

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

**SmartMoves for a Changing Region
and amendments to
2023-2026 Transportation Improvement Program**



**Final Report
September 2023**

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42 21st Street, Suite
Pittsburgh, Pennsylvania 15222
Voice: 412-391-5590
Fax: 412-391-9160

E-mail: comments@spcregion.org

Website: www.spcregion.org

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अनुरोध गरेमा बिना शुल्क SPC ले अनुवादन र दोभाषे सेवा उपलब्ध गराउँछ।
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Gujarati

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Marathi

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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 2023 to make its transportation-related conformity determination for the region's 2050 Long Range Transportation Plan (*SmartMoves for a Changing Region*, SPC, September 2023) and updates to the 2023-2026 Transportation Improvement Program. 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 (O₃), particulate matter (PM₁₀ and PM_{2.5}), and carbon monoxide (CO).

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

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

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

The most recent conformity finding for the region's fiscally constrained TIP and Plan was approved by SPC on June 27, 2022 in conjunction with adoption of the 2023-2026 TIP and

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updates to SPC’s 2045 Long Range Transportation Plan (*SmartMoves for a Changing Region, SPC, July 2019*). The United States Department of Transportation, in consultation with EPA, concurred with SPC’s conformity finding on September 29, 2022.

SPC has developed a new fiscally constrained Long-Range Transportation Plan (2050 Plan) which includes newly identified regionally significant projects as well as scope and schedule modifications to several currently programmed projects. Significant adjustments were also made to the current Transportation Improvement program (2023-2026 TIP) to address changes in fiscal projections that were made during development of the 2050 Plan and to include projects eligible for several new federal funding Programs. These changes to the regionally significant projects to be programmed on the region’s 2050 Plan and 2023-2026 TIP triggered the need for a new finding of conformity. The new conformity finding was needed prior to SPC’s adoption of the 2059 Plan and modifications to the 2023-2026 TIP, and before any federal action on programmed, regionally significant projects.

Travel simulation work and other relevant quantitative analysis for this demonstration of conformity began on January 26, 2023, 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 on June 27, 2022. 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, the update to 2020 data was not done for this conformity assessment, and instead it was decided to continue to use the 2017 data.
- The current vehicle inspection/maintenance (I/M) programs for southwestern Pennsylvania are reflected in the analysis. Information about the I/M programs is presented in Section V.
- The Pennsylvania Clean Vehicles (PCV) Program, adopted in 1998, incorporates the California Low Emission Vehicle Program (CA LEV) by reference although it allowed automakers to comply with the National Low Emission Vehicle (NLEV) program as an alternative to this Pennsylvania program until model year (MY) 2006. Beginning with MY 2008, “new” passenger cars and light-duty trucks with a gross vehicle weight rating (GVWR) of 8,500 pounds or less that are sold or leased and titled in Pennsylvania must be certified by the California Air Resources Board (CARB) or be certified for sale in all

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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. The Cycle 11 forecast was used in the conformity determination approved by SPC on June 27, 2022. Information about SPC’s modeling and forecasting process is presented in Section IV.
- SPC’s travel demand model is configured for the Cube Voyager modeling software package. The travel model covers SPC’s entire 10-county planning region. All of the estimates of vehicle miles traveled (VMT) and emissions projections were developed from SPC’s travel model.
- The travel model was 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 during development of the conformity assessment in the spring of 2022. The 2022 base year validation would have been based on 2020 and 2021 data. Travel patterns in those two years were severely disrupted due to the Covid-19 pandemic. The model was revalidated during this conformity assessment although travel patterns are still significantly below pre-Covid levels. Expectations are that travel will return to pre-Covid levels in the coming years. 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 new 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 (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).

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- 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_x 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_x are used for the conformity demonstration in Section VII for the Pittsburgh-Beaver Valley 8-hour ozone maintenance area.
- Greene and Indiana counties were designated as nonattainment areas under the 1997 8-hour ozone NAAQS. They were re-classified as maintenance areas with acceptance by EPA of maintenance plan SIPs. Subsequently, 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 the Greene and Indiana county maintenance areas. The same analysis process was required for these counties for the conformity assessment that was approved on June 27, 2022.
- Motor vehicle emission budgets are available to SPC for use in the conformity assessment for the Pittsburgh-Beaver Valley PM_{2.5} maintenance area under the 1997 annual PM_{2.5} NAAQS and the 2006 daily PM_{2.5} NAAQS. That area consists of four complete counties within SPC's planning area (Beaver, Butler, Washington, and Westmoreland), part of Allegheny County (not including the separate Liberty-Clairton nonattainment area), and

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parts of Armstrong, Greene and Lawrence counties. EPA approved the PM_{2.5} and NO_x MVEBs for use in conformity assessments for the Pittsburgh Area in a final rule published in Federal Register on October 2, 2015 (80 FR 59624).

- Motor vehicle emission budgets are available to SPC for use in the conformity assessment for the Allegheny County PM_{2.5} nonattainment area under the 2012 annual PM_{2.5} NAAQS. EPA approved the PM_{2.5} and NO_x MVEBs for use in conformity assessments for the Allegheny County nonattainment area in a final rule published in the Federal Register on May 14, 2021 (86 FR 26388).
- The EPA approved an “insignificance finding” that PM_{2.5} nonattainment in the Liberty-Clairton PM_{2.5} area was primarily the result of industrial stationary sources and motor vehicles were not an important contributor to the nonattainment problem. That finding was approved by EPA in a rulemaking published in the Federal Register on October 2, 2015 (80 FR 59615). With approval of this finding by EPA, no additional quantitative analysis for transportation-related PM_{2.5} impacts is required for conformity purposes for the Liberty-Clairton PM_{2.5} area. Interagency consultation and public review is still required.
- 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 the 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.
- Two major, regionally significant projects were completed in the region since the conformity assessment for the 2023-2026 TIP and 2045 Long Range Plan was prepared in the spring of 2022. Those projects are now included in the existing (2024 base year) transportation network for this conformity assessment. Those projects are:
 - Allegheny County:**
 - PA 28 Highland Park Br. Interchange Improvements (PA 28 widened to 2 lanes in each direction)
 - I-76 PA Turnpike Mainline widening to 6 lanes (Cranberry Int. to Pine Twp.)
- Three non-codable, regionally significant projects were also completed and reflected in the existing year (2024) analysis. These projects are:
 - Allegheny County:**
 - D11 4c SINC-UP Project – MPMS#100382 [Allegheny Co.]

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Butler County:

- D10 4c SINC-UP Project – MPMS#112713 [Butler 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_{2.5} NAAQS, the 2006 24-hour PM_{2.5} NAAQS, the 1971 carbon monoxide (CO) NAAQS, and the 1987 PM₁₀ NAAQS. The 2045 Plan and 2023-2026 TIP are summarized in Section III. Section IV discusses SPC's transportation modeling process. The methods used to develop emissions estimates for this conformity determination are highlighted in Section V. Section VI presents the travel simulations developed for this conformity determination. Section VII highlights the conformity findings and conclusions. The conformity determinations under the 8-hour ozone standard, the PM_{2.5} and PM₁₀ air quality standards, and the carbon monoxide standard are also made in Section VII. The public review process is outlined in Section VIII. A series of appendices, described in the text, appear at the end of this report.

The conformity findings and conclusions in this report are based on VMT, average speed, and emissions for six analysis years: 2024 – the base year for the conformity tests; 2025 – a budget year for the PM_{2.5} air quality standards; 2026 – the horizon year for the 2023-2026 TIP; 2035 – interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart; 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:

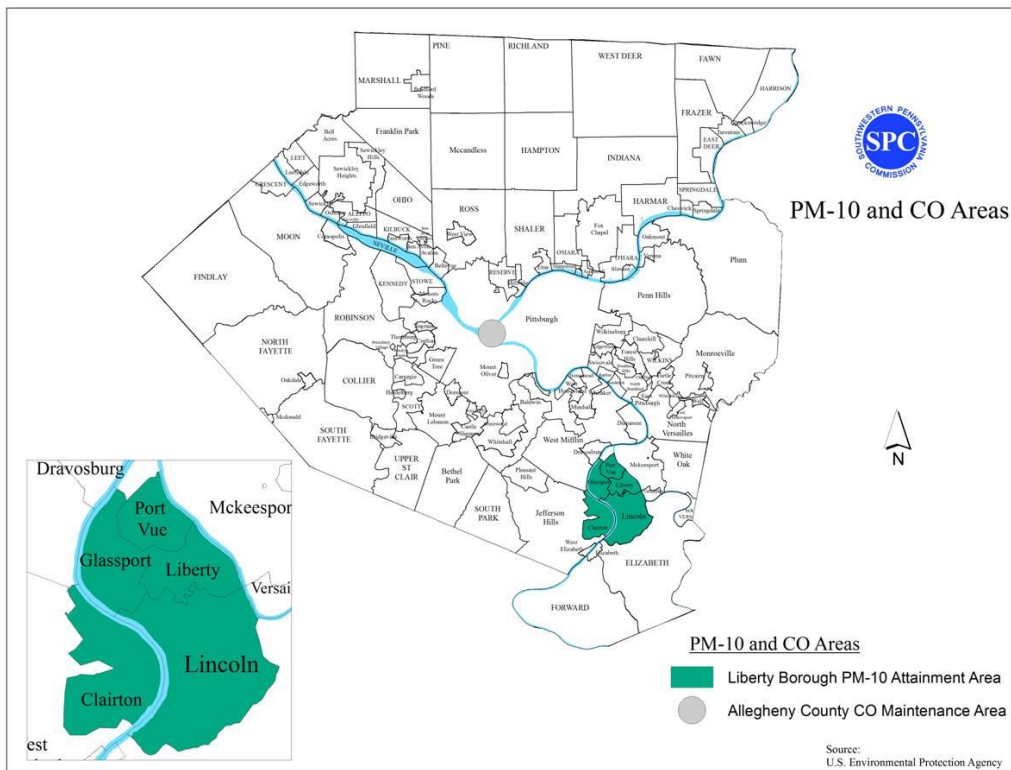
- 1) A determination should be made that the endorsed transportation plan and program will be consistent with the MVEBs in the approved control strategy SIP or redesignation request. Prior to EPA approval of MVEBs, a determination should be made that the transportation plan and program are consistent 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 and maintenance areas within Southwestern Pennsylvania for seven separate NAAQS. The seven air quality standards are: (1) the 1987 PM₁₀ NAAQS (one designated area, covering five municipalities within Allegheny County) – Map 1, (2) the 1971 carbon monoxide NAAQS (one designated area, covering the City of Pittsburgh's Central Business District and certain other high traffic density areas in and near the City's Oakland neighborhood) – Map 1, (3) the 1997 8-hour ozone NAAQS (two designated areas, covering Greene and Indiana counties within SPC's planning area) – Map 2, (4) the 2008 8-hour ozone NAAQS (one designated area, covering seven of the ten counties within SPC's planning area) – Map 2, (5) the 1997 PM_{2.5} annual NAAQS (three separate areas that, combined, cover five entire counties and parts of four other counties within SPC's planning area) – Map 3, (6) the 2006 PM_{2.5} 24-hour NAAQS (the same three geographic areas designated for the PM_{2.5} annual standard) – Map 3, and (7) the 2012 PM_{2.5} annual NAAQS (one designated area, covering all of Allegheny County) – Map 3.

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



Map 1

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PM₁₀

In accord with the federal Clean Air Act, the EPA designated a moderate nonattainment area for particulate matter under the 1987 PM₁₀ 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 PM₁₀ nonattainment in that area stemmed primarily from industrial sources in the area and not from mobile sources. As a result, a PM₁₀ transportation conformity budget is not required for this area. In addition, because the PM₁₀ violations were primarily caused by industrial stationary sources and motor vehicles were not an important contributor to the air quality problem, no additional quantitative analysis for transportation-related PM₁₀ 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 PM₁₀ Attainment Plan to EPA for review and approval. That was followed on July 12, 1995 with submittal of contingency measures that would be enforced if the area failed to attain the PM₁₀ standard. On September 8, 1998, EPA’s final approval of those documents was announced in the

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Federal Register (63 FR 47434) and EPA declared that the area had attained the PM₁₀ standard. On October 28, 2002, a request to redesignate the area as attainment for PM₁₀ was submitted to EPA by ACHD. EPA's approval of the redesignation request, and the formal redesignation of the area from nonattainment to maintenance of the PM₁₀ NAAQS, was announced in the Federal Register on September 11, 2003 (68 FR 53515).

The 2050 Plan and the 2023-2026 TIP will not worsen the PM₁₀ emissions in that area, nor will they interfere with the expeditious implementation of mitigation measures to control those emissions. Four projects are identified on the 2050 Plan and the 2023-2026 TIP in those five municipalities. They are: 1). PA 837 Slide Remediation – Slide remediation work on North State Street (PA 837) in the City of Clairton and West Mifflin Borough, \$15,650,000 (MPMS#114193); 2). SR 2010 Slide Remediation – Slide remediation work on Lovedale Road (SR 2010) in Lincoln Borough and Elizabeth Township, \$11,250,000 (MPMS#114194); 3). Lovedale Road Bridge/Wylie Run - Bridge Replacement on SR 2010, Lovedale Road over Wylie Run in Elizabeth Township & Lincoln Borough, \$3,050,000 (MPMS#74319); 4). Clairton-Glassport Bridge – Bridge rehabilitation on SR 2038 over Monongahela River in the City of Clairton, \$19,570,000 (No MPMS#). The total cost programmed on the 2050 Plan and the 2023-2026 TIP for these four projects is \$49,520,000.

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. With approval of an Attainment SIP and Maintenance Plan, this area was classified as a Maintenance area effective in March 2009.
- Greene County. This area includes all of Greene County which is within SPC's planning area. With approval of an Attainment SIP and Maintenance Plan, this area was classified as a Maintenance area effective in March 2009.

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

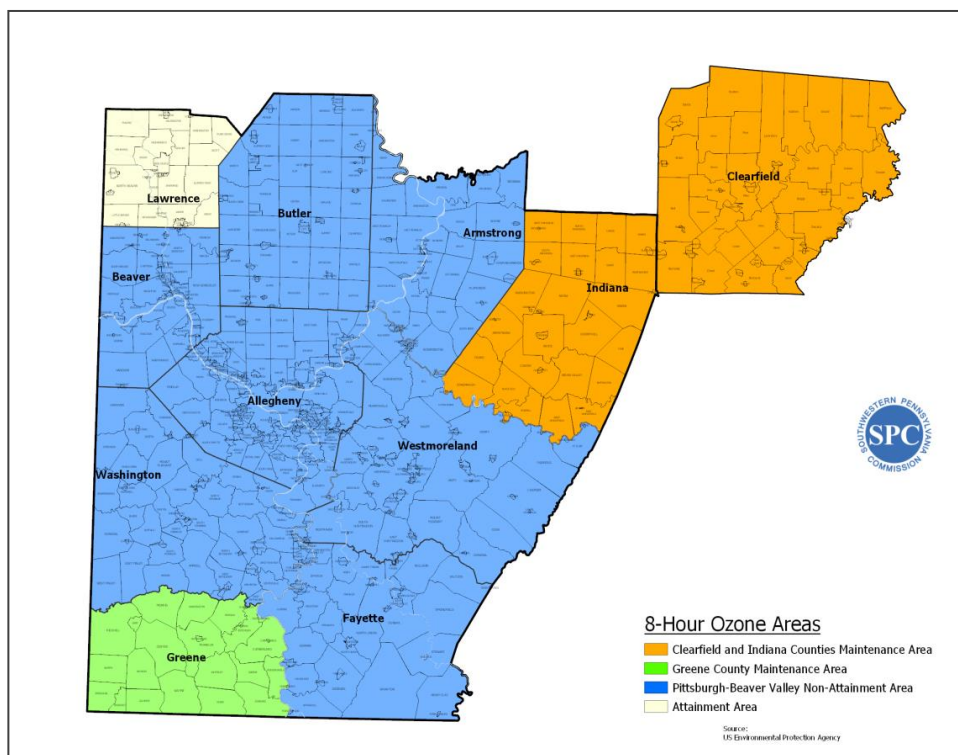
- Pittsburgh - Beaver Valley. This area includes the same seven counties within SPC's planning area that were included under the 1997 8-hour ozone NAAQS (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland).

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- The Greene and Indiana county maintenance areas 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 (NOx). A major source of VOCs and NOx is the incomplete combustion of fossil fuels. Transportation-related activities are a major contributor of these pollutants. Since heat speeds the reactions, ozone levels are typically highest during hot summer days. For ozone nonattainment areas, reductions in both VOC and NOx are required in order to demonstrate conformity.

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The Transportation Conformity Rule requires that the conformity determination for transportation plans and programs be based on comparisons to established VOC and NO_x 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_x emissions in a future year for the transportation plan or program when compared to the established MVEBs. The analysis must estimate total transportation-related emissions within the ozone nonattainment area for certain future years, and may include the effects of any emission control programs which are already adopted or committed to in the applicable State Implementation Plan.

MVEBs for VOC and NO_x 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_x) 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_{2.5}

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

- Johnstown. This area includes all of Cambria County (which is outside of the SPC planning area), plus five municipalities within Indiana County (West Wheatfield, Center, and East Wheatfield townships, and Armagh and Homer City boroughs). The attainment plan and maintenance SIP for this area was approved by EPA in July 2015, which reclassified the area as a Maintenance area.
- 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 attainment plan and maintenance SIP for this area was approved by EPA in October 2015, which reclassified the area as a Maintenance area.

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

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

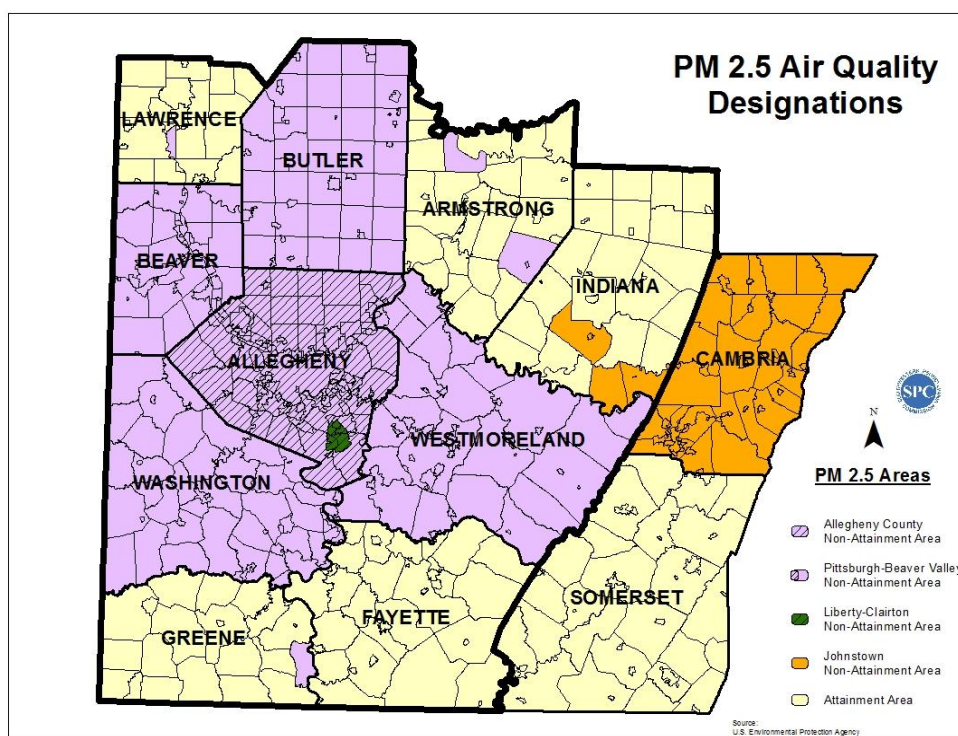
The remainder of the SPC planning area is designated as an attainment area under both the 1997 Annual and 2006 24-hour PM_{2.5} NAAQS. The attainment area includes all of Fayette County and the remainder of Armstrong, Greene, Indiana, and Lawrence counties.

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

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



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

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MVEBs for the Indiana County portion of the Johnstown PM_{2.5} maintenance area are presented in Table 15 and shown graphically in Figures 5 (PM_{2.5}) and 6 (NO_x) in Section VII.

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

The 2050 Plan and 2023-2026 TIP will not worsen the PM_{2.5} emissions in that area, nor will they interfere with the expeditious implementation of mitigation measures to control those emissions. The three projects identified on the 2023-2026 TIP and the 2050 Plan in the Liberty – Clairton PM_{2.5} Area are listed in the PM₁₀ discussion above.

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

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

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

PM_{2.5} emissions (fine particulates) are emitted directly by motor vehicles as a result of the fuel combustion process (tailpipe emissions) and as a result of brake and tire wear. PM_{2.5} emissions are contained in re-entrained road dust and transportation construction dust. PM_{2.5} emissions are also formed through reactions in the atmosphere among several precursor emissions including VOC, NO_x, ammonia (NH₃) and sulfates (SO_x). Under EPA conformity regulations:

- Direct PM_{2.5} tailpipe, brake wear, and tire wear emissions must be analyzed.
- Re-entrained road dust is included only if EPA or the Pennsylvania DEP determines that it is a significant contributor to PM_{2.5} in the nonattainment area, or is named in a PM_{2.5} SIP and a MVEB is established for this item.

