>		<i>11.26</i>	<i>0.41</i>
Beaver	Off-Network	N/A	N/A	84.26	3.90
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	14,201,369	37.5	2.26	0.12
	Urban Restricted	339,330,157	56.2	33.73	1.42
	Urban UnRestricted	1,023,259,718	36.8	147.58	8.45
	<i>Subtotal</i>	<i>1,376,791,244</i>		<i>267.83</i>	<i>13.88</i>
Butler	Off-Network	N/A	N/A	129.47	4.36
	Rural Restricted	71,264,657	48.1	10.41	0.42
	Rural UnRestricted	136,135,971	33.6	23.67	1.31
	Urban Restricted	516,299,312	56.5	103.83	2.85
	Urban UnRestricted	1,409,063,436	37.5	251.81	12.13
	<i>Subtotal</i>	<i>2,132,763,376</i>		<i>519.19</i>	<i>21.08</i>
Washington	Off-Network	N/A	N/A	169.15	4.65
	Rural Restricted	244,863,051	57.5	27.05	1.02
	Rural UnRestricted	108,646,742	33.7	17.35	1.02
	Urban Restricted	946,416,940	55.9	282.31	6.57
	Urban UnRestricted	1,108,960,579	37.6	206.63	9.65
	<i>Subtotal</i>	<i>2,408,887,312</i>		<i>702.49</i>	<i>22.91</i>
Westmoreland	Off-Network	N/A	N/A	275.55	9.04
	Rural Restricted	50,482,317	51.3	7.95	0.28
	Rural UnRestricted	122,016,717	30.0	32.05	1.50
	Urban Restricted	942,223,973	56.8	294.59	6.60
	Urban UnRestricted	2,087,619,112	36.4	521.35	20.85
	<i>Subtotal</i>	<i>3,202,342,119</i>		<i>1,131.49</i>	<i>38.27</i>
Greene (Partial)	Off-Network	N/A	N/A	1.18	0.04
	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	23,246,047	44.4	4.06	0.17
	<i>Subtotal</i>	<i>23,246,047</i>		<i>5.24</i>	<i>0.21</i>
Lawrence (Partial)	Off-Network	N/A	N/A	0.73	0.03
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	437,986	25.0	0.18	0.01
	Urban UnRestricted	13,540,691	42.5	2.05	0.10
	<i>Subtotal</i>	<i>13,978,677</i>		<i>2.96</i>	<i>0.13</i>
Region Subtotal		17,561,166,872		4,732.29	203.23
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>17,561,166,872</b>	<b>(Kg/Year)</b>	<b>4,732.29</b>	<b>203.23</b>
				<b>4,293,061</b>	<b>184,366</b>

**Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary**  
**2050 LRP Horizon Year (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny (Partial)	Off-Network	N/A	N/A	573.92	22.61
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,038,746	39.9	0.91	0.06
	Urban Restricted	3,133,275,438	48.3	450.15	18.18
	Urban UnRestricted	5,331,319,433	28.0	1,078.09	63.79
	<i>Subtotal</i>	<i>8,472,633,616</i>		<i>2,103.05</i>	<i>104.63</i>
Armstrong (Partial)	Off-Network	N/A	N/A	2.87	0.09
	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	45,111,816	45.0	8.24	0.31
	<i>Subtotal</i>	<i>45,111,816</i>		<i>11.10</i>	<i>0.40</i>
Beaver	Off-Network	N/A	N/A	86.28	3.67
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	14,483,951	37.5	2.27	0.12
	Urban Restricted	346,307,770	56.2	33.76	1.42
	Urban UnRestricted	1,040,895,444	36.8	147.94	8.48
	<i>Subtotal</i>	<i>1,401,687,165</i>		<i>270.25</i>	<i>13.68</i>
Butler	Off-Network	N/A	N/A	129.66	4.00
	Rural Restricted	71,109,363	48.1	10.26	0.41
	Rural UnRestricted	136,712,411	33.6	23.48	1.30
	Urban Restricted	522,290,161	56.5	103.16	2.82
	Urban UnRestricted	1,418,869,887	37.5	250.51	12.04
	<i>Subtotal</i>	<i>2,148,981,822</i>		<i>517.07</i>	<i>20.57</i>
Washington	Off-Network	N/A	N/A	168.63	4.24
	Rural Restricted	258,360,857	57.6	27.82	1.05
	Rural UnRestricted	108,852,116	33.7	17.33	1.01
	Urban Restricted	948,180,250	55.9	278.75	6.42
	Urban UnRestricted	1,117,520,767	37.6	206.08	9.59
	<i>Subtotal</i>	<i>2,432,913,991</i>		<i>698.61</i>	<i>22.31</i>
Westmoreland	Off-Network	N/A	N/A	279.48	8.52
	Rural Restricted	49,374,490	51.3	7.64	0.27
	Rural UnRestricted	121,056,974	29.9	31.53	1.47
	Urban Restricted	947,541,272	56.8	291.55	6.47
	Urban UnRestricted	2,114,651,570	36.4	522.01	20.80
	<i>Subtotal</i>	<i>3,232,624,305</i>		<i>1,132.20</i>	<i>37.54</i>
Greene (Partial)	Off-Network	N/A	N/A	1.20	0.04
	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	23,776,590	44.4	4.10	0.17
	<i>Subtotal</i>	<i>23,776,590</i>		<i>5.30</i>	<i>0.20</i>
Lawrence (Partial)	Off-Network	N/A	N/A	0.75	0.03
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	442,831	25.0	0.18	0.01
	Urban UnRestricted	14,024,863	42.3	2.10	0.10
	<i>Subtotal</i>	<i>14,467,694</i>		<i>3.03</i>	<i>0.13</i>
Region Subtotal		17,772,196,998		4,740.61	199.47
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>17,772,196,998</b>	<b>(Kg/Year)</b>	<b>4,740.61</b>	<b>199.47</b>
				<b>4,300,607</b>	<b>180,957</b>

**Allegheny County, PA PM2.5 Annual Emission Summary**  
**2025 Existing / Base / Budget Year - PM2.5 NAAQS (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny	Off-Network	N/A	N/A	728.18	34.97
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,761,392	40.1	1.89	0.09
	Urban Restricted	2,862,192,962	48.5	884.06	32.81
	Urban UnRestricted	5,388,330,099	28.5	1,904.42	99.62
	<i>Subtotal</i>	<i>8,258,284,453</i>		<i>3,518.54</i>	<i>167.50</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>8,258,284,453</b>		<b>3,518.54</b>	<b>167.50</b>
			<b>(Kg/Year)</b>	<b>3,191,970</b>	<b>151,956</b>

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**Allegheny County, PA PM2.5 Annual Emission Summary**  
**2028 TIP Year (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny	Off-Network	N/A	N/A	634.80	33.19
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,831,472	40.1	1.43	0.08
	Urban Restricted	2,887,780,444	48.4	669.99	26.33
	Urban UnRestricted	5,424,282,472	28.5	1,511.17	84.83
	<i>Subtotal</i>	<i>8,319,894,388</i>		<i>2,817.39</i>	<i>144.42</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>8,319,894,388</b>		<b>2,817.39</b>	<b>144.42</b>
			<b>(Kg/Year)</b>	<b>2,555,894</b>	<b>131,020</b>

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**Allegheny County, PA PM2.5 Annual Emission Summary**  
**2035 Interim Year #1 (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny	Off-Network	N/A	N/A	572.18	31.76
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,131,825	39.6	0.91	0.06
	Urban Restricted	2,966,158,442	48.6	478.03	19.41
	Urban UnRestricted	5,430,521,181	28.4	1,163.79	68.69
	<i>Subtotal</i>	<i>8,403,811,448</i>		<i>2,214.92</i>	<i>119.92</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>8,403,811,448</b>		<b>2,214.92</b>	<b>119.92</b>
			<b>(Kg/Year)</b>	<b>2,009,340</b>	<b>108,794</b>