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- Transportation construction dust is encompassed in regional transportation conformity if it is named in a PM_{2.5} SIP and a MVEB is established for this item.
- NO_x 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, NH₃ and SO_x analysis is not required in the period prior to SIP submission unless EPA or DEP determines one or more of these precursors to be a significant contributor.

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

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

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III. Transportation Networks Developed for Conformity Assessment

SPC’s process for this conformity determination for the 2050 Transportation Plan and updates to the 2023-2026 TIP called for use of six 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 six 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 six networks developed specifically for use in this conformity process were: 1). 2024 network – representing the base year for the conformity tests; 2). 2025 network – a PM_{2.5} NAAQS budget year; 3). 2026 network – the horizon year for the 2023-2026 TIP; 4). 2035 network – an interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart; 5). 2045 network -a second interim year to satisfy the Transportation Conformity Rule requirement that analysis years be not more than ten years apart, and; 6). 2050 network – the horizon year for the Long-Range Transportation Plan.

The 2050 Long Range Transportation Plan (2050 Plan) is the region’s fiscally constrained long-range transportation plan. The SPC report *SmartMoves for a Changing Region* (SPC, September 2023), identifies the specific projects included in the Plan for SPC’s 10-county planning area. It replaces the Plan that was adopted by SPC on June 24, 2019. The updated Plan was adopted by SPC on June 26, 2023. Appendix C lists the projects included on 2050 Plan.

The 2023-2026 TIP is the fiscally constrained program of projects for federal fiscal years 2023 through 2026 (October 1, 2022 through September 30, 2026) that reflect the region’s transportation priorities. It was initially adopted by SPC on June 27, 2022. Updates to the 2023-2026 TIP were made to address changes in fiscal projections that were made during development of the 2050 Plan and to include projects eligible for several new federal funding Programs. Those TIP modifications were approved with adoption of the 2050 Plan on June 26, 2023. The SPC report *2023-2026 Transportation Improvement Program for Southwestern Pennsylvania* (September, 2023) provides more information about the projects programmed on the TIP at that time. For purposes of this conformity assessment it was presumed that all projects programmed

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on the 2023-2026 TIP for construction would be completed by 2026. Appendix A lists all of the projects included on the updated 2023-2026 TIP.

“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 2024 network. The projects and facilities are those listed as completed from 1990 through 2024. The network was used to develop 2024 emissions estimates for the "existing" (2024) transportation system.

“Non-exempt” projects and facilities listed in Figure 1 for completion by 2025 were added to the 2024 network to define the transportation system for the 2025 network. The 2025 (PM_{2.5} Budget Year) network is a Cube Voyager-based representation of the region’s highway and transit system as it will appear upon completion of the projects programmed for construction on the 2023-2026 TIP by 2025. This network was used to develop emissions estimates for the PM_{2.5} NAAQS 2025 budget year.

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

“Non-exempt” projects and facilities listed in Figure 1 for completion between 2026 and 2035 were added to the 2026 network to define the 2035 “interim year #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 2035 “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 2023-2026 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.

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Appendix A contains a one-line summary of every highway, transit, and Pennsylvania Turnpike project identified on the updated 2023-2026 TIP within SPC's 10-county region. Appendix B contains a brief summary of every highway, transit, and Pennsylvania Turnpike project identified on the fiscally constrained portion of the 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.

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)

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

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)

2. PM2.5 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)

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

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)

3. Existing Base Network (2024) Transportation System

- 2008 Transportation System plus:

Facilities completed between 2008 and 2024

Allegheny County:

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

Beaver County:

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

Butler County:

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

Fayette County:

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

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

Greene County:

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

Indiana County:

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

Washington County:

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

Westmoreland County:

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

4. Budget Year #1 (2025) Transportation System

- 2024 Transportation System plus:
Facilities on 2023-2026 TIP for Construction by 2025

Allegheny County:

1. Bus Rapid Transit (BRT) Project Phase-1 (Downtown – Oakland – East End) [City of Pittsburgh]
2. Stevenson Mill Connector [Moon Twp.]
3. Rouser Road Connector [Moon Twp.]
4. MTA-Stevenson Mill/Rouser Road Offsites [Moon Twp.]
5. Market Place District Improvements-Montour Run Rd.-add through lane between FedEx Dr. and Market Place Blvd. [Moon Twp.]

Butler County:

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

5. TIP Year (2026) Transportation System

- 2025 Transportation System plus:
Facilities on 2023-2026 TIP for Construction between 2025 and 2026

Allegheny County:

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

6. Interim Year #1 (2035) Transportation System

- 2026 Transportation System plus:
Facilities on 2050 Long Range Plan for Construction between 2026 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 (2nd Ave. to Blvd. of Allies) [City of Pittsburgh]

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

3. I-79 @ SR 910 Interchange - Widening and installation of additional travel lane
4. Campbell's Run Road Improvements - Widen to 4 lanes - [Robinson Twp.]
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. Pa Turnpike – Mon Fayette Project – New 4-lane toll Freeway (Large to Duquesne)

Beaver County:

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

Butler County:

9. SR 228 Mars RR Bridge West - Widening to 4 lanes (SR 3015 [Mars-Valencia Road] to SR 3021[Franklin Road])
10. Freedom Road (SR 3020) Improvements - Widening to 4 lanes (Lovi Rd. to Powell Rd.)
11. SR 228 Three Degree Road – Widen Sr 228 to 4 lanes; Intersection Improvements
12. 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.]
13. I-79 Widening to 6 lanes (SR 228 to SR 528)

Fayette County:

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

7. 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. I-76 PA Turnpike Mainline – (Widen to 6 lanes) – Pittsburgh Int. to Westmoreland County line
2. Pa Turnpike – Mon Fayette Project – New 4 lane toll Freeway (E. Pittsburgh to Monroeville)

Westmoreland County:

3. I-76 PA Turnpike Mainline – (Widen to 6 lanes) – Allegheny County line to Irwin Int

8. 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 TIP or Long Range Plan and not listed above could not be coded. Their effect on emissions and conformity determination is qualitatively described in Section VII.

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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 replaced 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 the basis for the highway and transit trip forecasts used in the travel demand model for this conformity assessment. With each cycle, models are revised to take advantage of the latest data and to incorporate evolving modeling techniques.

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

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

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

REGIONAL POPULATION

COUNTY	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%
TOTAL	2,513,614	2,546,936	+33,302	+1.3%

TABLE 1

SPC Sept 2023

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%
TOTAL	1,103,518	1,154,521	+51,003	+4.6%

TABLE 2

SPC Sept 2023

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>	25,039	5,152	295,090	14,290	339,571
<i>non-Pittsburgh</i>	89,209	29,957	346,380	51,188	516,734
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
TOTAL	220,509	90,894	1,013,720	159,988	1,485,111
COUNTY	2050				
	RETAIL	MANU-FACTURING	SERVICES	OTHER	TOTAL
Allegheny	118,238	47,046	735,972	67,643	968,899
<i>Pittsburgh City</i>	27,238	6,783	332,227	14,881	381,129
<i>non-Pittsburgh</i>	91,000	40,263	403,745	52,762	587,770
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
TOTAL	225,384	118,856	1,159,437	164,669	1,668,346
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>	8.8%	31.7%	12.6%	4.1%	12.2%
<i>non-Pittsburgh</i>	2.0%	34.4%	16.6%	3.1%	13.7%
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%
TOTAL	2.2%	30.8%	14.4%	2.9%	12.3%

TABLE 3

SPC Sept 2023

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 regional 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 zones through the use of MERLAM.

SPC's Cycle 12 2020 base year estimates and 2050 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 impact of the Covid-19 pandemic 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. And is not being done during this conformity assessment for development of the 2050 Long-Range plan. 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 new 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 applying trip rates stratified by households and by three employment categories. In some

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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 trip 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 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.

Air Quality Conformity Determination

*2050 Long Range Transportation Plan and 2023-2026 Transportation Improvement Program Update
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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 current, 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 Sept 2023

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
TOTAL NORTH HILLS	16,588	38,201	2.30
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
TOTAL SOUTH HILLS - WEST END	29,964	33,429	1.12
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	----
TOTAL SOUTHEAST	6,666	8,860	1.33
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
TOTAL EAST END	63,762	78,242	1.23
INCLINES	452	16	0.04
OTHER PORT AUTHORITY	5,007	5,869	1.17
TOTAL PORT AUTHORITY SYSTEM	122,439	164,617	1.34
NON-PORT AUTHORITY ROUTES	9,918	8,156	0.82
TOTAL TRANSIT NETWORK	132,357	172,773	1.31

TABLE 5

SPC Sept 2023

Air Quality Conformity Determination

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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 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

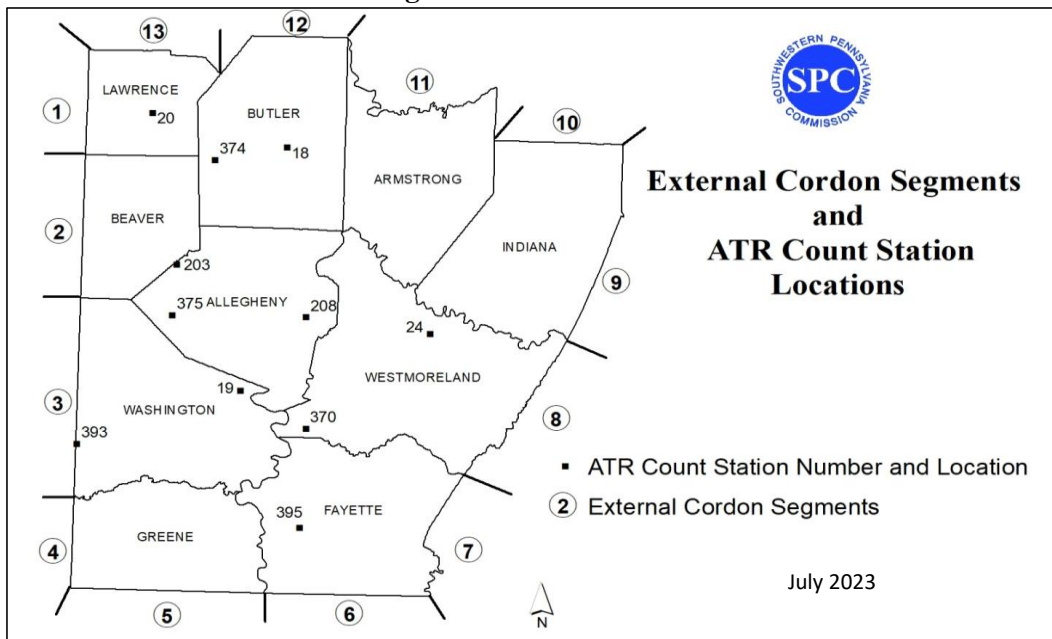
CORDON SEGMENT	COUNTY	OBSERVED VOLUME	SIMULATED VOLUME	SIMULATED / OBSERVED
1	Lawrence	37,018	37,474	1.01
2	Beaver	22,211	30,416	1.37
3	Washington	59,684	63,002	1.06
4	Greene	1,232	2,408	1.95
Western Boundary Total		120,145	133,300	1.11
5	Greene	33,442	28,597	0.86
6	Fayette	17,467	17,995	1.03
Southern Boundary Total		50,909	46,592	0.92
7	Fayette	7,735	11,385	1.47
8	Westmoreland	46,699	35,464	0.76
9	Indiana	25,849	28,137	1.09
Eastern Boundary Total		80,283	74,986	0.93
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
Northern Boundary Total		94,005	120,463	1.28
TOTAL		345,342	375,341	1.09

Table 6

SPC Sept 2023

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

SPC Sept 2023

TRAVEL MODEL VALIDATION River Crossing Volume Comparisons

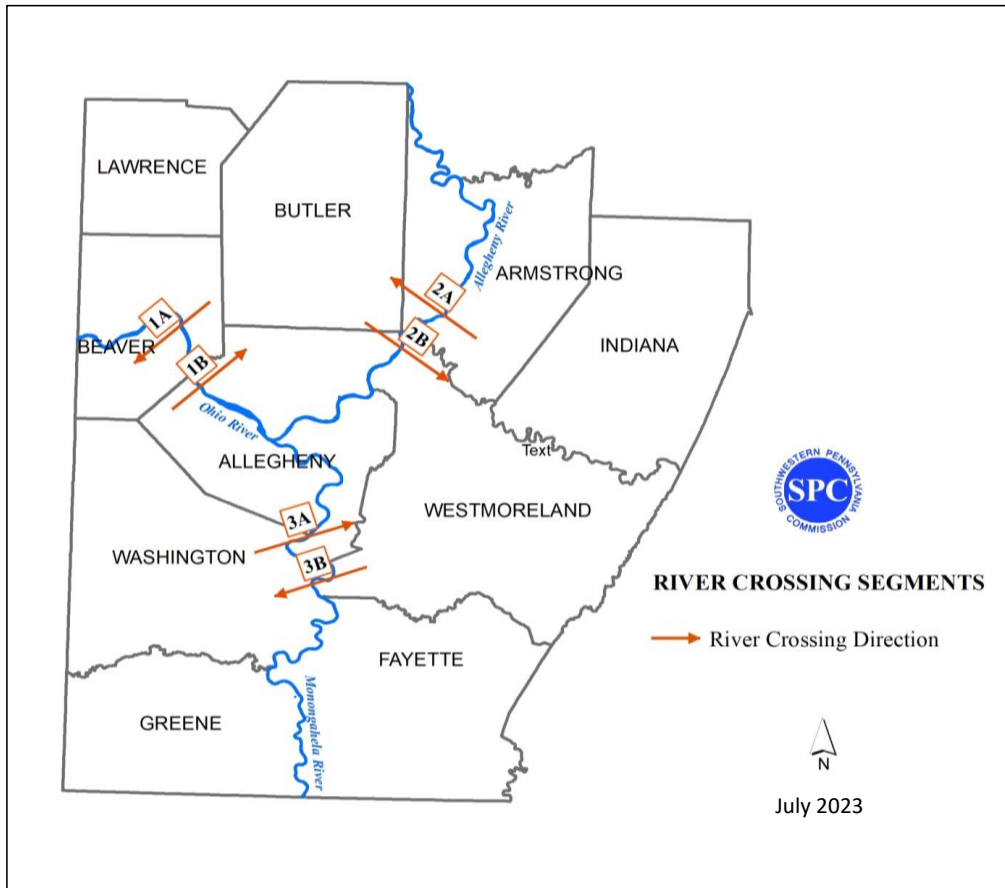
RIVER CROSSING SEGMENT	OBSERVED VOLUME	SIMULATED VOLUME	SIMULATED / OBSERVED
1A	108,215	135,838	1.26
1B	105,959	128,380	1.21
Ohio River Total	214,174	264,218	1.23
2A	200,368	245,462	1.23
2B	210,542	242,084	1.15
Allegheny River Total	410,910	487,546	1.19
3A	231,059	259,406	1.12
3B	229,999	258,411	1.12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

Table 7

SPC Sept 2023

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 Sept 2023

TRAVEL MODEL VALIDATION
Traffic Volume Comparisons - ATR Stations

COUNT STATION	COUNTY	ROUTE	OBSERVED VOLUME	SIMULATED VOLUME	SIM/OBS
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
TOTAL			269,418	216,504	0.80

Table 8

SPC Sept 2023

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
TOTAL	13,459	28,739	13,694	55,892
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
TOTAL	8,001	27,011	16,769	51,781
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
TOTAL	0.59	0.94	1.22	0.93

TABLE 9

SPC Sept 2023

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

Air Quality Conformity Determination

*2050 Long Range Transportation Plan and 2023-2026 Transportation Improvement Program Update
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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 2023, 2024, 2025, 2026, 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 2023 network are presented in Table 10. The 2050 network modal split results are shown in Table 11. Table 12 summarizes regional trips by purpose and mode for each of the five scenarios defined for this conformity assessment of the 2023-2026 TIP and 2050 Plan. Table 13 summarizes modeled HOV trips for each scenario.

2023 MODAL SPLIT SUMMARY

DISTRICT	2023 Person Trip Attractions			2023 Auto Trip Attractions			2023 Transit Trip Attractions			2023 Transit/2023 Total Person					
	HBW	HBO	TOT	HBW	HBO	TOT	HBW	HBO	TOT	HBW	HBO	TOT			
CBD	124120	77335	233264	57935	43486	25289	126710	51006	11331	2010	64347	41.09%	14.65%	6.32%	27.59%
PGH E	163122	275303	536884	133231	169015	72812	375058	21188	13364	3911	38463	12.99%	4.85%	3.97%	7.16%
PGH S	49525	117290	209528	44949	76873	32567	154389	1984	2327	570	4881	4.01%	1.98%	1.33%	2.33%
PGH N	42842	78583	148080	39275	49626	20203	109104	1442	1323	436	3201	3.37%	1.68%	1.64%	2.16%
PGH TOT	255489	471176	894492	217455	295514	125582	638551	24614	17014	4917	46545	9.63%	3.61%	2.93%	5.20%
ALG E	104538	322756	516943	97470	208514	61441	367425	1876	2243	677	4796	1.79%	0.69%	0.76%	0.93%
ALG N	193384	601891	954681	181322	388828	109513	679663	1790	3026	681	5497	0.93%	0.50%	0.43%	0.58%
ALG S	153318	424423	691908	143196	273185	78439	494820	2662	3548	759	6969	1.74%	0.84%	0.66%	1.01%
ALG W	126943	384117	613576	119106	249373	70714	439193	1100	1646	357	3103	0.87%	0.43%	0.35%	0.51%
ALG TOT	578183	1733187	2777108	541094	1119900	320107	1981101	7428	10463	2474	20365	1.28%	0.60%	0.53%	0.73%
OUTSIDE ALG	861520	2423877	3873009	820503	1601229	418870	2840602	2176	2769	519	5464	0.25%	0.11%	0.09%	0.14%
GRAND TOTAL	1819312	4705575	7777873	1636987	3060129	889848	5586964	85224	41577	9920	136721	4.68%	0.88%	0.79%	1.76%

TABLE 10

SPC Sept 2023

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				
CBD	127570	78922	34025	240517	56955	42604	22805	122364	55639	14306	7204	77149	43.61%	18.13%	21.17%	32.08%
PGH E	171869	288267	107855	567991	132846	174185	72737	379768	30458	17995	13477	61930	17.72%	6.24%	12.50%	10.90%
PGH S	50884	117208	44833	212925	46213	76292	34094	156599	2096	2360	644	5100	4.12%	2.01%	1.44%	2.40%
PGH N	53553	92063	32112	177728	48949	58580	24303	131832	2036	1703	632	4371	3.80%	1.85%	1.97%	2.46%
PGH TOT	276306	497538	184800	958644	228008	309057	131134	668199	34590	22058	14753	71401	12.52%	4.43%	7.98%	7.45%
ALG E	110786	328048	93580	532414	103108	211847	63923	378878	1974	2363	1001	5338	1.78%	0.72%	1.07%	1.00%
ALG N	211399	626249	169318	1006966	198188	404457	116146	718791	2050	3338	947	6335	0.97%	0.53%	0.56%	0.63%
ALG S	168942	444637	122045	735624	157727	286087	83921	527735	2937	3748	871	7556	1.74%	0.84%	0.71%	1.03%
ALG W	134625	397055	108736	640416	126505	257598	74951	459054	1131	1727	377	3235	0.84%	0.43%	0.35%	0.51%
ALG TOT	625752	1795989	493679	2915420	585528	1159989	338941	2084458	8092	11176	3196	22464	1.29%	0.62%	0.65%	0.77%
OUTSIDE ALG	932114	2533555	618191	4083860	888111	1675370	441284	3004765	2381	2905	575	5861	0.26%	0.11%	0.09%	0.14%
GRAND TOTAL	1961742	4906004	1330695	8198441	1758602	3187020	934164	5879786	100702	50445	25728	176875	5.13%	1.03%	1.93%	2.16%

TABLE 11

SPC Sept 2023

TRAVEL MODEL RESULTS
Trips By Purpose and Mode

YEAR	SCENARIO	--- Total Person Trip Attractions ---			
		HBW	HBO	NHB	TOTAL
2024	2024 Existing Year	1,824,540	4,712,932	1,255,795	7,793,267
2025	2025 Budget Year - PM2.5 NAAQS	1,829,895	4,720,433	1,258,774	7,809,102
2026	2026 TIP Year	1,835,093	4,727,802	1,261,537	7,824,432
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
2024	2024 Existing Year	1,641,979	3,064,923	891,860	5,598,762
2025	2025 Budget Year - PM2.5 NAAQS	1,640,663	3,066,967	884,088	5,591,718
2026	2026 TIP Year	1,645,119	3,071,662	885,954	5,602,735
2035	2035 Interim Year #1	1,686,497	3,114,652	903,974	5,705,123
2045	2045 Interim Year #2	1,735,030	3,162,956	924,170	5,822,156
2050	2050 LRP Horizon Year	1,758,602	3,187,020	934,164	5,879,786
YEAR	SCENARIO	--- Transit Person Trip Attractions ---			
		HBW	HBO	NHB	TOTAL
2024	2024 Existing Year	85,193	41,691	9,948	136,832
2025	2025 Budget Year - PM2.5 NAAQS	92,037	46,209	22,580	160,826
2026	2026 TIP Year	92,466	46,465	22,767	161,698
2035	2035 Interim Year #1	96,985	48,604	24,262	169,851
2045	2045 Interim Year #2	99,152	49,787	25,193	174,132
2050	2050 LRP Horizon Year	100,702	50,445	25,728	176,875
YEAR	SCENARIO	--- Transit / Total Person Trips ---			
		HBW	HBO	NHB	TOTAL
2024	2024 Existing Year	4.67%	0.88%	0.79%	1.76%
2025	2025 Budget Year - PM2.5 NAAQS	5.03%	0.98%	1.79%	2.06%
2026	2026 TIP Year	5.04%	0.98%	1.80%	2.07%
2035	2035 Interim Year #1	5.15%	1.01%	1.88%	2.13%
2045	2045 Interim Year #2	5.12%	1.02%	1.91%	2.14%
2050	2050 LRP Horizon Year	5.13%	1.03%	1.93%	2.16%

TABLE 12

SPC Sept 2023

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

YEAR	SCENARIO	--- HBW Vehicle Trips by Vehicle Occupancy ---				
		1	2	3	4+	TOTAL
2024	2024 Existing Year	1,552,901	82,329	5,395	1,327	1,641,952
2025	2025 Budget Year - PM2.5 NAAQS	1,551,776	82,137	5,376	1,315	1,640,604
2026	2026 TIP Year	1,555,989	82,381	5,395	1,326	1,645,091
2035	2035 Interim Year #1	1,595,583	84,059	5,478	1,354	1,686,474
2045	2045 Interim Year #2	1,642,350	85,740	5,566	1,361	1,735,017
2050	2050 LRP Horizon Year	1,664,768	86,804	5,636	1,371	1,758,579

TABLE 13

SPC Sept 2023

Air Quality Conformity Determination

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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 latest 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 runs and processes MOVES outputs. PPSUITE is a widely used and accepted tool for estimating speeds and processing emissions rates. The PPSUITE tool has been used to develop on-road highway mobile source inventories in SIP revisions, control strategy analyses, and conformity analyses in 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 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 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 output from SPC's travel demand model to the thirteen vehicle source types. Vehicle type pattern data is used by PPSUITE to distribute the hourly roadway segment volumes among the thirteen vehicle source types. Similar to the 24-hour pattern data, this data contains percentage splits to each source type for every hour of the day. The vehicle type pattern data is developed from several sources including truck percentages from PennDOT's statewide Roadway Management System (RMS) database, hourly distributions for trucks and total traffic compiled by PennDOT's Bureau of Planning and Research (BPR), transit data from PennDOT and the National Transit Database Transit Profiles, and school bus registration data from PennDOT's Bureau of Motor Vehicles Registration Database.

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

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

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

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population.

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

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

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

Six scenarios were defined by selectively assigning the 2024, 2025, 2026, 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 (2024 network, 2024 trips)
2. PM_{2.5} NAAQS Budget Year (2025 network, 2025 trips)
3. TIP Build Year (2026 network, 2026 trips)
4. Interim Year #1 (2035 network, 2035 trips)
5. Interim Year #2 (2045 network, 2045 trips)
6. 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 2023-2026 TIP is programmed for the specific TDM projects listed below:

- TMA TDM Programming & Outreach – SPC, \$1,500,000 (MPMS#117268)
- Pittsburgh Bus Rapid Transit – Pittsburgh Regional Transit, \$281,706,702 (MPMS#110895)
- Bus Stop Extension Pads – Pittsburgh Regional Transit, \$400,000 (MPMS#117259)
- Wilkinsburg Transit Center – Pittsburgh Regional Transit, \$7,800,000 (MPMS#117269)
- Transit Access Improvements – Pittsburgh Regional Transit, \$3,600,000 (MPMS#117275)
- Homestead Eighth Ave. Transit & Pedestrian Imp. – Pittsburgh Regional Transit, \$420,000 (MPMS#118764)
- Allegheny River Green Boulevard – City of Pittsburgh, \$3,500,000 (MPMS#114290)
- Bus Shelters/Mobility Hubs – City of Pittsburgh, \$3,240,000 (MPMS#114294)
- Rt.68 Park and Ride Program - BTA, \$3,750,000 (MPMS#114742)

The total cost identified in the 2023-2026 TIP for these nine projects is \$305,916,702. 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_{2.5} and 8-hour ozone nonattainment and maintenance area. The summaries were compiled from MOVES model outputs.

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Travel Demand Management Strategies

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

Figure 2

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VII. Conformity Determination

PM_{2.5} Nonattainment and Maintenance Areas

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

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

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

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

Pittsburgh – Beaver Valley PM_{2.5} Maintenance Area

As noted in Section II, MVEBs have been established for use in conformity assessments for the 1997 Annual PM_{2.5} and 2006 daily PM_{2.5} NAAQS for the Pittsburgh – Beaver Valley PM_{2.5} maintenance area. The PM_{2.5} and NO_x 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 maintenance area.

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

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

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

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 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_{2.5} Maintenance Area

As noted in Section II, emission budgets have been established for use in conformity assessments for the 1997 Annual PM_{2.5} and 2006 daily PM_{2.5} NAAQS for the Indiana County portion of the Johnstown PM_{2.5} maintenance area. The PM_{2.5} and NO_x 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 maintenance area.

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

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

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 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_{2.5} Nonattainment Area

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

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

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

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 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_x 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 maintenance area and the Indiana County portion of the Clearfield and Indiana counties 8-hour ozone maintenance 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_x 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_x 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_x). VMT and emissions by county and facility type for each scenario are presented in Appendix D.

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

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 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 Maintenance Areas

As noted in Sections I and II, the Greene County 8-hour ozone maintenance area and the Indiana County portion of the Clearfield and Indiana counties 8-hour ozone maintenance area were designated as nonattainment areas under the 1997 8-hour ozone NAAQS, and reclassified as maintenance areas in March 2009. These areas 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, interagency and public review, and implementation of TCMs in the SIP. This report demonstrates that the applicable conformity criteria for these two areas have been satisfied.

No goals, directives, recommendations or projects identified in the 2023-2026 TIP or the 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 PM₁₀ Maintenance and PM_{2.5} Nonattainment Areas

As noted in Section II, EPA has determined that PM₁₀ and PM_{2.5} nonattainment in the Liberty – Clairton area stems primarily from industrial sources in the area and not from mobile sources. This PM₁₀ nonattainment area and PM_{2.5} maintenance area was not required to have PM₁₀ or PM_{2.5} transportation conformity emissions budgets. Because the PM₁₀ and PM_{2.5} violations were primarily caused by industrial stationary sources and motor vehicles were not an important contributor to the nonattainment problem, no additional quantitative analysis for transportation-related PM₁₀ or PM_{2.5} impacts is required for conformity purposes. Other conformity criteria still must be satisfied, including demonstration of fiscal constraint, interagency and public review, and implementation of TCMs in the SIP. This report demonstrates that the applicable conformity criteria for the Liberty – Clairton PM₁₀ and PM_{2.5} Area have been satisfied.

Qualitative Analysis of Non-Codable Regionally Significant Projects

Due to their nature, a number of regionally significant projects in the 2023-2026 TIP and 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 2023-2026 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 2050 Plan and the 2023-2026 TIP. 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_{2.5} precursor emissions. The effect on regional emissions from implementation of these projects was not included in the quantitative analysis detailed on Tables 14 through 17 and Figures 3 through 10. Nevertheless, implementation of the regionally significant, non-codable projects identified in the 2050 Plan and the 2023-2026 TIP will not worsen the region's air quality.

Non-Codable Regionally Significant Projects

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

Liberty Avenue Safety Improvements - MPMS#106773 [City of Pittsburgh – Allegheny Co.]
Smart Spines (ATCMTD) – MPMS#109691 [City of Pittsburgh - Allegheny Co.]
Smart Spines-Phase 1 – MPMS#116300 [City of Pittsburgh - Allegheny Co.]
Smart Spines-Phase 2 – MPMS#116301 [City of Pittsburgh - Allegheny Co.]
Smart Spines-Phase 3 – MPMS#116303 [City of Pittsburgh - Allegheny Co.]
PGH CBD Signal Upgrade Phase-4 – MPMS#63378 [City of Pittsburgh –Allegheny Co.]
HSIP 2022 – MPMS#118376 [City of Pittsburgh –Allegheny Co.]
Penn Avenue Signal Improvements – MPMS#114288 {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.]
SR 4003-East St. to Babcock Blvd. Signals – MPMS#119595 {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 3003 Washington Pike Improvements – MPMS#114287 [Allegheny Co.]
SR 51 Clairton Blvd. Adaptive Traffic Signal System – MPMS#110369 [Allegheny Co.]
SR 3069 Washington Rd. Adaptive Traffic Signal System – MPMS#110374 [Allegheny Co.]
SR 30 @ SR 48 Signal Improvement w/D12 – MPMS#116655 [Allegheny Co.]
PAAC – Wilkensburg Transit Center – MPMS#117269 [Allegheny Co.]
PAAC – Transit Access Improvements – MPMS#117275 [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.]
Route 837 Transit Improvements – MPMS#118508 [Allegheny Co.]
Monaca Gateway MTF-TIIF-Smart – MPMS#112022 [Beaver Co.]
BTA - SR 68 Park-N-Ride Program - MPMS#114742 [Butler Co.]
SR 68 Corridor Improvements - MPMS#106568 [Butler Co.]
SR 356 Moraine Pt. Signals – MPMS#110462 [Butler Co.]
Jefferson-Cunningham Streets Signal Improvements-MPMS#117264 [Butler Co.]
SR 119 Connellsville Signals – MPMS#110402 [Fayette Co.]
SR 88 Charleroi – MPMS#110399 [Washington Co.]
PA 18 – Main St. to Third St. – MPMS#114561 [Washington Co.]
PA 18 Signal Upgrades – MPMS#88829 [Washington Co.]
Bebout Rd. @ E. McMurray Rd. Intersection – MPMS#109025 [Washington Co.]
119 SW Greensburg CMAQ – MPMS#114560 [Westmoreland Co.]
SPC Regional Traffic Signal Program Cycle IV – MPMS#100382 [10-County Region]

Air Quality Conformity Determination

2050 Long Range Transportation Plan and 2023-2026 Transportation Improvement Program Update
Southwestern Pennsylvania Commission – September 2023

B. Listed on 2050 Long Range Plan for Completion after 2026

I-376 Parkway East Active Traffic Management – MPMS#94651 [Allegheny Co.]
PPC – Marine & Landside Equipment Repower Program – MPMS#117270 [Allegheny Co.]
PA 50–I-79 to Thoms 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 – No MPMS# [City of Pittsburgh – Allegheny Co.]
Fifth Avenue Signal Improvement – MPMS#119398 [Oakland/City of Pittsburgh – Allegheny Co.]
SR 356 Park-N-Ride – MPMS#116127 [Butler Co.]
SR 21 Operations & Safety – MPMS#119619 [Fayette Co.]
SR 119 Operations & Safety – MPMS#119622 [Fayette Co.]
US 19 Corridor and Intersection Improvements – MPMS#119615 [Washington Co.]
US 19 Corridor Signal & Safety Upgrades – MPMS#107432 [Washington Co.]
US 19 Adaptive Signals CMAQ Supplement – MPMS#117943 [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 Adaptive Signal Corridor – MPMS#117945 [Westmoreland Co.]
SPC Regional Traffic Signal Program Cycle V – MPMS#106593 [10-County Region]

Conclusion

In conclusion, the region's 2050 Transportation Plan and amended 2023-2026 TIP are in conformance with the federal Clean Air Act, as amended. This finding of conformity is based upon both quantitative and qualitative analyses designed to address the conformity criteria outlined in EPA's Transportation Conformity Rule for the nonattainment and maintenance areas within SPC's planning region designated under the 1997 8-hour ozone NAAQS, the 2008 8-hour ozone NAAQS, the 2006 daily PM_{2.5} NAAQS, the 1997 Annual PM_{2.5} NAAQS, the 2012 Annual PM_{2.5} NAAQS, and the 1987 PM₁₀ 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 2023 to make its finding of conformity for the region's 2050 Transportation Plan and amended 2023-2026 Transportation Improvement Program. SPC's conformity process demonstrates that the 2050 Transportation Plan and amended 2023-2026 TIP satisfy all applicable conformity criteria under the 1997 8-hour ozone NAAQS, the 2008 8-hour ozone NAAQS, the 2006 daily PM_{2.5} NAAQS, the 1997 Annual PM_{2.5} NAAQS, the 2012 Annual PM_{2.5} NAAQS, the 1987 PM₁₀ NAAQS, and the 1971 carbon monoxide NAAQS.

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

Entire Nonattainment Area						
	2024	2025	2026	2035	2045	2050
Annual VMT	17,071,242,845	17,012,915,981	17,029,416,606	17,332,597,637	17,563,716,806	17,783,236,916
PM 2.5 MVEB	700.000	537.000	537.000	537.000	537.000	537.000
PM 2.5	357.333	336.083	317.599	228.252	203.289	200.101
NOx MVEB	17,584.000	10,709.000	10,709.000	10,709.000	10,709.000	10,709.000
NOx	8,682.274	7,888.524	7,271.231	4,973.825	4,726.450	4,742.114

TABLE 14

SPC Sept 2023

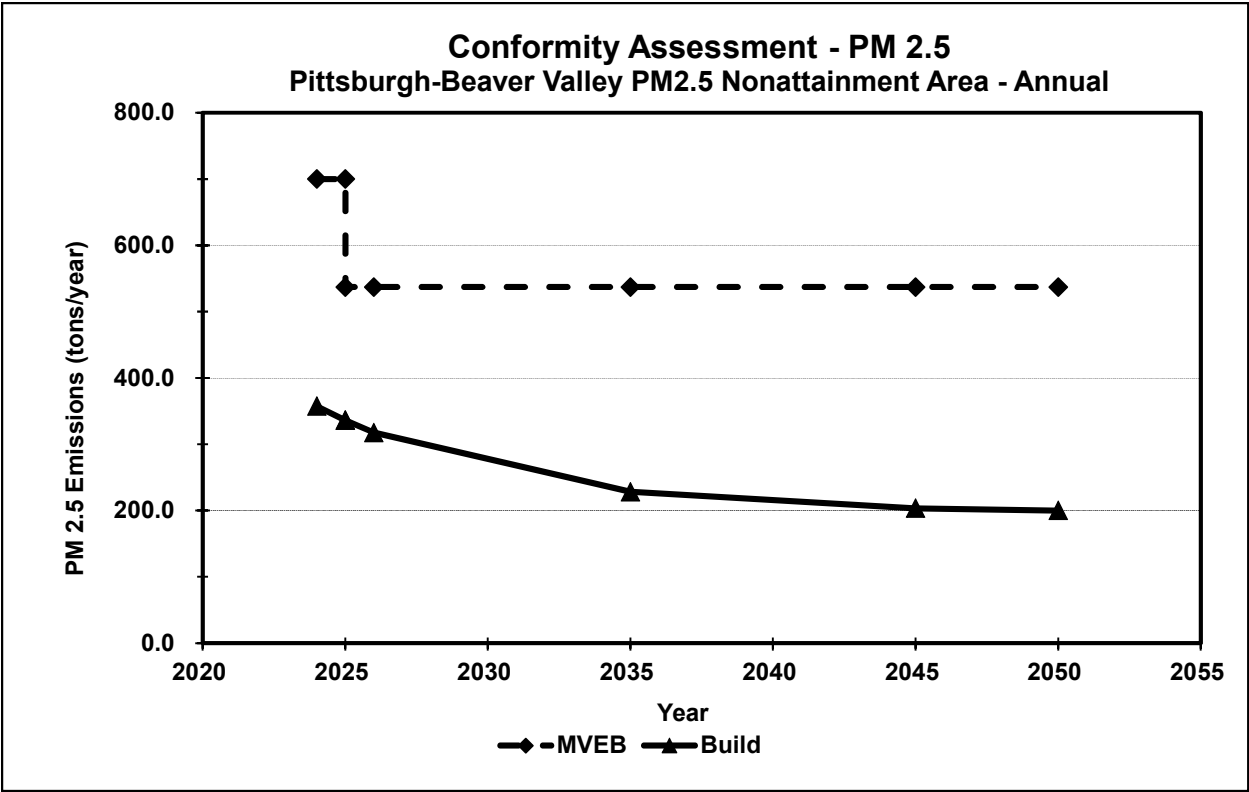


Figure 3

SPC Sept 2023

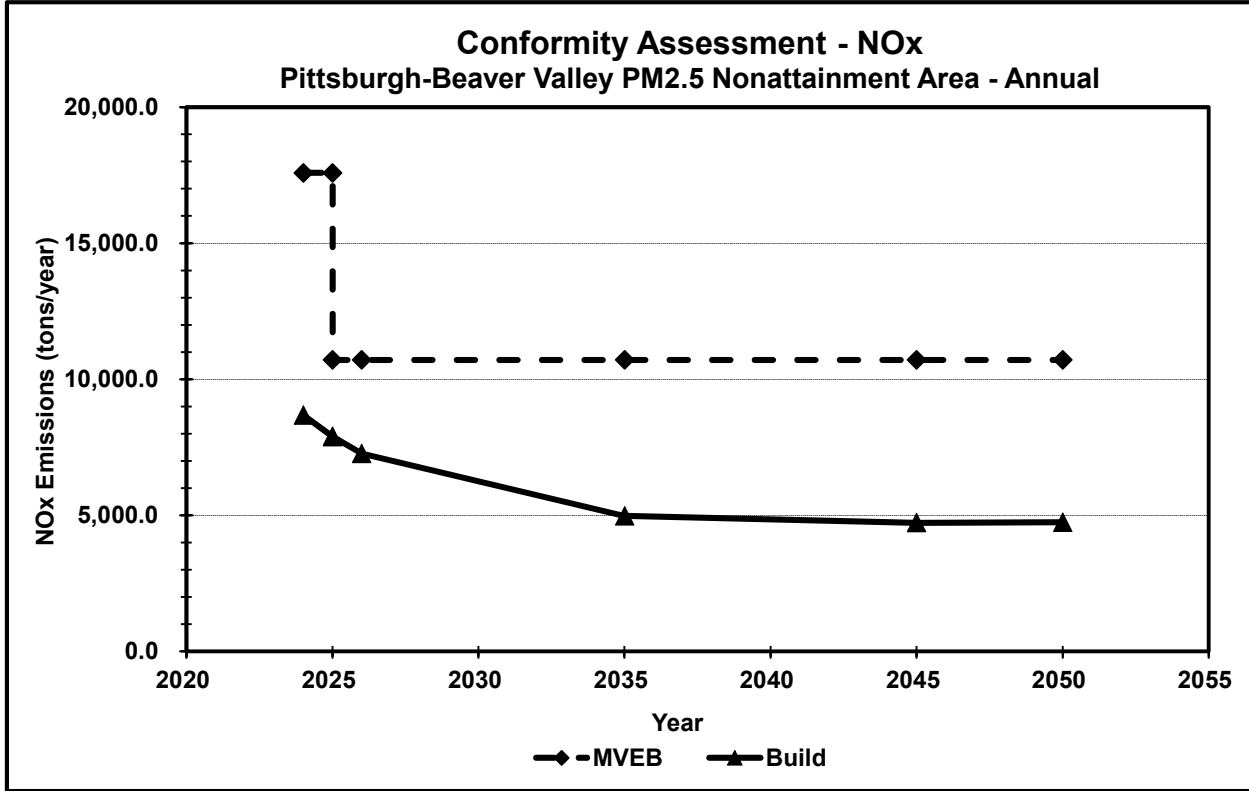


Figure 4

SPC Sept 2023

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

Indiana County Portion of Nonattainment Area						
	2024	2025	2026	2035	2045	2050
Annual VMT	153,301,803	153,707,941	153,302,383	156,701,151	161,474,898	163,384,188
PM 2.5 MVEB	7.950	4.380	4.380	4.380	4.380	4.380
PM 2.5	2.781	2.586	2.382	1.507	1.277	1.242
NOx MVEB	238.500	120.980	120.980	120.980	120.980	120.980
NOx	86.738	77.970	70.242	43.266	39.883	39.815