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**Allegheny County, PA PM2.5 Annual Emission Summary**  
**2045 Interim Year #2 (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny	Off-Network	N/A	N/A	569.27	24.40
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,389,582	40.2	0.95	0.06
	Urban Restricted	3,034,262,952	48.1	445.94	18.05
	Urban UnRestricted	5,439,141,420	28.0	1,105.26	65.62
	<i>Subtotal</i>	<i>8,481,793,953</i>		<i>2,121.41</i>	<i>108.14</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>8,481,793,953</b>		<b>2,121.41</b>	<b>108.14</b>
			<b>(Kg/Year)</b>	<b>1,924,515</b>	<b>98,099</b>

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**Allegheny County, PA PM2.5 Annual Emission Summary**  
**2050 LRP Horizon Year (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Allegheny	Off-Network	N/A	N/A	582.15	22.97
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,025,475	39.9	0.90	0.06
	Urban Restricted	3,133,239,841	48.3	450.68	18.19
	Urban UnRestricted	5,454,147,284	28.0	1,098.66	65.18
	<i>Subtotal</i>	<i>8,595,412,601</i>		<i>2,132.40</i>	<i>106.39</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>8,595,412,601</b>		<b>2,132.40</b>	<b>106.39</b>
			<b>(Kg/Year)</b>	<b>1,934,478</b>	<b>96,518</b>

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**Indiana County PM2.5 Annual Emission Summary\***  
**2025 Existing / Base / Budget Year - PM2.5 NAAQS (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Indiana (Partial)	Off-Network	N/A	N/A	12.37	0.43
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	220,235	25.0	0.20	0.01
	Urban UnRestricted	152,808,470	49.9	65.83	2.13
	<i>Subtotal</i>	<i>153,028,705</i>			<i>78.41</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>153,028,705</b>		<b>78.41</b>	<b>2.57</b>
			<b>(Kg/Year)</b>	<b>71,129</b>	<b>2,332</b>

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

**Indiana County PM2.5 Annual Emission Summary\***  
**2028 TIP Year (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Indiana (Partial)	Off-Network	N/A	N/A	11.36	0.42
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	227,766	25.0	0.18	0.01
	Urban UnRestricted	154,637,484	49.9	49.39	1.66
	<i>Subtotal</i>	<i>154,865,250</i>		<i>60.93</i>	<i>2.09</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>154,865,250</b>		<b>60.93</b>	<b>2.09</b>
			<b>(Kg/Year)</b>	<b>55,278</b>	<b>1,897</b>

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\* 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)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Indiana (Partial)	Off-Network	N/A	N/A	9.83	0.40
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	238,689	25.0	0.16	0.01
	Urban UnRestricted	156,127,866	49.9	33.63	1.14
	<i>Subtotal</i>	<i>156,366,556</i>		<i>43.62</i>	<i>1.54</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>156,366,556</b>		<b>43.62</b>	<b>1.54</b>
			<b>(Kg/Year)</b>	<b>39,570</b>	<b>1,397</b>

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

**Indiana County PM2.5 Annual Emission Summary\***  
**2045 Interim Year #2 (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Indiana (Partial)	Off-Network	N/A	N/A	9.79	0.30
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	271,076	25.0	0.17	0.01
	Urban UnRestricted	160,966,350	50.1	30.67	1.02
	<i>Subtotal</i>	<i>161,237,426</i>		<i>40.63</i>	<i>1.32</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>161,237,426</b>		<b>40.63</b>	<b>1.32</b>
			<b>(Kg/Year)</b>	<b>36,862</b>	<b>1,202</b>

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

**Indiana County PM2.5 Annual Emission Summary\***  
**2050 LRP Horizon Year (By Road Type)**

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM <sub>2.5</sub>
Indiana (Partial)	Off-Network	N/A	N/A	9.92	0.28
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	275,750	25.0	0.18	0.01
	Urban UnRestricted	162,700,248	50.0	30.43	1.00
	<i>Subtotal</i>	<i>162,975,997</i>		<i>40.52</i>	<i>1.28</i>
Off-Model Project Emission Benefits				0.00	0.00
<b>Region Total</b>		<b>162,975,997</b>		<b>40.52</b>	<b>1.28</b>
			<b>(Kg/Year)</b>	<b>36,761</b>	<b>1,165</b>

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

**Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary**  
**2025 Existing / Base / Budget Year - PM2.5 NAAQS (By Road Type)**