TABLE 15

SPC Sept 2023

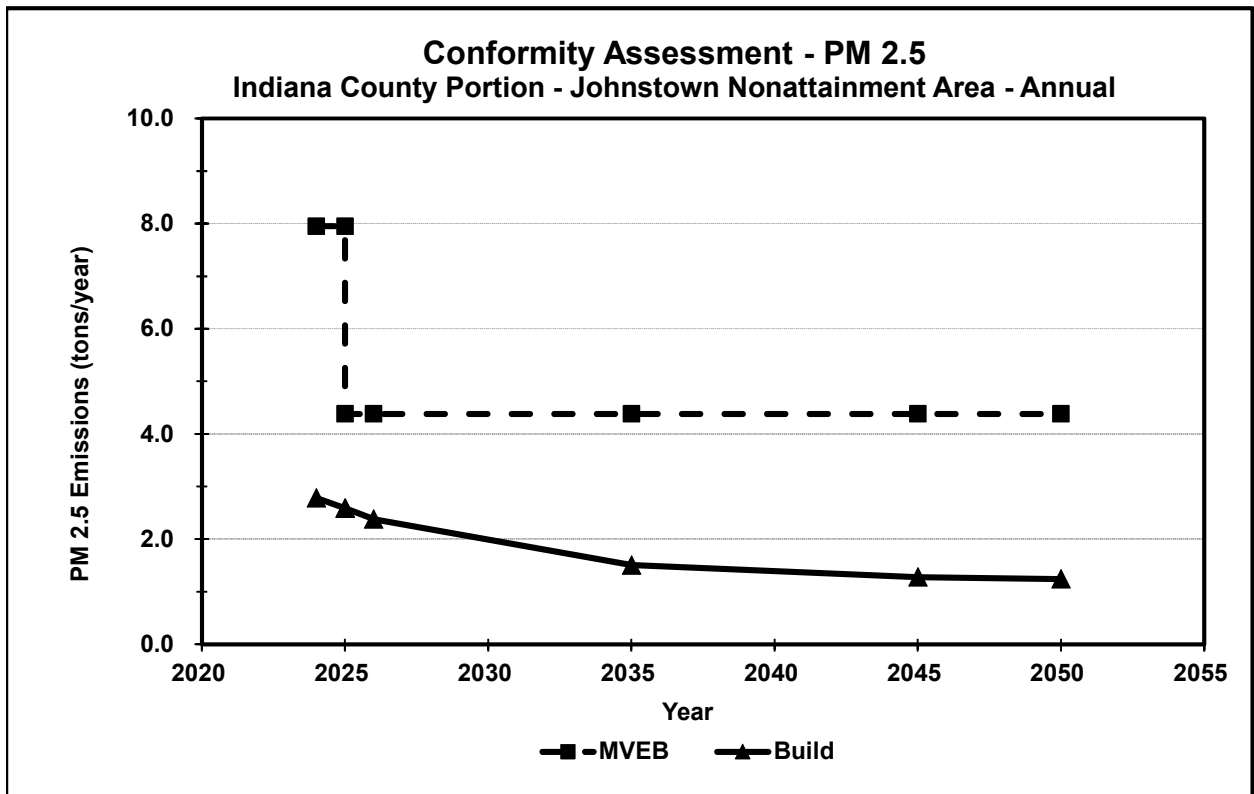


Figure 5

SPC Sept 2023

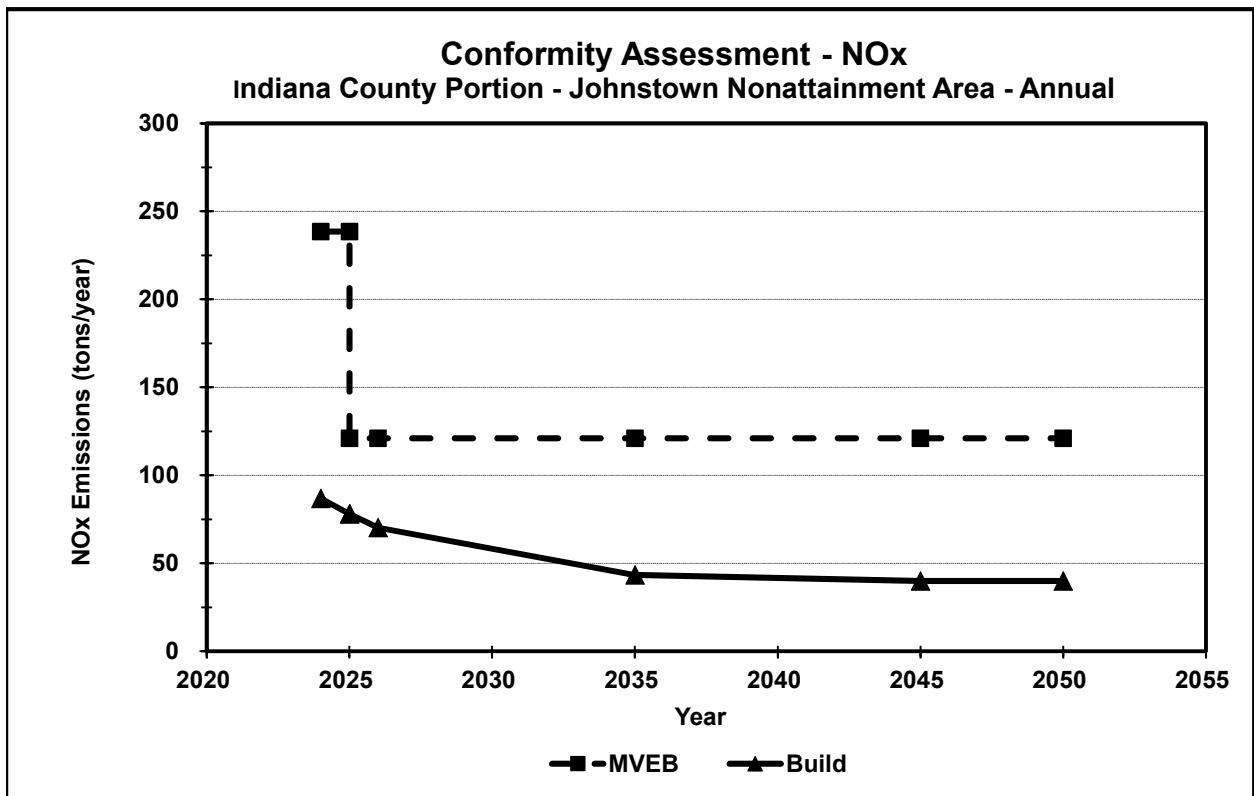


Figure 6

SPC Sept 2023

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

Entire Nonattainment Area						
	2024	2025	2026	2035	2045	2050
Annual VMT	8,309,439,017	8,279,078,197	8,272,444,747	8,411,276,150	8,490,086,747	8,611,250,336
PM 2.5 MVEB	266.000	266.000	266.000	266.000	266.000	266.000
PM 2.5	170.690	168.038	160.061	120.104	108.127	106.622
NOx MVEB	5,708.000	5,708.000	5,708.000	5,708.000	5,708.000	5,708.000
NOx	3,845.449	3,482.577	3,208.521	2,215.421	2,121.020	2,134.647

TABLE 16

SPC Sept 2023

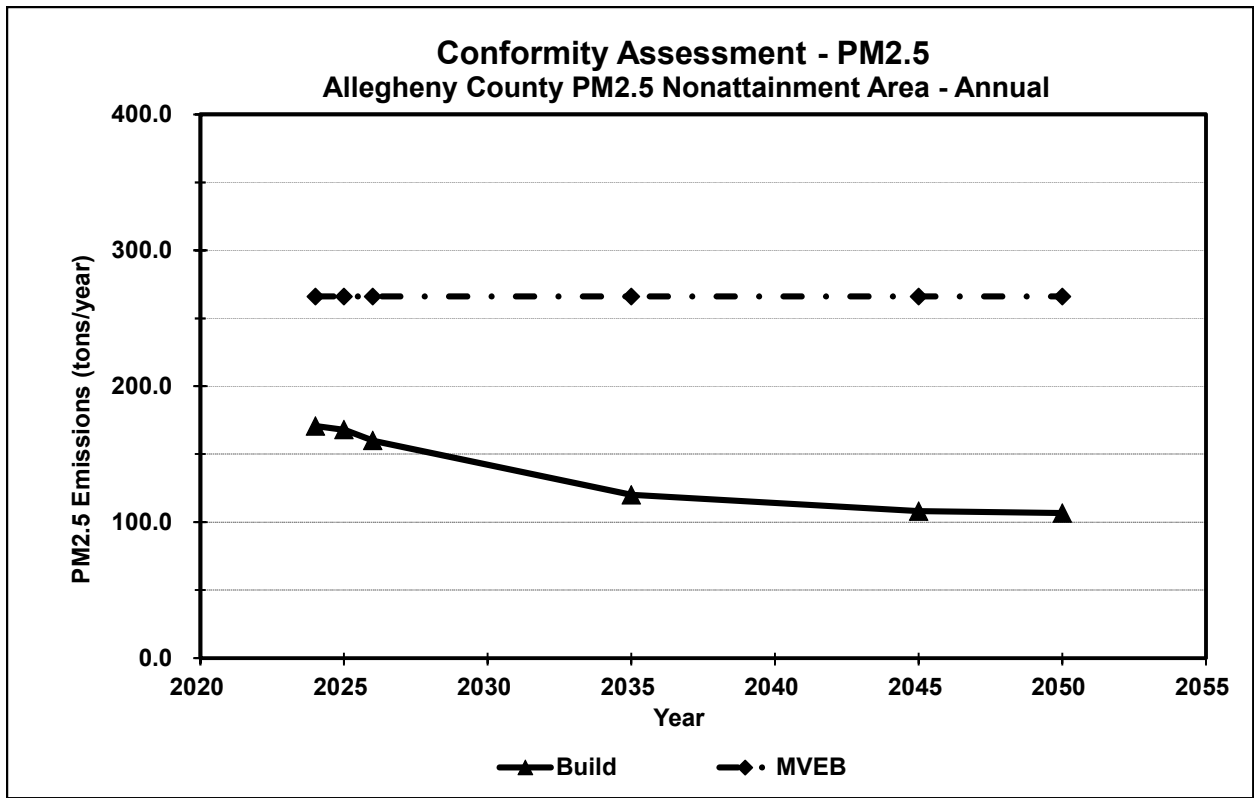


Figure 7

SPC Sept 2023

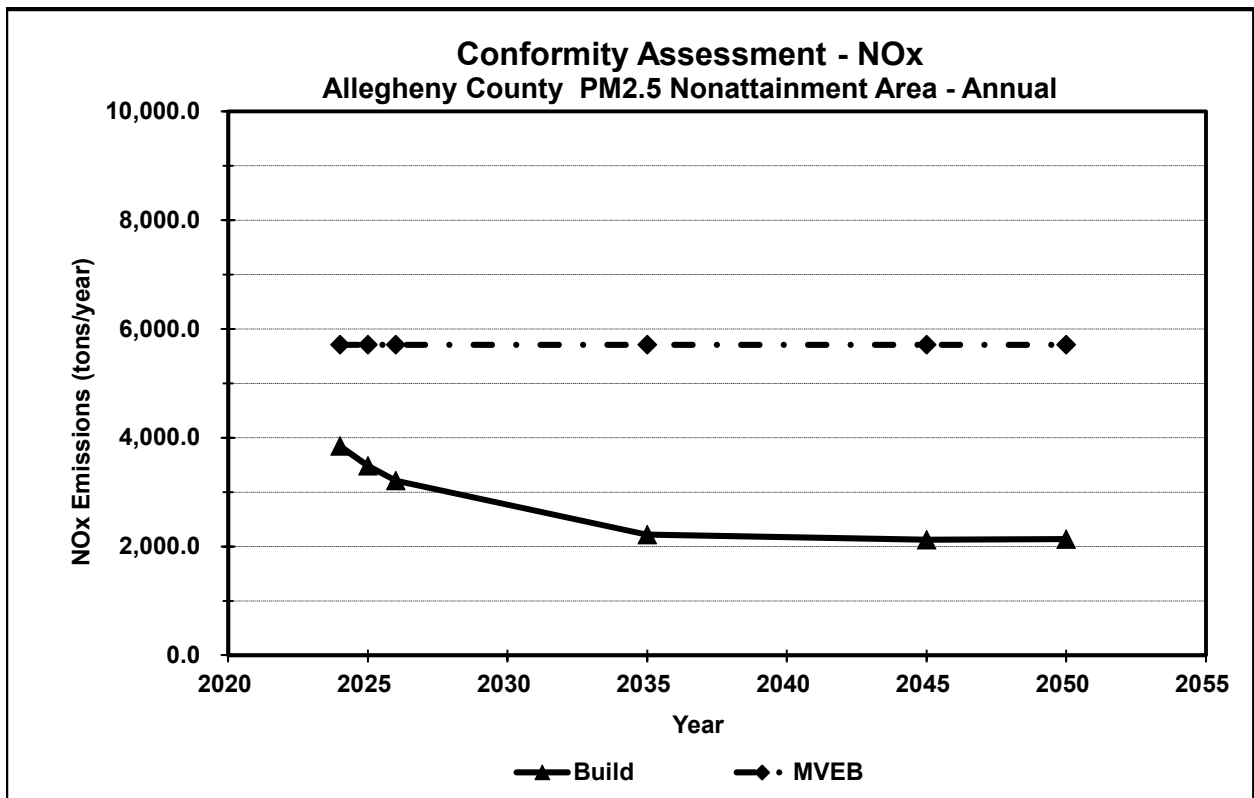


Figure 8

SPC Sept 2023

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

	2024	2025	2026	2035	2045	2050
Daily VMT	61,486,777	61,591,534	61,670,843	62,803,663	63,638,585	64,414,522
VOC MVEB	45.680	45.680	45.680	45.680	45.680	45.680
VOC	12.776	12.183	11.410	8.614	7.508	7.486
NOx MVEB	77.090	77.090	77.090	77.090	77.090	77.090
NOx	27.801	25.363	23.319	15.643	14.770	14.794

TABLE 17

SPC Sept 2023

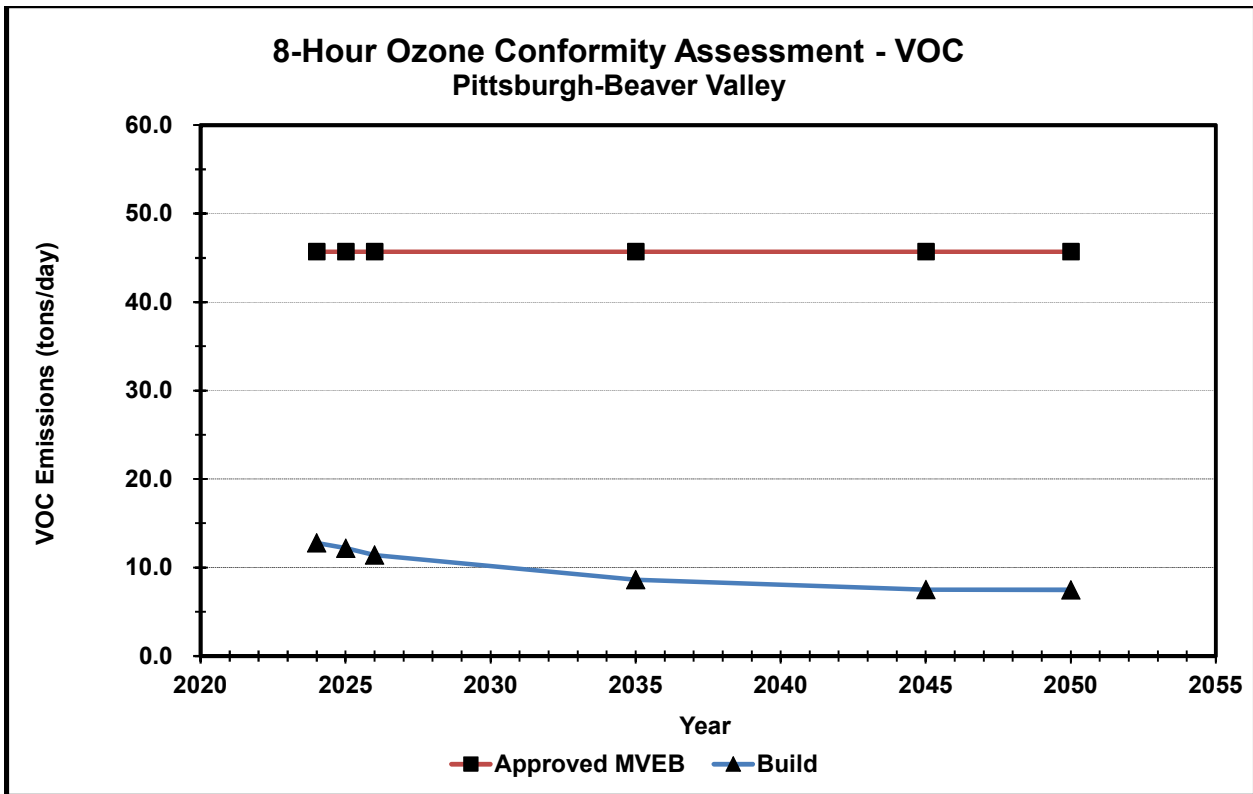


Figure 9

SPC Sept 2023

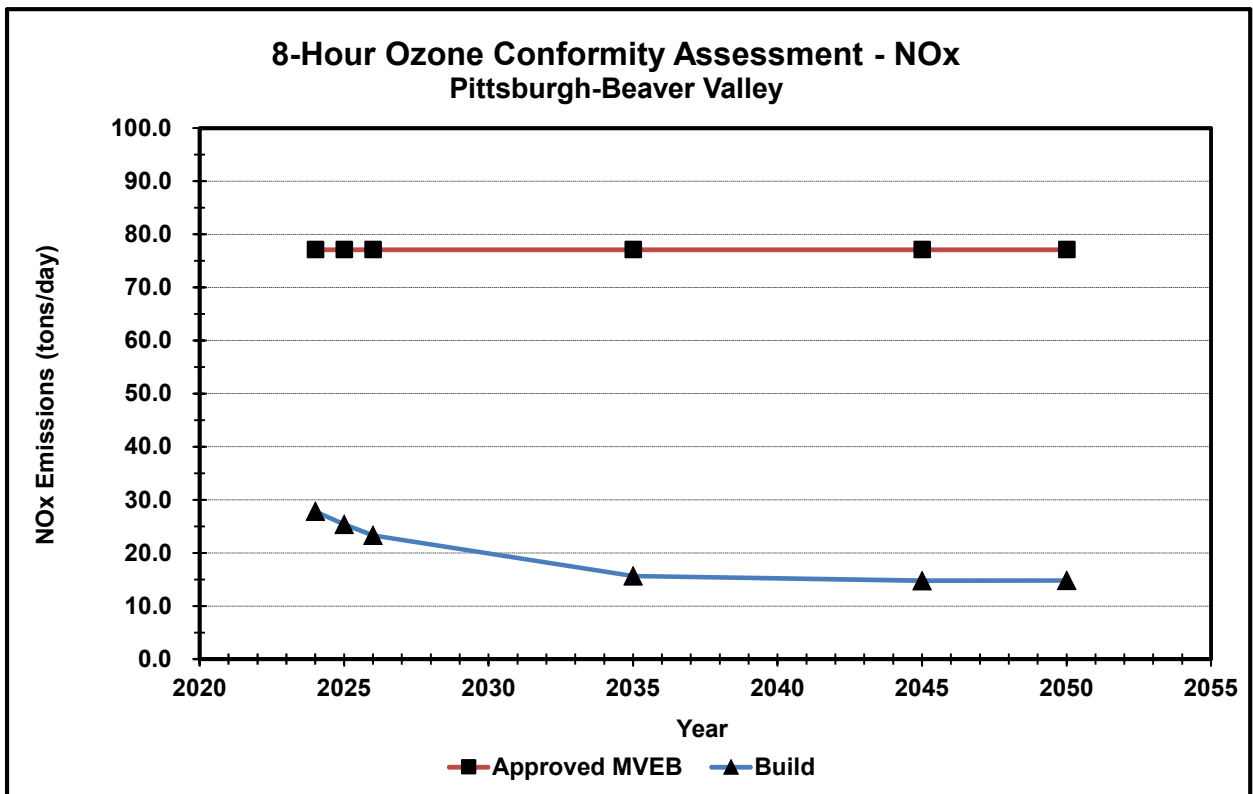


Figure 10

SPC Sept 2023

Air Quality Conformity Determination

*2050 Long Range Transportation Plan and 2023-2026 Transportation Improvement Program Update
Southwestern Pennsylvania Commission – September 2023*

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 11, 2023 through June 9, 2023, concurrent with the public comment period for the region's draft 2050 Long Range Transportation and Development Plan *SmartMoves For a Changing Region*, updates to the *2023-2026 Transportation Improvement Program (TIP)*, and the draft report – *Report on Environmental Justice*. Electronic versions of these documents were available online at 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 (4 virtual, 7 in-person) were held throughout the region that provided an overview of the draft documents, updates on project advancement, and opportunities for the public to ask questions and submit comments. A recording of each meeting was posted to SPC's YouTube channel following the meeting.

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

Full documentation of the public review and comment period is on file at the SPC offices, including copies of legal notices, newspaper advertisements, SPC webpage text, public meeting recordings and summaries, all written testimony received by SPC, a summary of all comments received during the public review period, and SPC's responses to those comments. An electronic version of the report (*Public Participation Report, Response to Public Comments May/June 2023, SPC, September 2023*) is posted on the SPC website.

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

No revisions to the conformity process or the conformity findings were needed as a result of public comment.

SPC, as the MPO for the Southwestern Pennsylvania region, formally acted at its June 26, 2023 meeting to make the finding of conformity, required under EPA's Transportation Conformity Rule, for the 2050 Transportation Plan for Southwestern Pennsylvania Plan and the updated 2023-2026 Transportation Improvement Program.

Copies of SPC Resolutions 5-23 and 6-23 are included as Appendix F. Resolution 5-23 finds that the 2050 Transportation Plan and the updated 2023-2026 TIP 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 6-23, SPC adopted the 2050 Transportation Plan and updates to the 2023-2026 TIP.

Air Quality Conformity Determination

*2050 Long Range Transportation Plan and 2023-2026 Transportation Improvement Program Update
Southwestern Pennsylvania Commission – September 2023*

APPENDIX A

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

Project Exempt Codes and Classification Codes

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

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

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

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

Project Exempt Code

Air Quality

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

Other

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

Exempt From Regional Emissions Analysis

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

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

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	75341	Betterment Reserve Allegheny		E C	PADOT	S10	EX
ALCO	75669	Slide Line Item		C	PADOT	S2	EX
ALCO	76430	SPC Reg. Safety Line Item		C	PADOT	S6	EX
ALCO	76458	Bridge - Allegheny County		E C	PADOT	S19	EX
ALCO	77273	PAAC Bus Procurement		C	TRANS	ML0	EX
ALCO	81708	Flaugherty Run Bridge #7 (FU07)		E	COUNTY	S19	EX
ALCO	81711	Pine Creek Bridge #9 (FN09)		E	COUNTY	S19	EX
ALCO	81714	Spruce Run Bridge #4 (XP04)		E	COUNTY	S19	EX
ALCO	82754	SPC Region TAU Line Item		C	PADOT	X12	EX
ALCO	84078	SPC CVAQ 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	106593	SPC - Traffic Signal 5		E C	SPC		
ALCO	107435	Traffic Services Support		E	PADOT	X2	EX
ALCO	109519	AWEM 2023		C	PADOT	S11	EX
ALCO	109520	AWEM 2024		C	PADOT	S11	EX
ALCO	112949	Bridge Wash 2024		C	PADOT	S19	EX
ALCO	113342	2024 ADA Curb Ramp Project		E C	PADOT	A2	EX
ALCO	114214	MIA Stevenson Mill/Rouser Road Offsites		RC	MUNIC		
ALCO	114242	Guiderail Upgrades		C	PADOT	S9	EX
ALCO	115277	Western Regional TMC Upgrade		E	PADOT	S7	EX
ALCO	115555	MIA Market Place District Improvements Phase 1		RC	MUNIC		
ALCO	116170	Homestead-Duquesne Rd Betterment 2		C	COUNTY	S10	EX
ALCO	117259	PRT Bus Stop Extension Pads		C	TRANS	M7	EX
ALCO	117268	TMA TDM Programming & Outreach			SPC	A1	EX
ALCO	117269	PAAC Wilkinsburg Transit Center		C	TRANS		
ALCO	117270	PFC - Marine & Landside Equipment Re-Power Progr		C	OTHER		
ALCO	117275	PAAC Transit Access Improvement Program		C	TRANS		
ALCO	118508	Route 837 Transit Improvements		C	TRANS	M7	EX
ALCO	118781	Utilities Inspection		R	PADOT	S18	EX
ALCO	119197	D11 Systemwide Pedestrian Countdown Signals (FCS)		E C	PADOT	A2	EX
ALCO	119262	Fifth Ave Reconstruction		E	COUNTY	S10	EX
ALCO	119280	D11 Carbon Reduction Program Line Item		C	PADOT		NS
ALCO	119281	SPC Regional CRP/CRFU Line Item		C	PADOT		NS
ALCO	119371	Universal Road Bridge over Union Railroad (BI01)		E	COUNTY	S19	EX
ALCO	119491	Rodi Road Streetscape Phase 1		C	MUNIC	A2	EX
ALCO	106390	Bridge Wash 2020	8	C	PADOT	S19	EX
ALCO	115053	SR 8, Butler Plank to Wildwood	8	C	PADOT	S10	EX
ALCO	116590	SR 8, Northtowne Square to Butler	8	C	PADOT	S10	EX
ALCO	117273	SR 8 Signal Upgrades	8	E C	PADOT		
ALCO	109388	Washington Road	19	C	PADOT	S10	EX
ALCO	27445	22/30 over the Parkway West	22	ERC	PADOT	S19	EX
ALCO	74255	PA 28 over Yutes Run	28	E	PADOT	S19	EX
ALCO	92276	PA 28: Hammarville-Russel	28	C	PADOT	S10	EX
ALCO	113415	Ardmore Blvd/Brinton Road - Bevington Road	30	C	PADOT	S10	EX
ALCO	116655	SR 30/SR48 Intersection Improvement with D12	30	RC	PADOT		
ALCO	100606	Jacks Run Rd Br ov Jacks R	48	RC	PADOT	S19	EX
ALCO	100782	Mosside Blvd-PA 130 to Haymaker	48	E C	PADOT	S10	EX
ALCO	28010	PA 50 -I79-Vanadium	50	RC	PADOT		

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

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

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	100382	SFC - Traffic Signal 4	50	C	SFC		
ALCO	100607	PA 50/Chartiers Street	50	C	PADOT		
ALCO	109640	PA 50: I-79 to Thoms Run	50	ER	PADOT		
ALCO	117271	SR 50 Signal Upgrades	50	E C	PADOT		
ALCO	117843	ARLE - Flashing Beacon at Carnegie Elerentary	50	C	PADOT	S8	EX
ALCO	109357	2022 ADA Curb Ramp Project	51	C	PADOT	A2	EX
ALCO	110369	PA 51-Clairton Blvd-Adaptive Traffic Signal System	51	C	PADOT		
ALCO	111571	SR 51, Clairton Boulevard	51	ERC	PADOT	S10	EX
ALCO	118376	HSIP 2022	51	C	PADOT		
ALCO	104328	I-79 at PA 910 Interchange	79	ERC	PADOT		
ALCO	100618	PA 136 Rainbow Run ov Beckets	136	ERC	PADOT	S19	EX
ALCO	117274	SR 286 Signal Upgrades	286	E C	PADOT		
ALCO	63306	Tarentum Bridge Ramp 'A'	366	C	PADOT	S19	EX
ALCO	100624	Tarentum Bridge ov NS RR	366	ERC	PADOT	S19	EX
ALCO	109513	ICSTIP 2021	376	C	PADOT	S6	EX
ALCO	112948	Bridge Wash 2023	579	C	PADOT	S19	EX
ALCO	78441	Eighth Ave ov Homestead Run	837	ERC	PADOT	S19	EX
ALCO	96559	Seventh Ave/W. Eighth Ave.	837	C	PADOT	S10	EX
ALCO	114193	PA 837 Slide Remediation	837	ERC	PADOT	S2	EX
ALCO	115085	SR 837, North State Stree	837	E	PADOT	S10	EX
ALCO	118764	Homestead Eighth Ave Tran	837	C	TRANS	M7	EX
ALCO	109558	PA 910 over Deer Creek 2	910	RC	PADOT	S19	EX
ALCO	63330	Bateman Road Bridge	978	ER	PADOT	S19	EX
ALCO	100636	Millers Run ov Dolphin Rn	978	RC	PADOT	S19	EX
ALCO	100637	Clinton Rd ov NB Robinson	978	ER	PADOT	S19	EX
ALCO	113514	D11 Traffic Signal Intersection Projects	1001	C	PADOT	S6	EX
ALCO	116668	Kittaning Pike Culvert Em	1003	R	PADOT	S2	EX
ALCO	116096	Kittanning St Flood Control	1004	E C	PADOT	S2	EX
ALCO	109549	Highland Park Bridge	1005	ER	PADOT	S19	EX
ALCO	63515	New Kensington Bridge	1038	C	PADOT	S19	EX
ALCO	74319	Lovedale Rd Br/Wylie Rn	2010	ERC	PADOT	S19	EX
ALCO	114194	SR 2010, Lovedale Road Wall Remediation	2010	ERC	PADOT	S2	EX
ALCO	112417	SR 2017, Blythedale Road Slide	2017	C	PADOT	S2	EX
ALCO	89129	SR 2031 ov Long Run	2031	RC	PADOT	S19	EX
ALCO	26623	SR 2040/Buttermilk Hollow	2040	C	PADOT	S10	EX
ALCO	28025	2040/Geco Dr to Brownsville Rd	2040	ERC	PADOT	S10	EX
ALCO	118570	Skyline Drive Slide	2042	E	PADOT	S2	EX
ALCO	119412	SR 2043, Camp Hollow Road	2043	E	PADOT	S2	EX
ALCO	91796	Streets Run Road	2046	E	PADOT	S2	EX
ALCO	27225	2048 Wm Penn Hwy/I-376 Ramp to PA 48	2048	C	PADOT	S10	EX
ALCO	89077	Verona Road Bridge	2058	ER	PADOT	S19	EX
ALCO	119510	SR 2058, Unity Trestle Slide	2058	E	PADOT	S2	EX
ALCO	78231	Indiana Drive Culvert	2070	E C	PADOT	S19	EX
ALCO	115774	SR 2084, Milltown Road Slide	2084	RC	PADOT	S2	EX
ALCO	28345	Jerome Street Bridge	2094	C	PADOT	S19	EX
ALCO	78232	Electric Ave ov Falls Run	2112	ER	PADOT	S19	EX
ALCO	63583	McKeesport Duquesne Bridge	2114	E C	PADOT	S19	EX
ALCO	114287	SR 3003 (Washington Pike) Improvements	3003	ERC	PADOT		
ALCO	63558	McLaughlin Run Rd #2	3004	ERC	PADOT	S19	EX
ALCO	100970	3009/South Park @Logan Rd	3009	C	PADOT	R2	EX

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

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

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
ALCO	93424	Snowden Road	3015	R	PADOT	S2	EX
ALCO	105451	SR 3015 ov Lick Run Creek	3015	ERC	PADOT	S19	EX
ALCO	109548	Presto Sygan Road Bridge	3028	E	PADOT	S19	EX
ALCO	114195	SR 3034, Chartiers St Slide Remediation	3034	ERC	PADOT	S2	EX
ALCO	73051	SR 3035/Weyman Br ov Saw Mill Rn	3035	C	PADOT	S19	EX
ALCO	27219	Campbell's Run Road	3041	C	COUNTY		
ALCO	110374	West Liberty Ave ATSEM	3069	C	PADOT		
ALCO	78152	Ewing Road over Meek Run	3070	ER	PADOT	S19	EX
ALCO	100699	Clinton-Frankfort Road Br	3082	C	PADOT	S19	EX
ALCO	111516	MIA Stevenson Mill Connector	3088	RC	MUNIC		
ALCO	28344	McKees Rocks Bridge Phase 2	3104	C	PADOT	S19	EX
ALCO	100701	McKees Rocks Bridge Phase 3	3104	E	PADOT	S19	EX
ALCO	111517	MIA Rouser Road Connector	3109	RC	MUNIC		
ALCO	89155	Rochester Road Culvert	4011	ERC	PADOT	S19	EX
ALCO	115772	SR 4019, Mt. Royal Blvd Slide	4019	C	PADOT	S2	EX
ALCO	113629	Babcock Boulevard Culvert	4031	E	PADOT	S19	EX
ALCO	100723	Richard Road over Wexford	4053	E	PADOT	S19	EX
ALCO	113631	Bakerstown Road Bridge	4068	E	PADOT	S19	EX
ALCO	109570	Glenfield Viaduct Bridge	4165	ER	PADOT	S19	EX
ALCO	117473	Steen Road Bridge	7102	E	MUNIC	S19	EX
ALCO	27322	Days Run Bridge No. 3 (DY03)	7104	E C	COUNTY	S19	EX
ALCO	57066	Crawford Run Bridge (CE02)	7104	E	COUNTY	S19	EX
ALCO	27316	AL Local BPRS Group 2	7113	E C	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	88414	PA03 - Painters Run No. 3	7123	E C	COUNTY	S19	EX
ALCO	57074	Bull Creek Br No 7 (BF07)	7202	C	COUNTY	S19	EX
ALCO	79252	Bull Creek Br No 8 BF08	7202	C	COUNTY	S19	EX
ALCO	79894	MC07 McClarens Run #7	7203	E C	COUNTY	S19	EX
ALCO	83833	Deer Creek Bridge No.4	7208	C	COUNTY	S19	EX
ALCO	95754	IN01 - Licks Run North 1	7219	ERC	COUNTY	S19	EX
ALCO	28044	Versailles Avenue Viaduct	7304	E	MUNIC	S19	EX
ALCO	88398	CM03 - Campbells Run No. 3	7415	E C	COUNTY	S19	EX
ALCO	28426	AL Local BPRS Group 5	7420	ERC	COUNTY	S19	EX
ALCO	28323	Trumbull Drive Bridge	7435	E	MUNIC	S19	EX
ALCO	27573	Grant Avenue Bridge ov Girty's Run	7445	E	MUNIC	S19	EX
ALCO	27751	Lincoln Ave Bridge 13	7445	E	MUNIC	S19	EX
ALCO	119502	Lincoln Avenue Bridge #7 Replacement	7445	E	MUNIC	S19	EX
ALCO	93915	Talbot Ave Ramp Bridge	7456	E C	COUNTY	S19	EX
ALCO	93917	Kernawr Ave Ramp	7456	RC	COUNTY	S19	EX
ALCO	93371	Patton St Bridge (TL13)	7479	ERC	COUNTY	S19	EX
FGH	27491	Beck's Run Road		ERC	COUNTY	S10	EX
FGH	27493	Smithfield St Reconstruct, Ph 1		ERC	FGH	S10	EX
FGH	63378	CBD Signalization Upgrade- Ph 4		C	FGH		
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		RC	FGH		
FGH	109691	Smart Spines (ATCMID)		ER	FGH		
FGH	111408	Critical Sidewalk Gap TAP		C	FGH	A2	EX

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
FGH	111410	Pittsburgh Pedestrian Wayfinding TAP		C	FGH		NS
FGH	112081	SMART - Sylvan Ave Multimodal Path		C	FGH	A2	EX
FGH	114288	Penn Avenue Signal Improvements		E C	FGH		
FGH	114290	Allegheny River Green Boulevard		ERC	FGH	S6	EX
FGH	114294	City of Pittsburgh Bus Shelters/Mobility Hubs		RC	FGH	M7	EX
FGH	116080	North Ave Signals & Safety		E C	FGH		
FGH	116300	Smart Spines - Phase 1		E C	FGH		
FGH	116301	Smart Spines - Phase 2		E C	FGH		
FGH	116303	Smart Spines - Phase 3		E C	FGH		
FGH	117272	Frankstown Avenue Signal Improvement Project		E C	FGH		
FGH	117860	Black Street at North Negley Avenue Signal Replace		C	PADOT	S18	EX
FGH	117865	Perrysville Avenue and North Charles Street Inters		C	PADOT	R2	EX
FGH	117946	Camp Horn Road Multimodal Improvement		C	PADOT	A2	EX
FGH	118708	Beaver Avenue Esplanade Project			FGH	X1	EX
FGH	118768	New Pathways to Equity - RAISE Grant		E C	FGH	X12	EX
FGH	119380	Beaver Avenue Line Item		C	FGH	X1	EX
FGH	119440	Pittsburgh SRTS		E C	FGH	A2	EX
FGH	26971	Butler Street Bridge	8	C	PADOT	S19	EX
FGH	91694	PA 8- Butler Street	8	E	PADOT	S10	EX
FGH	81700	SR 19, Wash Rd -W. Libert	19	E	PADOT	S10	EX
FGH	100956	West End Bridge	19	ER	PADOT	S19	EX
FGH	110357	2023 ADA Curb Ramp Project	19	C	PADOT	A2	EX
FGH	91845	EA 28/Highland Park Br In	28	C	PADOT		
FGH	117911	Wrong Way Detection System	28	E C	PADOT	X11	EX
FGH	28309	SR 65 Ramps to Ft. Duq	65	ER	PADOT	S19	EX
FGH	115515	North Shore Expressway	279	ER	PADOT	S19	EX
FGH	94651	I-376/Parkway East A.T.M	376	ERC	PADOT		
FGH	97028	I-376/Banksville Interchange	376	ERC	PADOT		
FGH	109383	Bigelow Boulevard	400	E	PADOT	S10	EX
FGH	98085	PA 837/33rd St to Smithfi	837	C	PADOT		
FGH	93419	MA08 - Glenwood Bridge	885	E C	COUNTY	S19	EX
FGH	98125	Bates Street Improvement	885	E	PADOT		
FGH	110372	SR 1001-Freepport Rd Signal Retiming	1001	C	PADOT		
FGH	119196	SR 2045 Mifflin Road Drainage Study	2045		PADOT	X1	EX
FGH	115070	SR 2046, Streets Run Road	2046	E	PADOT	S10	EX
FGH	119503	SR 2051/Main Street	2051	E	PADOT	S10	EX
FGH	81750	Tenth Street Bypass	2128	C	PADOT	S10	EX
FGH	117952	Mount Lebanon Boulevard	3042	C	PADOT	S8	EX
FGH	94645	West Liberty Avenue	3069	E	PADOT	S10	EX
FGH	110353	SR 4003 - East Street to Babcock Blvd	4003	ERC	PADOT	S10	EX
FGH	119595	SR 4003 - East St to Babcock Blvd Signal Project	4003	ER	PADOT		
FGH	27144	28th Street Bridge	7301	ERC	FGH	S19	EX
FGH	27747	Swinburne Bridge	7301	ERC	FGH	S19	EX
FGH	58561	Wenzell Av/Camahahan Rd Br	7301	ER	FGH	S10	EX
FGH	76388	6th Street Bridge Rehab	7301	C	COUNTY	S19	EX
FGH	83137	South Negley Ave. Bridge	7301	C	FGH	S19	EX
FGH	91907	Charles Anderson Bridge	7301	ERC	FGH	S19	EX
FGH	93394	AL Local BPRS Group 4	7301	ERC	COUNTY	S19	EX
FGH	93922	AR01 - Armstrong Tunnel	7301	C	COUNTY		NS
FGH	106386	Larimer Avenue Bridge	7301	ERC	FGH	S19	EX

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
FGH	110319	Forbes Avenue ov Fern Hollow	7301	C	PADOT	S19	EX
FGH	114150	Swindell Bridge	7301	E	FGH	S19	EX
FGH	117365	Maple Ave Bridge Preservation	7301	E	FGH	S19	EX
FGH	117366	Herron Ave Bridge Preservation	7301	E	FGH	S19	EX
FGH	117367	Elizabeth St Bridge Rehabilitation	7301	E	FGH	S19	EX
FGH	117368	Corley St Bridge Preservation	7301	E	FGH	S19	EX
FGH	117369	Calera St Bridge Replacement	7301	E	FGH	S19	EX
FGH	117472	Bridge over Route 51 Near Woodruff Street	7301	E	FGH	S19	EX
FGH	113632	Ramp B to I-279 NB	8055	E	PADOT	S19	EX
ARCO	79843	SFC D-10 Hwy/Bridge Line		C	PADOT	S19	EX
ARCO	119198	District 10 HSIP/VRU Pedestrian Countdown Signals		E C	PADOT	A2	EX
ARCO	24056	Poverty Hill Bridge	28	C	PADOT	S19	EX
ARCO	69141	Goheenville Dip	28	C	PADOT	R4	EX
ARCO	117243	Armstrong Latex Group Bridges	28	E C	PADOT	S19	EX
ARCO	109622	1/112th Infantry Bridge/Graff Ramp Rehabilitation	66	E C	PADOT	S19	EX
ARCO	111826	Armstrong Co. Department Force Bridge Maintenance	68	C	PADOT	S19	EX
ARCO	117907	SR 85/SR 2001 Intersection ITS	85	E C	PADOT	X11	EX
ARCO	23978	Graff Bridge Preservation	422	E C	PADOT	S19	EX
ARCO	85574	Margaret Rd Intersection	422	C	PADOT	R4	EX
ARCO	85575	Theater Road Realignment	422	R	PADOT	R4	EX
ARCO	98689	Dunbar Dip	422	E	PADOT	S19	EX
ARCO	113645	US 422 A-15 Concrete Preservation	422	C	PADOT	S10	EX
ARCO	114936	US 422 County Line East PM	422	C	PADOT	S10	EX
ARCO	83245	Rural Valley Bridge #4	2001	E C	PADOT	S19	EX
ARCO	24135	Pyra Road Bridge	2005	ERC	PADOT	S19	EX
ARCO	24136	Brick Church Bridge #2	2005	ERC	PADOT	S19	EX
ARCO	91794	Fagley Run Bridge #2	2027	ERC	PADOT	S19	EX
BECO	106494	Beaver Local Bridge Line Item		C	COUNTY	S19	EX
BECO	101165	Frankfort Road Bridge	18	ERC	PADOT	S19	EX
BECO	105441	PA 18 Bridge ov Beaver River	18	ERC	PADOT	S19	EX
BECO	109376	Rochester - Monaca Bridge	18	C	PADOT	S19	EX
BECO	102661	Aliquippa East End Gateway, Ph 1 TIIIF	51	ERC	OTHER	X1	EX
BECO	112022	Monaca Gateway MIF-TIIIF-Start	51	ERC	MUNIC		
BECO	35156	PA 65, Country Club Bridge	65	ERC	PADOT	S19	EX
BECO	109390	Mercer Road Bridge	65	C	PADOT	S19	EX
BECO	110356	PA 65 - Eighth Street to Mercer Rd	65	C	PADOT	S10	EX
BECO	109356	Midland Beaver Road	68	E	PADOT	S10	EX
BECO	116559	SR 68, Virginia Avenue/Ad	68	E	PADOT	S10	EX
BECO	101173	PA 168 over Jordan Run	168	E C	PADOT	S19	EX
BECO	113607	I-376, ITS Installation - Beaver County	376	E C	PADOT	X11	EX
BECO	108473	GRP 112-22-7135-1	588	C	PADOT	S10	EX
BECO	113346	Bridge Demand Mtc 15, 23	588	C	PADOT	S19	EX
BECO	99795	Brush Ck Br/BrBrush Ck	1019	E	PADOT	S19	EX
BECO	115780	SR 1019, Brush Creek Road Slide	1019	C	PADOT	S2	EX
BECO	93770	Pine Run Road Culvert	1021	E C	PADOT	S19	EX
BECO	89157	Grange Road Culvert	1037	E C	PADOT	S19	EX
BECO	67016	Freedom Rd Upgrade - Ph C	2004	C	PADOT		NS
BECO	117332	SR 2004 Freedom Crider Rd at Lovi Rd	2004	ERC	PADOT	R1	EX
BECO	112403	SR 2006, Lovi Road Slide	2006	C	PADOT	S2	EX
BECO	109530	Chapel Road Slide	3005	C	PADOT	S2	EX