County	Road Type	Summer Daily VMT	Speed (mph)	Emissions (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	3.715	1.986
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	26,942	40.1	0.001	0.006
	Urban Restricted	9,143,938	48.5	0.435	2.533
	Urban UnRestricted	17,879,704	28.5	1.331	5.644
	<i>Subtotal</i>	<i>27,050,584</i>		<i>5.482</i>	<i>10.169</i>
Armstrong	Off-Network	0	0.0	0.301	0.170
	Rural Restricted	293,682	54.5	0.014	0.096
	Rural UnRestricted	177,580	35.9	0.012	0.056
	Urban Restricted	94,530	32.9	0.007	0.048
	Urban UnRestricted	1,379,914	43.6	0.080	0.485
	<i>Subtotal</i>	<i>1,945,707</i>		<i>0.415</i>	<i>0.855</i>
Beaver	Off-Network	0	0.0	0.620	0.297
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	39,156	37.9	0.002	0.011
	Urban Restricted	1,025,962	56.8	0.042	0.228
	Urban UnRestricted	3,201,840	37.2	0.186	0.811
	<i>Subtotal</i>	<i>4,266,958</i>		<i>0.850</i>	<i>1.347</i>
Butler	Off-Network	0	0.0	0.874	0.514
	Rural Restricted	218,062	47.7	0.011	0.062
	Rural UnRestricted	463,286	34.7	0.031	0.134
	Urban Restricted	1,554,222	56.4	0.076	0.613
	Urban UnRestricted	4,609,127	37.6	0.288	1.400
	<i>Subtotal</i>	<i>6,844,696</i>		<i>1.281</i>	<i>2.723</i>
Washington	Off-Network	0	0.0	0.848	0.661
	Rural Restricted	624,232	56.9	0.026	0.153
	Rural UnRestricted	409,842	36.2	0.024	0.107
	Urban Restricted	3,140,152	56.8	0.157	1.591
	Urban UnRestricted	3,614,094	37.3	0.216	1.119
	<i>Subtotal</i>	<i>7,788,320</i>		<i>1.270</i>	<i>3.630</i>
Westmoreland	Off-Network	0	0.0	1.361	0.966
	Rural Restricted	168,700	53.0	0.008	0.051
	Rural UnRestricted	425,591	30.7	0.030	0.160
	Urban Restricted	2,866,881	56.9	0.148	1.625
	Urban UnRestricted	6,731,088	36.9	0.417	2.549
	<i>Subtotal</i>	<i>10,192,260</i>		<i>1.964</i>	<i>5.351</i>
Fayette	Off-Network	0	0.0	0.578	0.315
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	3,912	44.7	0.000	0.001
	Urban Restricted	507,043	46.9	0.028	0.197
	Urban UnRestricted	2,986,044	41.2	0.180	1.102
	<i>Subtotal</i>	<i>3,496,999</i>		<i>0.786</i>	<i>1.615</i>
Region Subtotal		61,585,523		12.048	25.690
Off-Model Project Emission Benefits				0.000	0.000
<b>Region Total</b>		<b>61,585,523</b>	<b>(Kg/Day)</b>	<b>12.048</b>	<b>25.690</b>
				<b>10,929</b>	<b>23,306</b>

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**Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary**  
**2028 TIP Year (By Road Type)**