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
BECC	105453	SR 3007/Frankfort Rd - Allegheny Co Line	3007	E C	PADOT	S10	EX
BECC	113630	Century Farm Road Culvert	3034	ERC	PADOT	S19	EX
BECC	109391	Brady Run Road Bridge	4012	ER	PADOT	S19	EX
BECC	101198	Shenango Road Bridge	4021	E	PADOT	S19	EX
BECC	78314	Wolf Run Rd ov Wolf Run	4034	E C	PADOT	S19	EX
BECC	28918	SR 4042, Old Rochester-Bridgewater Rd Bridge	4042	ER	PADOT	S19	EX
BECC	101200	West Madison Street Bridge	4042	ER	PADOT	S19	EX
BECC	70793	Georgetown Br over PA 51	4053	ER	PADOT	S19	EX
BECC	28974	Loughheads Bridge (CB #9)	7201	E	COUNTY	S19	EX
BUCC	109385	Slippery Rock Group Crossings		C	PADOT	S8	EX
BUCC	110766	Maple Avenue Crossing		C	PADOT	S8	EX
BUCC	110768	Evans City Corridor Crossings		C	PADOT	S8	EX
BUCC	118362	Butler-Freeport Community Trail Stream Bank Stabil		E C	PADOT	A2	EX
BUCC	119692	D10/SPC Carbon Reduction Line Item		C	PADOT		NS
BUCC	24715	South of Cooperstown Br #1	8	C	PADOT	S19	EX
BUCC	111827	Butler Co. Department Force Bridge Maintenance	8	C	PADOT	S19	EX
BUCC	113652	General Butler Bridge EM	8	E	PADOT	S19	EX
BUCC	114789	SR 8 Butler City to SR 308	8	C	PADOT	S10	EX
BUCC	117903	SR 8/SR 4010 Intersection ITS	8	E C	PADOT	X11	EX
BUCC	117244	Zelienople Bridge #1 Latex Overlay	19	E C	PADOT	S19	EX
BUCC	117959	Route 19 AND Progress Ave	19	C	PADOT	R2	EX
BUCC	86105	Karns Crossing Bridge	68	RC	PADOT	S19	EX
BUCC	106568	PA 68 Corridor Improvements	68	C	PADOT		
BUCC	117264	Jefferson - Cunningham Streets Signal Improvements	68	ERC	PADOT		
BUCC	116661	I-79 Seneca Ramps - TSMO	79	E C	PADOT	X11	EX
BUCC	24682	Southwest of Euclid Bridge	138	ERC	PADOT	S19	EX
BUCC	91285	Pittsburgh Street Interse	228	R	PADOT	R2	EX
BUCC	91286	Three Degree Rd Intersection	228	RC	PADOT		
BUCC	91288	Balls Bend	228	C	PADOT		
BUCC	105900	Ekastown West 3R	228	ERC	PADOT	S10	EX
BUCC	83317	PA 268 ovTrib.S.Br. Bear Ck	268	ER	PADOT	S19	EX
BUCC	105574	Zelienople Railroad Corridor	288	C	PADOT	S8	EX
BUCC	117245	Boyers Bridge #1 Epoxy	308	C	PADOT	S19	EX
BUCC	24759	PA 356 over Tributary to Coal Run	356	E C	PADOT	S19	EX
BUCC	110462	PA 356 Moraine Pointe to Campus In Signal Upgrade	356	C	PADOT		
BUCC	117246	Wayne Street Viaduct Epoxy	356	C	PADOT	S19	EX
BUCC	24663	US 422 over PA 356	422	ER	PADOT	S19	EX
BUCC	98028	Shearer Bridge Pres.	422	ERC	PADOT	S19	EX
BUCC	114188	Butler Bypass Phase 2	422	C	PADOT	S10	EX
BUCC	117334	US 422 County Line West EM	422	C	PADOT	S10	EX
BUCC	98730	Portersville Bridge	488	C	PADOT	S19	EX
BUCC	24819	Rattigan Bridge #1	1021	RC	PADOT	S19	EX
BUCC	24827	Renfrew Bridge	3007	ERC	PADOT	S19	EX
BUCC	89972	SR 3014 Callery Bridge	3014	C	PADOT	S19	EX
BUCC	83336	SR 3015 over Trib. to Breakneck Creek	3015	ERC	PADOT	S19	EX
BUCC	112933	Freedom Rd (Beaver Co. to Haine School Road)	3020	C	PADOT		
BUCC	110783	10-2 SR 3021 Corridor Improvements	3021	C	PADOT	S6	EX
BUCC	24793	SR 3031 Lions Road Bridge	3031	C	PADOT	S19	EX
BUCC	117905	SR 4010/Harmony Intersection ITS	4010	E C	PADOT	X11	EX
BUCC	56592	T-584 Geibel Road Bridge	7228	ERC	PADOT	S19	EX

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BUCC	24471	CO #24 Kelly Bridge	7232	ERC	PADOT	S19	EX
GRCO	30207	Greene Co Bridge # 35		ER	PADOT	S19	EX
GRCO	116236	12-24-REM		C	PADOT	S11	EX
GRCO	117551	DI2 Betterment Line Item		C	PADOT	S10	EX
GRCO	117422	2025 Slide Repairs	18	C	PADOT	S2	EX
GRCO	113683	Waynesburg Betterment	19	C	PADOT	S10	EX
GRCO	116238	2024 Slide Repairs	19	C	PADOT	S2	EX
GRCO	30315	PA 21 over Grinnage Run	21	C	PADOT	S19	EX
GRCO	105306	PA 21 over Toll Gate Run	21	C	PADOT	S19	EX
GRCO	117441	PA 21 East of Waynesburg	21	C	PADOT	S10	EX
GRCO	118003	DI2 Waynesburg Corridor	21	RC	PADOT	S10	EX
GRCO	116235	12-23-REM	40	C	PADOT	S11	EX
GRCO	90646	PA 88 over Whiteley Creek	88	C	PADOT	S19	EX
GRCO	119192	DI2 Vulnerable User Safety Improvements	88	C	PADOT	S6	EX
GRCO	116175	PA 188 Jefferson Rd Preservation	188	C	PADOT	S10	EX
GRCO	116237	2023 Slide Repairs	188	C	PADOT	S2	EX
GRCO	81849	PA 218 ov Br Smith Ck	218	ERC	PADOT	S19	EX
GRCO	105401	SR 1008 over Neel Run - DFB	1008	RC	PADOT	S19	EX
GRCO	76038	SR 1009 over Bacon Run-DFB	1009	RC	PADOT	S19	EX
GRCO	79347	SR 1009 over Castile Run-DFB	1009	RC	PADOT	S19	EX
GRCO	81842	SR 1010 over Pumpkin Run	1010	C	PADOT	S19	EX
GRCO	96659	Sugar Run Road Intersect	2003	ERC	PADOT		NS
GRCO	98856	SR 2008 ov Dunkard Crk	2008	ERC	PADOT	S19	EX
GRCO	30134	SR 3001 over Wheeling Ck	3001	E C	PADOT	S19	EX
GRCO	113599	SR 3007 over Webster Run-DFB	3007	RC	PADOT	S19	EX
GRCO	116456	SR 3009 over Branch of Toms Run-DFB	3009	RC	PADOT	S19	EX
GRCO	74220	SR 3011 over Hargus Creek	3011	ERC	PADOT	S19	EX
GRCO	105402	SR 3011 over Br of Hargus Ck - DFB	3011	RC	PADOT	S19	EX
GRCO	81796	SR 3018 over Br Blacks Ck - DFB	3018	RC	PADOT	S19	EX
GRCO	81798	SR 4007 over Owens Run - DFB	4007	RC	PADOT	S19	EX
GRCO	105394	SR 4033 over Gamers Run - DFB	4033	RC	PADOT	S19	EX
GRCO	106407	Greene Co Bridge #105	7202	ER	PADOT	S19	EX
GRCO	86225	Greene County #75	7214	ERC	PADOT	S19	EX
GRCO	112595	Greene County #73	7214	ER	PADOT	S19	EX
FACO	76508	Dist12 Hwy/Brdg Line Item		C	PADOT	S10	EX
FACO	81229	DI2 Bridge Preservation Design		E C	PADOT	S19	EX
FACO	96657	Bruceston Mills Rd. T-311		C	PADOT	S10	EX
FACO	101968	DI2 Pmnt Presv Design		E	PADOT	S10	EX
FACO	105858	Districtwide DFB Line Item		E	PADOT	S19	EX
FACO	107625	Sheepskin Trail - Southern Extension		C	PADOT	XI2	EX
FACO	114628	DI2 BOF Local Bridge Reserve		C	PADOT	S19	EX
FACO	117112	District 12 Support Services		E	PADOT	XI	EX
FACO	117429	2025 REM Contract		C	PADOT	S11	EX
FACO	117430	2026 REM Contract		C	PADOT	S11	EX
FACO	117530	DI2 Slide Design		E	PADOT	S2	EX
FACO	119279	DI2 Carbon Reduction Line Item		C	PADOT		NS
FACO	119477	DI2 2023 Appropriations		E	PADOT	XI	EX
FACO	79306	PA 21 over PA 166	21	C	PADOT	S19	EX
FACO	116500	2023 EIDM Preservation	40	C	PADOT	S19	EX
FACO	116690	2023 Bridge Deck Preservation	40	C	PADOT	S19	EX

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
FACO	118002	D12 Turn Lanes	40	C	PADOT	S6	EX
FACO	118001	D12 Intersection Warning Signals 2021	51	C	PADOT	S7	EX
FACO	96661	McClure/Kingview Road Interchange	119	ERC	PADOT		
FACO	110402	US 119 Connellsville CMAQ	119	C	PADOT		
FACO	118000	D12 Flashing Beacon 2021	201	RC	PADOT	S7	EX
FACO	113781	PA 653 over Indian Creek	653	C	PADOT	S19	EX
FACO	74342	PA 711 Crawford Ave Bridge	711	C	PADOT	S19	EX
FACO	76006	PA 819 over Br Jacobs Ck	819	ER	PADOT	S19	EX
FACO	105387	SR 1005 over Br Back Ck - DFB	1005	RC	PADOT	S19	EX
FACO	105820	SR 1019 ov Breakneck Run-DFB	1019	RC	PADOT	S19	EX
FACO	116189	SR 1020 Gallatin Avenue Betterment	1020	C	PADOT	S10	EX
FACO	29966	SR 1051 over Mounts Creek-DFB	1051	RC	PADOT	S19	EX
FACO	98325	SR 1051 ov Br Mounts Ck-DFB	1051	RC	PADOT	S19	EX
FACO	29824	SR 2003 over Chaney Run-DFB	2003	RC	PADOT	S19	EX
FACO	113705	2022 Slide Repairs	2018	C	PADOT	S2	EX
FACO	93507	SR 2040 over Redstone Ck	2040	C	PADOT	S19	EX
FACO	74186	SR 3008 over Jacobs Creek- DFB	3008	RC	PADOT	S19	EX
FACO	116773	2024 Edam Preservation	3027	C	PADOT	S19	EX
FACO	76016	SR 4001 over Rush Run 0050-2 - DFB	4001	RC	PADOT	S19	EX
FACO	88878	SR 4001 over Rush Run 0050 - DFB	4001	RC	PADOT	S19	EX
FACO	74344	Cast Iron Bridge	4003	RC	PADOT	S19	EX
FACO	76017	SR 4016 over Redstone Ck	4016	ER	PADOT	S19	EX
FACO	117423	2026 Slide Repairs	4022	C	PADOT	S2	EX
FACO	113595	SR 4032 over Bolden Run- DFB	4032	RC	PADOT	S19	EX
FACO	81192	Layton Bridge	4038	ERC	PADOT	S19	EX
FACO	76137	Moyer Road Bridges	7202	RC	COUNTY	S19	EX
FACO	113210	Fayette County Bridge #15	7206	ER	PADOT	S19	EX
FACO	95837	North Gallatin Ave Bridge	7302	ERC	PADOT	S19	EX
FACO	111776	Jefferson Street Bridge	7302	ER	PADOT	S19	EX
INCO	105582	Olson Road Crossing		C	PADOT	S8	EX
INCO	117277	Blairsville Riverfront Trail		C	PADOT	A2	EX
INCO	25621	US 119 over SR 8001 (Northbound and Southbound)	119	E C	PADOT	S19	EX
INCO	83227	US 119 over Pine Run	119	ERC	PADOT	S19	EX
INCO	95852	US 119 over Two Lick Ck.	119	ERC	PADOT	S19	EX
INCO	101113	Stoney Run Bridge #1	119	ERC	PADOT	S19	EX
INCO	117248	US 119 over Crooked Creek	119	ERC	PADOT	S19	EX
INCO	25596	PA 286 ovTrib to Cherry Rn	286	ERC	PADOT	S19	EX
INCO	104459	PA 286: US 422 Interchange East	286	R	PADOT		
INCO	114423	Jacksonville Bridge #1	286	ER	PADOT	S19	EX
INCO	109638	Marion Center Bridge #1	403	C	PADOT	S19	EX
INCO	118589	SR 403 over US 22 Bridge	403	C	PADOT	S19	EX
INCO	25548	US 422 over Two Lick Ck.	422	E C	PADOT	S19	EX
INCO	25696	US 422 Cunningham Culvert	422	RC	PADOT	S19	EX
INCO	78101	Mentch Bridge EB/WB	422	C	PADOT	S19	EX
INCO	88615	Indiana Bypass Repair	422	C	PADOT	S10	EX
INCO	98811	Bridge to Nowhere EB EM	422	ER	PADOT	S19	EX
INCO	98827	Bridge to Nowhere WB EM	422	ER	PADOT	S19	EX
INCO	117247	Indiana Latex Group	422	C	PADOT	S19	EX
INCO	117909	SR 422/SR 403 Intersection ITS	422	E C	PADOT	X11	EX
INCO	111829	Indiana Co. Department Force Bridge Maintenance	553	C	PADOT	S19	EX

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Projects Funded Through FAST-Act Title I Programs

COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
INCO	25411	Yellow Creek #2 Bridge	954	ERC	PADOT	S19	EX
INCO	117379	Indiana Epoxy Group Bridges	954	C	PADOT	S19	EX
INCO	83364	Ramsey Run Bridge #1	1002	C	PADOT	S19	EX
INCO	25587	Broadhead Run Bridge #2	1045	ERC	PADOT	S19	EX
INCO	25791	Straight Run Bridge #2	1046	RC	PADOT	S19	EX
INCO	83370	Dilltown Bridge No.3	2012	ERC	PADOT	S19	EX
INCO	117493	Pleasant Valley Bridge	2012	ERC	PADOT	S19	EX
INCO	25795	Clarksburg Bridge #1	3007	ERC	PADOT	S19	EX
INCO	83382	SR 3007 over Marshall Run #1	3007	C	PADOT	S19	EX
INCO	78117	Rearick Road Bridge #1	3010	ERC	PADOT	S19	EX
INCO	25602	Green Valley Bridge #1	3031	ERC	PADOT	S19	EX
INCO	25802	Anthony Run Bridge #2	3039	ERC	PADOT	S19	EX
INCO	100122	SR4005-PA954 to Oakland Ave	4005	C	PADOT	S10	EX
INCO	105300	SR 4005 Mack Park Bridge	4005	C	PADOT	S19	EX
INCO	78122	SR 4030 Carter Avenue Bridge	4030	C	PADOT	S19	EX
INCO	111796	Indian Springs Road/Rustic Lodge Road Intersection	4422	RC	PADOT	R2	EX
LACO	88721	Hickory View Drive Bridge		ERC	MUNIC	—	NA
LACO	117261	Union Township TA Project		C	MUNIC	—	NA
LACO	78396	PA 18 ov Abandoned Plant Access Rd	18	E	PADOT	—	NA
LACO	88284	Liberty St., Jefferson St., Wilmi	18	ERC	PADOT	—	NA
LACO	109386	Perry Hwy	19	E	PADOT	—	NA
LACO	109389	Perry Highway	19	E	PADOT	—	NA
LACO	91768	PA 65/East Washington Street	65	C	PADOT	—	NA
LACO	119466	SR 158/North Jefferson St	158	E	PADOT	—	NA
LACO	78397	Eastbrook Road Bridge	168	C	PADOT	—	NA
LACO	108503	SR 208, Pulaski Road	208	C	PADOT	—	NA
LACO	92282	SR 422, Benjamin Franklin Highway	422	C	PADOT	—	NA
LACO	81639	Frew Mill Road Bridge	1012	E C	PADOT	—	NA
LACO	29468	Liberty Road Over Branch Of Jamison Run	1015	E	PADOT	—	NA
LACO	100743	East Washington Street Br	2006	ERC	PADOT	—	NA
LACO	114621	NCIR at Cherry Street	2032	C	PADOT	—	NA
LACO	29394	S. Main Street Bridge	3001	C	PADOT	—	NA
LACO	117475	Pulaski Road Culvert	4005	E C	PADOT	—	NA
LACO	29327	Wallace Road Bridge T356	7203	C	COUNTY	—	NA
LACO	29528	Graceland Rd Br T464	7205	ERC	MUNIC	—	NA
LACO	78357	Barkley Road Bridge #3	7207	ERC	MUNIC	—	NA
LACO	105601	McCartney Hollow Road Bridge T311	7207	ERC	MUNIC	—	NA
WACO	30989	Gabby Bridge #64		ERC	PADOT	S19	EX
WACO	102154	DI2 Construction Mgt		C	PADOT	X1	EX
WACO	114584	Charleroi Corridor RRX		C	PADOT	S8	EX
WACO	114630	Bus Replacement - MMTA			PADOT	M10	EX
WACO	117949	MMTA 2022 Bus Replacement		C	PADOT	M10	EX
WACO	118319	National Pike Tunnel Rehabilitation		C	PADOT		NS
WACO	79365	PA 18 over Chartiers Ck-1	18	ER	PADOT	S19	EX
WACO	88829	PA 18 Signal Upgrades	18	C	PADOT		
WACO	90685	PA 18 over Chartiers Creek-2	18	C	PADOT	S19	EX
WACO	110065	PA 18: PA 844 to PA 50	18	C	PADOT	S10	EX
WACO	114561	PA 18: Main Street to Third Sreet	18	C	PADOT		
WACO	117943	US 19 Adaptive Signal CMAQ Supplement	19	C	PADOT		
WACO	117444	US 22 Concrete Repair - Washington	22	C	PADOT	S10	EX

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
WACO	113722	US 40 over Catfish Run	40	ER	PADOT	S19	EX
WACO	118574	US 40/SR 3005 Intersection Improvements	40	C	PADOT	R1	EX
WACO	30957	I-70 over SR 3009 and Buf	70	E	PADOT	S19	EX
WACO	89131	I79 ov Br Chartiers Ck #1	79	ERC	PADOT	S19	EX
WACO	76050	EA 88 over Trib Mon River	88	C	PADOT	S19	EX
WACO	105426	Charleroi Betterment	88	RC	PADOT	S10	EX
WACO	110399	PA 88 Charleroi CMAQ	88	C	PADOT		
WACO	116178	PA 88 Fredericktown Preservation	88	C	PADOT	S10	EX
WACO	116204	PA 88 over Peters Creek	88	ER	PADOT	S19	EX
WACO	30882	PA 221 ov Br Ten Mile Ck-DFB	221	RC	PADOT	S19	EX
WACO	105914	PA 231 over Br Templeton Run - DFB	231	RC	PADOT	S19	EX
WACO	90691	PA 331 over Br Brush Run-DFB	331	RC	PADOT	S19	EX
WACO	76063	PA 519 ov Br Chartiers Run	519	ER	PADOT	S19	EX
WACO	31088	EA 917 over Br Pigeon Creek	917	ER	PADOT	S19	EX
WACO	109025	Bebout Rd/ E McMurray Rd Intersection	1002	RC	PADOT		
WACO	31152	SR 1016 ov Br Mingo Ck	1016	C	PADOT	S19	EX
WACO	89068	SR 1055 ov Br Ltl Chartiers Ck-DFB	1055	RC	PADOT	S19	EX
WACO	90690	SR 1061 over Froman Run- DFB	1061	RC	PADOT	S19	EX
WACO	113597	SR 2047 over Little Termile Creek	2047	ERC	PADOT	S19	EX
WACO	118280	West Brownsville RFX Corridor	2067	C	PADOT	S8	EX
WACO	74234	SR 3009 over Buffalo Creek #1	3009	ER	PADOT	S19	EX
WACO	116368	SR 3009 over Branch of Buffalo Creek-DFB	3009	RC	PADOT	S19	EX
WACO	105406	SR 3021 ov Br Mid Wheel Creek - DFB	3021	RC	PADOT	S19	EX
WACO	30709	SR 4022 ov Br Buffalo Ck	4022	C	PADOT	S19	EX
WACO	89052	SR 4057 over Brush Run	4057	C	PADOT	S19	EX
WACO	51404	Pike Run #1	7401	ERC	COUNTY	S19	EX
WACO	31074	Raccoon Bridge #23	7404	ER	PADOT	S19	EX
WEICO	31669	Fairwood Manor Bridge		RC	PADOT	S19	EX
WEICO	31689	Ladysmith Road T-470		ER	PADOT	S19	EX
WEICO	31927	Possum Hollow Road		E	PADOT	S19	EX
WEICO	112413	Greensburg HCD Neighborhood Trail		C	PADOT	A2	EX
WEICO	118320	Lowry Avenue Sidewalks		C	PADOT	X12	EX
WEICO	110900	US 30 Corridor Impmnts - Western Section	30	ERC	PADOT	S6	EX
WEICO	113784	US 30 over Loyalhanna Creek	30	C	PADOT	S19	EX
WEICO	114390	US 30 @ Georges Station Road	30		PADOT	R1	EX
WEICO	116501	US 30 over PA Turnpike ED	30	C	PADOT	S19	EX
WEICO	117866	US Route 30 and Wimmerton Boulevard Safety Upgrade	30	C	PADOT	S6	EX
WEICO	117945	US 30 Adaptive Signal Corridor	30	C	PADOT		
WEICO	116179	PA 66 Pavement Preservation	66	E C	PADOT	S10	EX
WEICO	117516	I-70 Fiber Installation (Segments 404-434)	70	C	PADOT	S7	EX
WEICO	117519	I-70 Fiber Installation Segment 0474-0494	70	C	PADOT	S7	EX
WEICO	117520	I-70 Fiber Installation Segment 0554-0570	70	C	PADOT	S7	EX
WEICO	76105	US 119 over Crabtree Creek 2	119	C	PADOT	S19	EX
WEICO	114560	119 SW Greensburg CMAQ	119	C	PADOT		
WEICO	69248	PA 136 over Pollock Run	136	ERC	PADOT	S19	EX
WEICO	98869	West Newton Bridge	136	ERC	PADOT	S19	EX
WEICO	116186	PA 136 Pavement Preservation	136	C	PADOT	S10	EX
WEICO	81751	PA 356 over Pine Run	356	E C	PADOT		NS
WEICO	116790	Freeport Bridge Truss Preservation	356	C	PADOT	S19	EX
WEICO	31818	Koffer Run Bridge	711	RC	PADOT	S19	EX

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COUNTY	MEMS NUMBER	PROJECT NAME	SR NUMBER	PHASE	PROJECT SPONSOR	"EXEMPT" CODES	
WECCO	76123	PA 711 ov Br of Tubmill Ck	711	RC	PADOT	S19	EX
WECCO	91150	PA 711 over Hendricks Ck	711	R	PADOT	S19	EX
WECCO	32084	PA 906 ov Webster Hollow	906	C	PADOT	S19	EX
WECCO	108010	LVITIP: Norvelt to Pleasant Unity	981	RC	PADOT	R4	EX
WECCO	108140	LVITIP: Pleasant Unity to Airport	981	ERC	PADOT	R4	EX
WECCO	98860	PA 982 ov Br Stony Run	982	C	PADOT	S19	EX
WECCO	117848	Irwin Borough Traffic Signal Upgrade	993	C	PADOT	R2	EX
WECCO	105414	SR 1005 over Br Shannon Run - DFB	1005	RC	PADOT	S19	EX
WECCO	113823	Donohoe Road/Georges Station Intersection	1026	RC	PADOT	R1	EX
WECCO	111650	Roseytown Road RR Tunnel Repairs	1030	C	PADOT	S10	EX
WECCO	116465	SR 1049 over Br Little Crabtree Creek (Seg 40)-DFB	1049	R	PADOT	S19	EX
WECCO	81747	Salina Bridge	1060	ERC	PADOT	S19	EX
WECCO	105415	SR 1071 over Br Hypocrite Creek (Seg 10) - DFB	1071	C	PADOT	S19	EX
WECCO	106047	SR 1071 over Br Hypocrite Creek (Seg 30) - DFB	1071	C	PADOT	S19	EX
WECCO	116463	SR 1071 over Hypocrite Creek (Seg 16)-DFB	1071	C	PADOT	S19	EX
WECCO	89043	SR 2025 over Welty Run	2025	C	PADOT	S19	EX
WECCO	98800	SR2037 ov Branch Four Mile Run-2 DFB	2037	RC	PADOT	S19	EX
WECCO	105416	SR 3010 over Br Sewickley Creek - DFB	3010	RC	PADOT	S19	EX
WECCO	112623	MS4 FRP Stream Bank Stabilization	3023	E	PADOT	X9	EX
WECCO	90834	SR 3030 over US 30	3030	C	PADOT	S19	EX
WECCO	81960	SR 4012 over Brush Creek	4012	E C	PADOT	S19	EX
WECCO	31550	SR 4019 Bridge over NS RR	4019	C	PADOT	S19	EX
WECCO	89066	SR 4019 over Brush Creek	4019	ERC	PADOT	S19	EX
WECCO	112554	SR 4041 over Haymakers Run	4041	C	PADOT	S19	EX
WECCO	83686	SR 4073 over PA 56	4073	ER	PADOT	S19	EX
WECCO	113267	New Kensington Corridor	4087	C	PADOT	S8	EX
WECCO	74265	SR 4089 over Br Chartiers Run - DFB	4089	RC	PADOT	S19	EX
WECCO	67722	T-479 Fry Hollow Rd Br	7209	ER	PADOT	S19	EX
WECCO	73028	Brewery Street Bridge	7302	ER	PADOT	S19	EX
WECCO	31554	Fourth Street Bridge	7421	E C	PADOT	S19	EX
WECCO	76393	I-70 over Br Cedar Ck	7449	E	PADOT	S19	EX

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2023-2026 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	74454	I-376 - Resurface - Boyce Road to I-79	376	ERC	PADOT	S10	EX
ALCO	81931	I-79 - Pavement Restoration - Campbells Run - Moon Run	79	RC	PADOT	S10	EX
ALCO	87767	I-376 - Pavement Restoration - Edgewood to Churchill	376	RC	PADOT	S10	EX
ALCO	87778	I-376 - Resurface - Churchill to Monroeville	376	RC	PADOT	S10	EX
ALCO	91565	I-79 - Reconstruct - Moon Run to Neville Island	79	E C	PADOT	S10	EX
ALCO	94812	I-79 - Pavement Restoration - Neville Island to I-279	79	C	PADOT	S10	EX
ALCO	97027	I-376 - Carnegie Interchange - Improve / Reconfigure	376	ERC	PADOT	R3	EX
ALCO	97029	I-376 - Greentree Interchange - Improve / Reconfigure	376	ERC	PADOT	R3	EX
ALCO	104325	I-79 - Widening - Alpine Rd to Bridgeville	79	C	PADOT		
ALCO	116525	I-79 - Longitudinal Joint Rehab - Bridgeville to I-376	79	C	PADOT	S10	EX
FGH	99874	1-376 - Squirrel Hill Interchange - Improve / Reconfigure	376	ERC	PADOT	R3	EX
FGH	105438	1-376 - Bridge Replacement - Commercial Street Bridge	376	ERC	PADOT	S19	EX
FGH	109270	I-376 - Ft. Duquesne Br. - Bridge Rehab / Preservation	279	E	PADOT	S19	EX
FGH	112249	I-376 - Drainage Imp - "Bath Tub" - Ft Pitt Br to 10th St.	376	E	PADOT	X1	EX
FGH	113362	I-376 - Bridge Improvement - Frazier Street Bridge	376	E	PADOT	S19	EX
BECC	117387	I-376 - IIS Installation - 2 (Hopeqwell Township)	376	C	PADOT	X11	EX
BUCO	106274	I-79 - Reconstruct-Widen - Cranberry, Jackson Townships	79	ER	PADOT		
BUCO	109288	I-79 - Bridge Replace - over Connoquenessing Cr - Jackson Twp	79	E	PADOT	S19	EX
IACO	87757	I-79 - Resurface - Butler Co. Line to Mercer Co. Line	79	RC	PADOT		NA
IACO	109275	I-376 - Longitudinal Joint Rehab - Mitchell Rd - Mercer Co.	376	E C	PADOT		NA
IACO	109284	I-376 - Resurface - SR 224 to Turnpike	376	ERC	PADOT		NA
WACO	75945	I-70 - Reconstruct - Buffalo, Donegal Townships	70	ERC	PADOT	S19	EX
WACO	106919	I-70 - Reconstruct - Belle Vernon Bridge to Bentleyville	70	ERC	PADOT	S10	EX
WECC	75978	I-70 - PA 51 Interchange Reconstruction	70	C	PADOT	R3	EX
WECC	88508	I-70 - Arnold City Interchange Reconstruction	70	RC	PADOT	R3	EX

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Regionally Significant Projects Funded by Pennsylvania Turnpike Commission

MFMSCOUNTY 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])		ERC	TREK	
BECC	Replace Beaver River Bridge - Widen to 6 Lanes (MP 12.5-13.5)	76	E C	TREK	
BUCO	Cranberry Int. to Pine Twp. - Widen to 6 Lanes (MP 28-31)	76	C	TREK	
WECC	Mile 99 to Westmoreland/Somerset Co. Line - Widen to 6 Lanes	76	E C	TREK	

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2023-2026 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	M10	EX
ACTS	114611	Bus Equipment	M5	EX
ACTS	118110	Operating Assistance	M1	EX
ACTS	118112	Support Vehicle	M2	EX
ACTS	119321	Bus Parking Lot Drainage	S2	EX
ACTS	119322	Replace Shop Laptop	M4	EX
ACTS	119323	TSI Camera Dard Drives	M5	EX
BCTA	65404	Purchase Paratransit Buses	M10	EX
BCTA	65590	Bus Replacement - Fixed-Route	M10	EX
BCTA	70708	Support Equipment	M4	EX
BCTA	83817	ADP Hardware and Software	M4	EX
BCTA	94985	Facility Renovations	M4	EX
BCTA	94986	Operating Asst. - Rural	M1	EX
BCTA	114400	Midlife Vehicle Overhaul	M3	EX
BCTA	118113	State Funding - Operating Assistance	M1	EX
BCTA	118124	Paratransit Service - Operating Assistance	M1	EX
BTA	77852	Operating Assistance	M1	EX
BTA	114742	Rt.68 Park-n-Ride Facilities		
BTA	118125	Acquisition of Misc. Assets	M4	EX
BTA	118126	Acquisition of Road Signing Assets	M7	EX
BTA	118127	Acquisition of Station Assets	M7	EX
BTA	118128	ADP Hardware and Software	M4	EX
BTA	118129	Communications Systems	M4	EX
BTA	118130	Fare Collection Equipment	M5	EX
BTA	118131	Replacement CNG Bus	M10	EX
BTA	118132	Security and Surveillance Equipment	M6	EX
BTA	118133	Shop Equipment	M4	EX
FACT	65222	Operating Assistance	M1	EX
FACT	71083	Capital Assistance	M10	EX
FACT	90041	Bus Procurement	M10	EX
FACT	114613	Communication Equipment	M5	EX
FACT	118134	Facility Assessment Study	X1	EX
FACT	118135	Operating Assistance - Shared Ride	M1	EX
FACT	118136	Support Vehicles	M2	EX
FACT	118137	Mini-Van Replacements	M10	EX
GREENE	114735	Facility Improvements	M8	EX
GREENE	118138	Bus Wash	M4	EX
GREENE	118139	Operating Assistances	M1	EX
GREENE	118140	Bus Replacements	M10	EX
HHF	111095	Operating Assistance	M1	EX
ICTA	65421	Operating Assistance - Rural	M1	EX

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PROJECT SPONSOR	MEMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
ICTA	111101	Support Equipment	M4	EX
ICTA	114533	CTC Mini Vans	M10	EX
ICTA	118143	Operating Assistance - Shared Ride	M1	EX
ICTA	118144	CNG Bus Replacements	M10	EX
ICTA	118146	Support Equipment (SkyLight Panel Replacement)	M8	EX
MDCO	83884	Operating Assistance	M1	EX
MDCO	106635	Fixed-Route Vehicle Replacement	M10	EX
MDCO	114736	Antenna Replacement	M6	EX
MDCO	114743	Ecolane Tablets	M5	EX
MDCO	114744	Server Upgrade	M4	EX
MDCO	118147	Intermodal Station Assets	R6	EX
MDCO	118148	Operating Assistance - Shared Ride	M1	EX
MDCO	118149	Shop Equipment - Power Washer	M4	EX
MDCO	118150	Shop Equipment - Wheel Alignment Machine	M4	EX
MDCO	118159	Shop Equipment - Wheel balancer and AC Auto Charger	M4	EX
MDCO	118160	Small Bus Replacement	M10	EX
MMVTA	65428	Operating Assistance - Urban	M1	EX
MMVTA	107897	Extended Warranty	M5	EX
MMVTA	114617	ITS System Upgrades	M6	EX
MMVTA	114618	Office Equipment	M4	EX
MMVTA	114619	Study/Planning	X1	EX
MMVTA	118161	Admin Facility Improvements	M8	EX
MMVTA	118162	Support Equipment - Facilities	M4	EX
MMVTA	118163	Multimodal Hub - Preliminary E&D	M8	EX
MMVTA	118164	Multimodal Hub - Construction	M8	EX
MMVTA	118165	Park-n-Ride Maintenance	M8	EX
MMVTA	118166	Replacement Buses	M10	EX
MMVTA	118204	Farebox System	M5	EX
MMVTA	119316	CMAQ Buses (Bus Replacement)	M10	EX
NCATA	77860	Operating Assistance - Rural	M1	EX
NCATA	114737	Garage Equipment	—	NA
NCATA	114745	Bus Facility Maintenance	—	NA
NCATA	118167	CNG Buses	M10	EX
NCATA	118168	Bus Storage Facility	—	NA
NCATA	118169	Support Vehicles	M2	EX
PAAC	65465	Capital Cost of Contracting - Access	M1	EX
PAAC	65535	Preventive Maintenance - Bus	M3	EX
PAAC	65541	Support Vehicles	M2	EX
PAAC	65550	Vehicle Overhaul Program	M3	EX
PAAC	71148	Bus Procurement	M10	EX
PAAC	77757	PAAC Capital Bond Debt Service	M1	EX
PAAC	84311	Operating Assistance	M1	EX
PAAC	90171	Transit Security Grant	NS	
PAAC	90349	Fixed Guideway Improvements	M9	EX
PAAC	95003	Fixed Facility Improvements	M8	EX
PAAC	95004	Fixed Guideway Bridge	M9	EX

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Projects Funded Through FAST-Act Title III Programs

PROJECT SPONSOR	MEMS NUMBER	PROJECT NAME	"EXEMPT" CODES	
PAAC	95005	IT / ITS Hardware/Software	M4	EX
PAAC	95006	Preventive Maintenance - Rail	M3	EX
PAAC	95007	Shop Equipment	M4	EX
PAAC	106644	Shared Ride	M1	EX
PAAC	110895	Pittsburgh BRT		
PAAC	114536	Fixed Guideway Tunnel Improvements	M9	EX
PAAC	116503	Electric Charging Stations	M6	EX
PAAC	118170	FTA Elderly and Handicapped Program	M1	EX
PAAC	118171	Light Rail Vehicle Procurement	M10	EX
PAAC	119324	Bus Network Study	X1	EX
PAAC	119325	Bus Stop Extension Pads	M7	EX
PAAC	119326	East-Cen. Pittsburgh Connection	X1	EX
PAAC	119327	Upper Mon Valley TOD	X1	EX
PAAC	119328	SR 837 Transit Improvements		
PAAC	119329	Homestead 8th Ave Transit-Ped Impr.		
SFC	71104	Capital Cost of Contracting - CommuteInfo	M1	EX
SFC	117531	Ride ACTA Shuttle	M1	EX
SFC	118151	Automatic Passenger Counters	M5	EX
SFC	118152	Computer Hardware	M4	EX
SFC	118153	Marketing Services	A1	EX
SFC	118154	Software Procurement	M4	EX
SFC	119317	Travel Demand Management	A1	EX
WASH	90068	Operating Assistance	M1	EX
WASH	102353	Maint. Facility Construction	M11	EX
WASH	102576	Operating Assistance State	M1	EX
WASH	106645	Heavy-Duty Bus Replacement	M10	EX
WASH	106646	Small Transit Buses	M10	EX
WASH	106650	Office Equipment Hardware	M4	EX
WASH	114751	Support Vehicles	M2	EX
WASH	118156	Bus Shelters	M7	EX
WASH	118157	Communications Systems	M4	EX
WASH	118172	Surveillance / Security Systems	M6	EX
WASH	118173	Fare Collection Equipment	M5	EX
WASH	118174	Multimodal Hub / Transfer Facility	R6	EX
WASH	118175	Operating Assistance - Shared Ride	M1	EX
WASH	118176	Park & Ride Lot - Feasibility Study	X1	EX
WCTA	65572	Operating Assistance - Rural	M1	EX
WCTA	102359	State Operating Assistance	M1	EX
WCTA	114540	Shared Ride Vehicles	M10	EX
WCTA	114541	Office Equipment	M4	EX
WCTA	114740	Transit Center Equipment	M4	EX
WCTA	118177	Fixed-Route Bus Replacement	M10	EX
WCTA	118178	Operating Assistance - Shared Ride	M1	EX
WCTA	118179	Preventive Maintenance	M3	EX

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

2023-2026 TIP
Projects Funded Through FAST-Act Title 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		
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		

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

APPENDIX B

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

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Armstrong	Graff Bridge Preservation	\$1,500,000	422	Mid-Term (2027-2034)	Preservation of the existing structure carrying US 422 over the Allegheny River in North Buffalo and Manor Townships, Armstrong County	Bridge Preservation	23978	Exempt	S19
10	Armstrong	1/112th Infantry Bridge and Graff Ramp Rehabilitation	\$18,000,000	66	Mid-Term (2027-2034)	Bridge rehabilitation of the existing structure carrying SR 66 and the Graff Bridge Ramp (SR 8008) over US 422, SR 2025 (Garretts Run Road), and Garretts Run in Manor Township, Armstrong County	Bridge Rehab/ Reconstruction	109622	Exempt	S19
10	Armstrong	Rayburn Township-North of Kittanning Bridge #2	\$5,000,000	1036	Mid-Term (2027-2034)	Replacement of the existing structure carrying SR 1036 over Cowanshannock Creek in Rayburn Township, Armstrong County.	Bridge Rehab/ Reconstruction	83239	Exempt	S19
10	Armstrong	SR 28 Hays Run 3R	\$36,100,000	28	Mid-Term (2027-2034)	Safety improvements including reconstruction, rehabilitation and resurfacing along PA 28 SR 1028 (Anderson Creek Road) to T-535 (McAuley Falls Road) in Rayburn and Boggs Townships.	Safety	91262	Exempt	S10
10	Armstrong	SR 422 Dunbar Dip	\$57,900,000	422	Mid-Term (2027-2034)	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 (Sivlis Hollow Road) to Township Road #590 (Simpson Church Road) in Kittanning Township, Armstrong County.	Safety	98689	Exempt	S10
10	Armstrong, Butler, Indiana	Bridge Non NHS Preservation Line Item	\$5,684,000	Various	Mid-Term (2027-2034)	Non NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
10	Armstrong, Butler, Indiana	Local/Off System Bridges	\$49,900,000	Various	Mid-Term (2027-2034)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
10	Armstrong, Butler, Indiana	Bridge Non NHS Reconstruction Line Item	\$3,408,000	Various	Mid-Term (2027-2034)	Non NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
10	Armstrong, Butler, Indiana	Roadway NHS Preservation Line Item	\$10,000,000	Various	Mid-Term (2027-2034)	NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
10	Armstrong, Butler, Indiana	Roadway Non-NHS Preservation Line Item	\$8,002,500	Various	Mid-Term (2027-2034)	Non-NHS Reconstruction Preservation	Roadway Preservation	TBD	Exempt	S10

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Armstrong, Butler, Indiana	Roadway NHS Reconstruction Line Item	\$6,800,000	Various	Mid-Term (2027-2034)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
10	Butler	PA 8 General Butler Bridge PM	\$6,000,000	8	Mid-Term (2027-2034)	Preservation of the existing structure carrying State Route 8 over Connoquenessing Creek, Quarry Street and railroads in Butler City, Butler County	Bridge Preservation	113652	Exempt	S19
10	Butler	Butler Latex Group Bridges	\$12,716,000	28	Mid-Term (2027-2034)	Preservation of various structures carrying various routes over various features in various municipalities in Butler County	Bridge Preservation	117377	Exempt	S19
10	Butler	PA 8 over Muddy Creek	\$4,000,000	8	Mid-Term (2027-2034)	Replacement of the existing structure carrying PA 8 over Muddy Creek in Clay Township, Butler County.	Bridge Rehab/ Reconstruction	24722	Exempt	S19
10	Butler	Karns Crossing Bridge	\$28,800,000	68	Mid-Term (2027-2034)	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	86105	Exempt	S19
10	Butler	SR 268, State Game Lands 95 Br	\$8,867,500	268	Mid-Term (2027-2034)	Bridge replacement of the existing structure carrying PA 268 over Bear Creek in Parker Township, Butler County.	Bridge Rehab/ Reconstruction	24409	Exempt	S19
10	Butler	US 422 Shawood Pipe	\$13,830,000	422	Mid-Term (2027-2034)	Replacement/repair of the existing culvert carrying a tributary to Muddy Creek beneath US Route 422 in Muddy Creek Township, Butler County.	Bridge Rehab/ Reconstruction	83611	Exempt	S19
10	Butler	US 422 over PA 356	\$11,591,500	422	Mid-Term (2027-2034)	Replacement of the existing structure carrying US 422 over PA 356 in Butler Township, Butler County.	Bridge Rehab/ Reconstruction	24663	Exempt	S19
10	Butler	PA 528 over Lake Arthur	\$8,500,000	528	Mid-Term (2027-2034)	Reconstruction of the existing structure carrying PA 528 over Lake Arthur in Franklin Township, Butler County.	Bridge Rehab/ Reconstruction	24241	Exempt	S19