County	Road Type	Summer Daily VMT	Speed (mph)	Emissions (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	3.197	1.676
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	27,043	40.1	0.001	0.004
	Urban Restricted	9,177,090	48.4	0.354	1.908
	Urban UnRestricted	17,904,820	28.5	1.082	4.447
	<i>Subtotal</i>	<i>27,108,953</i>		<i>4.634</i>	<i>8.036</i>
Armstrong	Off-Network	0	0.0	0.279	0.151
	Rural Restricted	293,843	54.5	0.011	0.070
	Rural UnRestricted	178,263	35.9	0.010	0.043
	Urban Restricted	94,891	32.9	0.006	0.040
	Urban UnRestricted	1,394,943	43.7	0.066	0.377
	<i>Subtotal</i>	<i>1,961,940</i>		<i>0.371</i>	<i>0.681</i>
Beaver	Off-Network	0	0.0	0.551	0.255
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	39,328	37.9	0.002	0.008
	Urban Restricted	1,039,347	56.8	0.035	0.165
	Urban UnRestricted	3,235,512	37.2	0.153	0.626
	<i>Subtotal</i>	<i>4,314,187</i>		<i>0.740</i>	<i>1.055</i>
Butler	Off-Network	0	0.0	0.771	0.443
	Rural Restricted	218,807	47.8	0.009	0.047
	Rural UnRestricted	463,186	34.8	0.025	0.103
	Urban Restricted	1,566,277	56.4	0.062	0.465
	Urban UnRestricted	4,630,450	37.6	0.237	1.090
	<i>Subtotal</i>	<i>6,878,720</i>		<i>1.104</i>	<i>2.148</i>
Washington	Off-Network	0	0.0	0.731	0.577
	Rural Restricted	627,091	56.9	0.021	0.112
	Rural UnRestricted	410,251	36.2	0.020	0.082
	Urban Restricted	3,150,267	56.8	0.124	1.225
	Urban UnRestricted	3,618,664	37.3	0.175	0.874
	<i>Subtotal</i>	<i>7,806,272</i>		<i>1.071</i>	<i>2.871</i>
Westmoreland	Off-Network	0	0.0	1.172	0.845
	Rural Restricted	168,864	53.1	0.006	0.038
	Rural UnRestricted	424,175	30.6	0.025	0.130
	Urban Restricted	2,879,768	56.9	0.117	1.259
	Urban UnRestricted	6,783,098	36.9	0.339	2.055
	<i>Subtotal</i>	<i>10,255,906</i>		<i>1.658</i>	<i>4.327</i>
Fayette	Off-Network	0	0.0	0.536	0.280
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	3,939	44.7	0.000	0.001
	Urban Restricted	512,006	46.9	0.023	0.154
	Urban UnRestricted	3,002,681	41.2	0.147	0.865
	<i>Subtotal</i>	<i>3,518,626</i>		<i>0.706</i>	<i>1.301</i>
Region Subtotal		61,844,603		10.285	20.418
Off-Model Project Emission Benefits				0.000	0.000
<b>Region Total</b>		<b>61,844,603</b>	<b>(Kg/Day)</b>	<b>10.285</b>	<b>20.418</b>
				<b>9,330</b>	<b>18,523</b>

SPC July 2024

**Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary**  
**2035 Interim Year #1 (By Road Type)**

County	Road Type	Summer Daily VMT	Speed (mph)	Emissions (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	2.860	1.431
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	24,766	39.6	0.001	0.003
	Urban Restricted	9,476,237	48.6	0.284	1.365
	Urban UnRestricted	18,024,972	28.4	0.857	3.428
	<i>Subtotal</i>	<i>27,525,975</i>		<i>4.003</i>	<i>6.227</i>
Armstrong	Off-Network	0	0.0	0.236	0.126
	Rural Restricted	282,127	54.5	0.008	0.045
	Rural UnRestricted	180,633	35.9	0.008	0.032
	Urban Restricted	112,309	33.2	0.005	0.037
	Urban UnRestricted	1,428,462	43.7	0.052	0.278
	<i>Subtotal</i>	<i>2,003,531</i>		<i>0.309</i>	<i>0.518</i>
Beaver	Off-Network	0	0.0	0.460	0.208
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	40,590	37.8	0.002	0.006
	Urban Restricted	1,078,904	56.7	0.028	0.109
	Urban UnRestricted	3,340,676	37.4	0.124	0.465
	<i>Subtotal</i>	<i>4,460,170</i>		<i>0.614</i>	<i>0.788</i>
Butler	Off-Network	0	0.0	0.627	0.359
	Rural Restricted	217,195	47.8	0.007	0.032
	Rural UnRestricted	467,019	34.8	0.020	0.077
	Urban Restricted	1,593,613	56.4	0.048	0.323
	Urban UnRestricted	4,700,851	37.6	0.189	0.810
	<i>Subtotal</i>	<i>6,978,678</i>		<i>0.891</i>	<i>1.601</i>
Washington	Off-Network	0	0.0	0.571	0.484
	Rural Restricted	746,823	57.4	0.020	0.085
	Rural UnRestricted	407,539	36.1	0.016	0.060
	Urban Restricted	2,973,400	56.3	0.089	0.871
	Urban UnRestricted	3,789,982	38.0	0.142	0.677
	<i>Subtotal</i>	<i>7,917,745</i>		<i>0.838</i>	<i>2.178</i>
Westmoreland	Off-Network	0	0.0	1.033	0.736
	Rural Restricted	162,633	52.8	0.005	0.025
	Rural UnRestricted	421,855	30.6	0.019	0.102
	Urban Restricted	2,946,558	56.9	0.089	0.914
	Urban UnRestricted	6,865,711	36.8	0.269	1.610
	<i>Subtotal</i>	<i>10,396,757</i>		<i>1.414</i>	<i>3.388</i>
Fayette	Off-Network	0	0.0	0.455	0.232
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	4,113	44.7	0.000	0.001
	Urban Restricted	517,494	46.9	0.018	0.113
	Urban UnRestricted	3,049,612	41.3	0.116	0.651
	<i>Subtotal</i>	<i>3,571,219</i>		<i>0.589</i>	<i>0.997</i>
Region Subtotal		62,854,076		8.658	15.697
Off-Model Project Emission Benefits				0.000	0.000
<b>Region Total</b>		<b>62,854,076</b>	<b>(Kg/Day)</b>	<b>8.658</b>	<b>15.697</b>
				<b>7,854</b>	<b>14,241</b>

SPC July 2024

**Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary**  
**2045 Interim Year #2 (By Road Type)**

County	Road Type	Summer Daily VMT	Speed (mph)	Emissions (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	2.445	1.390
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	29,122	40.2	0.001	0.003
	Urban Restricted	9,693,835	48.1	0.254	1.272
	Urban UnRestricted	18,056,347	28.0	0.752	3.250
	<i>Subtotal</i>	<i>27,779,304</i>		<i>3.451</i>	<i>5.914</i>
Armstrong	Off-Network	0	0.0	0.208	0.123
	Rural Restricted	280,993	54.3	0.007	0.040
	Rural UnRestricted	182,190	35.7	0.007	0.030
	Urban Restricted	112,985	30.7	0.005	0.038
	Urban UnRestricted	1,469,277	43.3	0.047	0.261
	<i>Subtotal</i>	<i>2,045,445</i>		<i>0.274</i>	<i>0.493</i>
Beaver	Off-Network	0	0.0	0.394	0.203
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	44,350	37.5	0.001	0.006
	Urban Restricted	1,084,226	56.2	0.025	0.096
	Urban UnRestricted	3,439,331	36.8	0.111	0.441
	<i>Subtotal</i>	<i>4,567,906</i>		<i>0.531</i>	<i>0.746</i>
Butler	Off-Network	0	0.0	0.518	0.339
	Rural Restricted	227,696	48.1	0.006	0.030
	Rural UnRestricted	444,400	33.6	0.017	0.069
	Urban Restricted	1,649,699	56.5	0.043	0.296
	Urban UnRestricted	4,762,571	37.5	0.167	0.754
	<i>Subtotal</i>	<i>7,084,366</i>		<i>0.751</i>	<i>1.488</i>
Washington	Off-Network	0	0.0	0.452	0.458
	Rural Restricted	782,363	57.5	0.018	0.077
	Rural UnRestricted	366,407	33.7	0.013	0.053
	Urban Restricted	3,024,099	55.9	0.080	0.807
	Urban UnRestricted	3,764,619	37.6	0.123	0.626
	<i>Subtotal</i>	<i>7,937,488</i>		<i>0.686</i>	<i>2.021</i>
Westmoreland	Off-Network	0	0.0	0.886	0.720
	Rural Restricted	161,296	51.3	0.004	0.023
	Rural UnRestricted	411,283	30.0	0.016	0.096
	Urban Restricted	3,010,726	56.8	0.079	0.841
	Urban UnRestricted	6,983,701	36.4	0.239	1.542
	<i>Subtotal</i>	<i>10,567,006</i>		<i>1.224</i>	<i>3.221</i>
Fayette	Off-Network	0	0.0	0.404	0.227
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	4,260	44.7	0.000	0.001
	Urban Restricted	523,500	46.8	0.016	0.104
	Urban UnRestricted	3,129,027	41.3	0.104	0.612
	<i>Subtotal</i>	<i>3,656,788</i>		<i>0.523</i>	<i>0.944</i>
Region Subtotal		63,638,303		7.440	14.826
Off-Model Project Emission Benefits				0.000	0.000
<b>Region Total</b>		<b>63,638,303</b>	<b>(Kg/Day)</b>	<b>7.440</b>	<b>14.826</b>
				<b>6,750</b>	<b>13,450</b>

SPC July 2024

**Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary**  
**2050 LRP Horizon Year (By Road Type)**

County	Road Type	Summer Daily VMT	Speed (mph)	Emissions (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	2.446	1.414
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	27,865	39.9	0.001	0.003
	Urban Restricted	10,010,044	48.3	0.256	1.285
	Urban UnRestricted	18,111,987	28.0	0.739	3.231
	<i>Subtotal</i>	<i>28,149,896</i>			<i>3.442</i>
Armstrong	Off-Network	0	0.0	0.210	0.125
	Rural Restricted	280,897	54.3	0.007	0.038
	Rural UnRestricted	184,148	35.7	0.007	0.030
	Urban Restricted	113,714	30.7	0.005	0.038
	Urban UnRestricted	1,496,207	43.4	0.046	0.263
	<i>Subtotal</i>	<i>2,074,966</i>			<i>0.275</i>
Beaver	Off-Network	0	0.0	0.394	0.207
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	45,233	37.5	0.001	0.006
	Urban Restricted	1,106,518	56.2	0.025	0.096
	Urban UnRestricted	3,499,246	36.8	0.111	0.442
	<i>Subtotal</i>	<i>4,650,997</i>			<i>0.531</i>
Butler	Off-Network	0	0.0	0.506	0.339
	Rural Restricted	227,196	48.1	0.006	0.029
	Rural UnRestricted	446,263	33.6	0.017	0.069
	Urban Restricted	1,668,845	56.5	0.043	0.295
	Urban UnRestricted	4,795,671	37.5	0.164	0.749
	<i>Subtotal</i>	<i>7,137,975</i>			<i>0.736</i>
Washington	Off-Network	0	0.0	0.436	0.456
	Rural Restricted	825,496	57.6	0.018	0.079
	Rural UnRestricted	367,090	33.7	0.013	0.053
	Urban Restricted	3,029,778	55.9	0.078	0.796
	Urban UnRestricted	3,793,186	37.6	0.121	0.624
	<i>Subtotal</i>	<i>8,015,550</i>			<i>0.666</i>
Westmoreland	Off-Network	0	0.0	0.885	0.726
	Rural Restricted	157,761	51.3	0.004	0.022
	Rural UnRestricted	407,959	29.9	0.016	0.095
	Urban Restricted	3,027,685	56.8	0.078	0.832
	Urban UnRestricted	7,073,745	36.4	0.237	1.543
	<i>Subtotal</i>	<i>10,667,150</i>			<i>1.220</i>
Fayette	Off-Network	0	0.0	0.408	0.230
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	4,367	44.7	0.000	0.001
	Urban Restricted	527,802	46.8	0.015	0.104
	Urban UnRestricted	3,158,188	41.3	0.102	0.610
	<i>Subtotal</i>	<i>3,690,356</i>			<i>0.526</i>
Region Subtotal		64,386,891		7.396	14.831
Off-Model Project Emission Benefits				0.000	0.000
<b>Region Total</b>		<b>64,386,891</b>	<b>(Kg/Day)</b>	<b>7.396</b>	<b>14.831</b>
				<b>6,710</b>	<b>13,455</b>

SPC July 2024

## **APPENDIX E**

### Common Acronyms



# COMMON ACRONYMS

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AADT	Annual Average Daily Traffic
ADA	Americans with Disabilities Act of 1990 (federal)
ADT	Average Daily Traffic
BIL	Bipartisan Infrastructure Law (federal transportation law – enacted 2021) (also IIA)
BPR	PennDOT Bureau of Planning and Research
BRT	Bus Rapid Transit
CAAA 90	Federal Clean Air Act Amendments of 1990
CA LEV	California Low Emission Vehicle Program
CARB	California Air Resources Board
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 Program (FHWA)
CO	Carbon Monoxide
CO <sub>2</sub>	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
IIJA	Infrastructure Investment and Jobs Act (federal transportation law – enacted 2021) (also BIL)
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

## COMMON ACRONYMS

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MPO	Metropolitan Planning Organization
MPH	Miles per Hour
MPMS	Multi-Modal Project Management System (Pennsylvania)
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 <sub>3</sub>	Ammonia
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
O <sub>3</sub>	Ozone
OVT	Out of Vehicle Travel Time
PaDEP	Pennsylvania Department of Environmental Protection (also DEP)
PennDOT	Pennsylvania Department of Transportation
PM <sub>10</sub>	Coarse Particulate Matter - particles with diameter less than 10 micrometers
PM <sub>2.5</sub>	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 <sub>2</sub>	Sulfur Dioxide
SO <sub>x</sub>	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
µG/M <sup>3</sup>	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 5-24 and 7-24



SOUTHWESTERN PENNSYLVANIA COMMISSION

RESOLUTION NO. 5-24

A RESOLUTION OF THE SOUTHWESTERN PENNSYLVANIA COMMISSION to make a finding of conformity that the region's fiscally constrained 2025-2028 Transportation Improvement Program (TIP) for the Pittsburgh Transportation Management Area (TMA) and the 2050 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; and

WHEREAS, the EPA requires conformity assessments for 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); and

WHEREAS, the EPA requires conformity assessments for 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); and

WHEREAS, the EPA requires a conformity assessment for 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; and

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; and

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; and

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; and

WHEREAS, SPC staff has conducted a qualitative and quantitative analysis for the designated PM 2.5, PM 10, 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 2025-2028 TIP and the 2050 Transportation Plan to the Clean Air Act; and

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 8, 2024 through June 7, 2024 including eleven public meetings; responses to all public comments have been compiled and made available to Commission members for review.

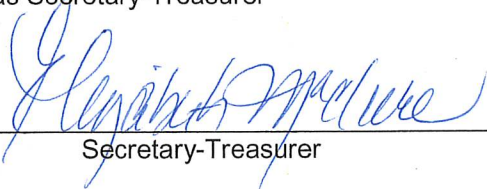
NOW, THEREFORE, BE IT RESOLVED that the Southwestern Pennsylvania Commission finds that the region's fiscally constrained 2025-2028 TIP and the 2050 Transportation Plan conform to the federal Clean Air Act by supporting its intention of achieving and maintaining the NAAQS;

BE IT FURTHER RESOLVED that the region's 2025-2028 TIP and the 2050 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, 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, Betsy McClure, 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 24th day of June 2024, and that said resolution is now in full force and effect.

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

  
Secretary-Treasurer



SOUTHWESTERN PENNSYLVANIA COMMISSION

RESOLUTION NO. 7-24

A RESOLUTION OF THE SOUTHWESTERN PENNSYLVANIA COMMISSION to adopt the FFY 2025-2028 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 2025-2028 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 2025-2028 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 5-24;

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 recommended Commission approval of the 2025-2028 TIP and companion documents at its June 12th and June 13th respective meetings.

NOW, THEREFORE, BE IT RESOLVED that the FFY 2025-2028 TIP meets all applicable federal requirements and the Southwestern Pennsylvania Commission approves and adopts the 2025-2028 Transportation Improvement Program (TIP) for the Pittsburgh Management Area;

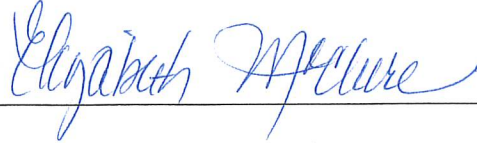
BE IT FURTHER RESOLVED that the FFY 2025-2028 TIP and companion documents are approved for submission to the appropriate authorities and agencies: 1) to the Secretary of the Pennsylvania Department of Transportation (PennDOT) for approval by the Governor, 2) to PennDOT for inclusion in the state transportation 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, Betsy McClure, 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 24th day of June 2024, and that said resolution is now in full force and effect.

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



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Secretary-Treasurer