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Butler	PA 528 over Big Run	\$2,012,000	528	Mid-Term (2027-2034)	Replacement of the existing structure carrying State Route 528 (Arbor Drive) over Big Run in Brady Township, Butler County.	Bridge Rehab/ Reconstruction	83323	Exempt	S19
10	Butler	356 Corridor Improvements	\$15,000,000	356	Mid-Term (2027-2034)	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	106486	Regionally Significant	
10	Butler	356 Park and Ride	\$1,900,000	356	Mid-Term (2027-2034)	Relocation and expansion of the existing park-and-ride facility at the intersection of PA 356 (South Pike Road) and SR 2017 (Silverville Road) in Buffalo Township, Butler County.	Efficiency & Operations	116127	Regionally Significant	
10	Butler	Mars RR Bridge West Expansion	\$71,600,000	228	Mid-Term (2027-2034)	Intersection improvements and widening of PA 228 to 4/5 lanes from SR 3019 (Pittsburgh Street) west to SR 3021 (Franklin Road) in Seven Fields Borough and Adams and Cranberry Townships, Butler County.	New Capacity	92908	Regionally Significant	
10	Butler	SR 8 Butler City to SR 308	\$7,258,000	8	Mid-Term (2027-2034)	Resurfacing to include, bituminous patching, minor drainage, milling, leveling, binder and wearing courses along SR 8 from the intersection of SR 68 north to the intersection of SR 308 in Butler and Center Townships, Butler County	Roadway Preservation	114789	Exempt	S10
10	Butler	US 422 County Line East PM	\$5,500,000	422	Mid-Term (2027-2034)	Roadway resurfacing to include milling of existing bituminous material, minor drainage, transverse and longitudinal joint repair and paving of bituminous leveling and wearing courses along US 422 from the Butler County Line East to near the bridge over Wallace Road, in Muddy Creek Township, Butler County	Roadway Preservation	115104	Exempt	S10
10	Butler	US 422 Prospect PM	\$5,000,000	422	Mid-Term (2027-2034)	Roadway resurfacing to include milling of existing bituminous material, minor drainage, transverse and longitudinal joint repair and paving of bituminous leveling and wearing courses along US 422 from the bridge over Wallace Road, east to the intersection of Greenwood Drive Franklin, Muddy Creek & Butler Townships, Butler County	Roadway Preservation	115108	Exempt	S10

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Butler	SR 228 Three Degree Rd Intersection	\$19,800,000	228	Mid-Term (2027-2034)	This safety improvement project includes adding through lanes along the length of the project, turn lanes at various intersections, side road improvements, the addition of service roads for access control, drainage and guide rail upgrades, signal replacement, signage, and pavement markings along PA 228 (Mars Crider Road) from 500 feet east of the intersection with SR 3015 (Mars Valencia Road) to 1.0 mile east of the intersection with SR 3007 (Three Degree Road) as well as sidewalks, ADA ramps, bicycle consideration and the addition of a roundabout on Three Degree Road in Adams Township, Butler County	Safety	91286	Regionally Significant	
10	Indiana	US 119 over Crooked Creek	\$13,000,000	119	Mid-Term (2027-2034)	Replacement of the existing structure carrying US 119 over Crooked Creek in Rayne Township, Indiana County.	Bridge Rehab/ Reconstruction	117248	Exempt	S19
10	Indiana	US 119 over SR 8001 Bridges	\$11,834,500	119	Mid-Term (2027-2034)	Replacement of the existing structures carrying US 119 northbound and southbound over SR 8001 in White Township, Indiana County	Bridge Rehab/ Reconstruction	25621	Exempt	S19
10	Indiana	SR 286 First Sergeant Alexander Kelly Memorial Bridge	\$18,536,500	286	Mid-Term (2027-2034)	Replacement of the existing structure carrying SR 286 over the Kiskiminetas River in Saltsburg Borough, Indiana County.	Bridge Rehab/ Reconstruction	117685	Exempt	S19
10	Indiana	Bridge to Nowhere EB PM & WB PM	\$28,000,000	422	Mid-Term (2027-2034)	Bridge rehabilitation of the existing structure carrying US 422 eastbound over SR 4422 (Ben Franklin Road), State Route 4005 (Indian Springs Road), State Route 3035 (Old US 119) and the Buffalo and Pittsburgh Railroad in White Township, Indiana County	Bridge Rehab/ Reconstruction	98811, 98827	Exempt	S19
10	Indiana	SR 22 Penn View PM	\$12,975,500	22	Mid-Term (2027-2034)	Preventative Maintenance project to include minor drainage, patching, guiderail upgrades and a Binder & Wearing overlay along SR 22 from Snyder Lane in Burrell Township to just east of Kettle Hollow Road in West Wheatfield Township, Indiana County.	Roadway Preservation	112424	Exempt	S10
10	Indiana	SR 22 Through Blairsville PM	\$10,164,000	22	Mid-Term (2027-2034)	Preventative maintenance along SR 22 from Blairsville/Westmoreland County Line east to Snyder Lane in Burrell Township, Indiana County.	Roadway Preservation	112423	Exempt	S10

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Indiana	US 422 County Line to Bypass	\$5,000,000	422	Mid-Term (2027-2034)	Resurfacing to include milling of existing 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	114605	Exempt	S10
10	Indiana	SR 22 Armagh Bypass Reconstruction	\$10,000,000	22	Mid-Term (2027-2034)	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	97102	Exempt	S10
10	Indiana	SR 286 Oakland Avenue Ped Safety	\$4,420,000	286	Mid-Term (2027-2034)	Pedestrian safety improvements from IUP (Maple Street) to Plaza Drive in White Township and Indiana Borough, Indiana County.	Safety	99709	Exempt	X12
11	Allegheny	West End Bridge	\$20,000,000	19	Mid-Term (2027-2034)	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	100956	Exempt	S19
11	Allegheny	North Shore Expressway Preservation	\$13,390,000	279	Mid-Term (2027-2034)	Bridge preservation on North of Ft. Duquesne Bridge over I-279 in the City of Pittsburgh, Allegheny County	Bridge Preservation	115515	Exempt	S19
11	Allegheny	Highland Park Bridge	\$36,050,000	1005	Mid-Term (2027-2034)	Bridge preservation on SR 1005 (Highland Park) over Allegheny River, Norfolk Southern Railway and AVR Railroad in Sharpsburg Borough, Allegheny County.	Bridge Preservation	109549	Exempt	S19
11	Allegheny	McKees Rocks Bridge Phase 3	\$90,000,000	3104	Mid-Term (2027-2034)	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	100701	Exempt	S19
11	Allegheny	Sewickley Bridge Preservation Phase 2	\$39,140,000	4025	Mid-Term (2027-2034)	Bridge rehabilitation on SR 4025, Sewickley Bridge over the Ohio River in Sewickley Boroughs, Allegheny County	Bridge Preservation	114106	Exempt	S19
11	Allegheny	Corliss Tunnel	\$17,510,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Tunnel reconstruction and preservation work on the structure that carries Corliss Street from the intersection of West Carson Street westward toward Crafton Heights in the City of Pittsburgh, Allegheny County	Bridge Preservation	27806	NS	
11	Allegheny	Mission St. (West)	\$8,984,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge preservation on Mission Street between Sterling Street and South 18th Street in the City of Pittsburgh, Allegheny County	Bridge Preservation	28279	Exempt	S19

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	10th Street Bridge Preservation	\$6,000,000	Local	Mid-Term (2027-2034)	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	118910	Exempt	S19
11	Allegheny	62nd Street Bridge	\$45,000,000	8	Mid-Term (2027-2034)	Bridge deck replacement on the 62nd Street Bridge in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	100958	Exempt	S19
11	Allegheny	SR 65 Fremont Street Bridge Preservation	\$23,000,000	65	Mid-Term (2027-2034)	Bridge rehabilitation on State Route 65, Ohio River Boulevard over Fremont Street in Bellevue, Allegheny County	Bridge Rehab/ Reconstruction	100935	Exempt	S19
11	Allegheny	Tarentum Bridge ov NS RR	\$80,000,000	366	Mid-Term (2027-2034)	Bridge restoration/replacement on PA 366, Tarentum Bridge over Norfolk Southern Rail and Allegheny River, in Tarentum Borough, Allegheny County	Bridge Rehab/ Reconstruction	100624	Exempt	S19
11	Allegheny	Tarentum Bridge Ramps A, B, C, D	\$17,500,000	366	Mid-Term (2027-2034)	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	63306	Exempt	S19
11	Allegheny	Electric Ave ov Falls Run	\$28,840,000	2112	Mid-Term (2027-2034)	Bridge restoration/replacement on SR 2112, Electric Avenue over Falls Run in East Pittsburgh and Turtle Creek Boroughs, Allegheny County.	Bridge Rehab/ Reconstruction	78232	Exempt	S19
11	Allegheny	McKeesport-Duquesne Southern Ramps Deck Replacement	\$48,000,000	2114	Mid-Term (2027-2034)	Bridge rehabilitation on the southern end of the McKeesport-Duquesne Bridge (SR 2114) in the City of McKeesport, Allegheny County.	Bridge Rehab/ Reconstruction	100955	Exempt	S19
11	Allegheny	40th Street Bridge	\$36,050,000	2124	Mid-Term (2027-2034)	40th Street Bridge Located on the 40th St. Br. over the Allegheny River in the City of Pittsburgh, Allegheny County. Preserve 2,364 foot bridge with full paint, repair cracks and section loss.	Bridge Rehab/ Reconstruction	69071	Exempt	S19
11	Allegheny	Homestead-Grays Bridge Rehabilitation	\$50,000,000	7301	Mid-Term (2027-2034)	(Sponsor = Allegheny County) Bridge rehabilitation on Homestead Grays Bridge over parking lot parallel to CSX Railroad in Homestead Borough, Allegheny County	Bridge Rehab/ Reconstruction	103366	Exempt	S19
11	Allegheny	Charles Anderson Bridge	\$48,000,000	7301	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge rehabilitation on Charles Anderson Bridge over Schenley Park, Bike Trail and CSX Railroad in the City of Pittsburgh, Allegheny County.	Bridge Rehab/ Reconstruction	91907	Exempt	S19

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	Swindell Bridge	\$30,000,000	7301	Mid-Term (2027-2034)	(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	114150	Exempt	S19
11	Allegheny	Talbot Avenue Ramp Bridge Rehabilitation	\$8,000,000	7456	Mid-Term (2027-2034)	(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	93915	Exempt	S19
11	Allegheny	Bld of Allies - Ramp H	\$20,600,000	8002	Mid-Term (2027-2034)	Deck replacement on Ramp H from Crosstown Blvd. (SR 0579) to Blvd. of the Allies, in the City of Pittsburgh, Allegheny County.	Bridge Rehab/ Reconstruction	109562	Exempt	S19
11	Allegheny	California Avenue Bridge	\$25,000,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge improvement on California Bridge that connects the Marshall-Shadland and Brighton Heights neighborhoods within the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	117889	Exempt	S19
11	Allegheny	Larimer Avenue Bridge	\$14,000,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge restoration/replacement on Larimer Avenue Bridge over Allegheny Valley Railroad in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	106386	Exempt	S19
11	Allegheny	Versailles Ave Bridge	\$10,000,000	Local	Mid-Term (2027-2034)	(Sponsor = McKeesport) Bridge replacement on Versailles Avenue over Ravine Street in the City of McKeesport, Allegheny County	Bridge Rehab/ Reconstruction	28044	Exempt	S19
11	Allegheny	Hot Metal Bridge	\$10,000,000	Local	Mid-Term (2027-2034)	(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	119367	Exempt	S19
11	Allegheny	Bloomfield Bridge	\$6,236,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge rehabilitation located between Liberty Avenue and Bigelow Boulevard in City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	119365	Exempt	S19
11	Allegheny	Mission St. (East)	\$5,443,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge rehabilitation on Mission Street between Sterling Street and South 18th Street in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	119364	Exempt	S19
11	Allegheny	McArdle Rdwy over Sycamore	\$5,000,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge rehabilitation on P.J. McArdle Roadway over East Sycamore Street in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	119375	Exempt	S19

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	McKeesport Bridge Ramps (10th Ward)	\$5,000,000	Local	Mid-Term (2027-2034)	(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	119603	Exempt	S19
11	Allegheny	Bridge over Route 51 Near Woodruff St.	\$5,000,000	Local	Mid-Term (2027-2034)	(Sponsor = Pittsburgh) Bridge removal over PA 51, Saw Mill Run Boulevard in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	117472	Exempt	S19
11	Allegheny	I-79 at PA 910	\$12,000,000	79	Mid-Term (2027-2034)	This project is on the CMAQ Program for congestion reduction at the I79/PA 910 interchange by widening and improving traffic flow at on/off ramps to interstate 79 in Marshall Township, Allegheny County	Efficiency & Operations	104328	Regionally Significant	
11	Allegheny	Pkwy East Active Traffic Management	\$30,000,000	376	Mid-Term (2027-2034)	The Parkway East Active Traffic Management System (PE ATMS) is an intelligent transportation system (ITS) improvement intended to improve traffic safety and operations on portions of I-376 in Allegheny County, Pennsylvania, Pennsylvania. The limits of the project are between the Grant Street interchange (MP 70.5) and the eastern terminus of I-376 at the Pennsylvania Turnpike and US 22 (MP 84.5).	Efficiency & Operations	94651	Regionally Significant	
11	Allegheny	Fifth Avenue Signal Improvement Project	\$9,000,000	Local	Mid-Term (2027-2034)	Signal improvements on Fifth Avenue in Oakland in the City of Pittsburgh, Allegheny County	Efficiency & Operations	119398	Regionally Significant	
11	Allegheny	PGH CBD Signals Phase 5 & 6	\$12,000,000	Various	Mid-Term (2027-2034)	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	119613	Regionally Significant	
11	Allegheny	US Route 22: Washington Line - Imperial	\$30,256,000	22	Mid-Term (2027-2034)	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	100768	Exempt	S10
11	Allegheny	US 22 - US 30 to McKee Rd	\$26,256,000	22	Mid-Term (2027-2034)	Crack and seal on US 22, from Imperial Interchange to McKee Road in North Fayette Township, Allegheny County	Roadway Preservation	100769	Exempt	S10
11	Allegheny	PA 28/East Ohio St	\$6,000,000	28	Mid-Term (2027-2034)	Patch and overlay on PA 28, from General Robinson Street to Heinz Wall in the City of Pittsburgh, Allegheny County	Roadway Preservation	100773	Exempt	S10

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	Lincoln Hwy: I-376 to Westinghouse Bridge	\$11,900,000	30	Mid-Term (2027-2034)	Mill and overlay on SR 30, Lincoln Highway, from I-376 to Westinghouse Bridge in North Braddock and East Pittsburgh Boroughs, Allegheny County	Roadway Preservation	88441	Exempt	S10
11	Allegheny	SR 48 Mossie Blvd - PA 130 to Haymaker	\$5,000,000	48	Mid-Term (2027-2034)	Resurfacing on Mossie Boulevard from PA 130 to Haymaker Road in Monroeville Borough, Allegheny County	Roadway Preservation	100782	Exempt	S10
11	Allegheny	PA 51 - Curry Hollow - SR 88	\$15,000,000	51	Mid-Term (2027-2034)	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	100793	Exempt	S10
11	Allegheny	PA 65 Emsworth to I-79	\$9,270,000	65	Mid-Term (2027-2034)	Patch and overlay on PA 65 (Ohio River Blvd) from Emsworth to I-79 in Killbuck Township and Emsworth and Glenfield Boroughs, Allegheny County	Roadway Preservation	109349	Exempt	S10
11	Allegheny	Bigelow Boulevard	\$14,020,000	400	Mid-Term (2027-2034)	Mill and overlay on SR 400 (Bigelow Blvd) from Segment 4 to Segment 20 in the City of Pittsburgh, Allegheny County	Roadway Preservation	109383	Exempt	S10
11	Allegheny	Streets Run Road	\$10,000,000	2046	Mid-Term (2027-2034)	Drainage investigation on SR 2046 (Streets Run Road) from Prospect Road to Baldwin Road in Baldwin and West Mifflin Boroughs, Allegheny County	Roadway Preservation	91796	Exempt	X1
11	Allegheny	PA 65: Fort Duquesne to Kendal	\$15,400,000	65	Mid-Term (2027-2034)	Milling and resurfacing on SR 65, Ohio River Boulevard in the City of Pittsburgh, Bellevue, Avalon, Ben Avon and Emsworth, Allegheny County	Roadway Preservation	79448	Exempt	S10
11	Allegheny	PA 65: Ohio River Blvd - River Ave	\$2,800,000	65	Mid-Term (2027-2034)	Resurfacing on PA 65, Ohio River Boulevard from River Avenue to Edgeworth Lane in Edgeworth and Sewickley Boroughs	Roadway Preservation	100797	Exempt	S10
11	Allegheny	PA 65: Ohio River Blvd - Ped Walkway	\$2,575,000	65	Mid-Term (2027-2034)	Resurfacing on PA 65, Ohio River Boulevard from the Pedestrian Walk Way to 200 feet past Eckert Street Bridge in City of Pittsburgh	Roadway Preservation	100798	Exempt	S10
11	Allegheny	PA 28 - Bull Ck to Butler	\$21,630,000	28	Mid-Term (2027-2034)	Reconstruction of PA 28 from Bull Creek to the Butler County Line in Harrison, Fawn Townships, and Tarentum Borough, Allegheny County	Roadway Reconstruction	100778	Exempt	S10

**SPC Long Range Transportation Plan
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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	PA 28 Allegheny Valley	\$10,300,000	28	Mid-Term (2027-2034)	Reconstruction of PA 28 from Regional Industrial Development Corporation (RIDC) to Yutes Run in Springdale, O'Hara, and Harmar Townships, Allegheny County	Roadway Reconstruction	100774	Exempt	S10
11	Allegheny	PA 50 - Wash County Line	\$17,600,000	50	Mid-Term (2027-2034)	Rehabilitation of existing concrete pavement on PA 50 from Washington County Line to Miller's Run Road in South Fayette Township	Roadway Reconstruction	100784	Exempt	S10
11	Allegheny	Saw Mill Run Blvd: PA 88 to US 19	\$19,800,000	51	Mid-Term (2027-2034)	Reconstruction of Saw Mill Run Boulevard from PA 88 (Library Rd) to I-376 in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	100789	Exempt	S10
11	Allegheny	Tenth Street Bypass	\$8,000,000	2128	Mid-Term (2027-2034)	Highway reconstruction located on SR 2128, from Fort Duquesne Bridge/South End Interchange to Fort Duquesne Boulevard near David L. Lawrence Convention Center in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	119607	Exempt	S10
11	Allegheny	PA 28 - Highland Pk to RIDC	\$13,390,000	28	Mid-Term (2027-2034)	Reconstruction of PA 28 from Highland Park to Regional Industrial Development Corporation (RIDC) Park in O'Hara Township, Fox Chapel, Aspinwall, and Sharpsburg Borough, and the City of Pittsburgh, Allegheny County	Roadway Reconstruction	100776	Exempt	S10
11	Allegheny	PA 65, Ohio River Blvd - Terrace Av	\$3,850,000	65	Mid-Term (2027-2034)	Concrete pavement reconstruction on Ohio River Boulevard from Terrace Avenue to River Avenue in Kilbuck Township and Emsworth and Glenfield Boroughs, Allegheny County	Roadway Reconstruction	100796	Exempt	S10
11	Allegheny	Neville Road	\$6,180,000	Local	Mid-Term (2027-2034)	(Sponsor = Allegheny County) Highway restoration on Neville Road from Grand Avenue to the Fleming Park Bridge in Neville Township, Allegheny County	Roadway Reconstruction	106269	Exempt	S10
11	Allegheny	Beck's Run Road	\$3,000,000	Local	Mid-Term (2027-2034)	(Sponsor = Allegheny County) Highway reconstruction on Beck's Run Road between East Carson Street and Brownsville Road in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	27491	Exempt	S10
11	Allegheny	I-376/Banksville Interchange	\$60,000,000	376	Mid-Term (2027-2034)	Interchange improvement on I-376 from the Parkway Center Interchange (SR 8091) to the Fort Pitt Tunnel in the City of Pittsburgh, Allegheny County. Includes US 19 (Banksville Road), PA 51 ramps and Banksville Interchange ramps (SR 8075).	Safety	97028	Regionally Significant	
11	Allegheny	SR 885 (Bates Street) Improvement (Pending Study)	\$25,750,000	885	Mid-Term (2027-2034)	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	98125	Exempt	X1

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	PA 50: I-79 to Thoms Run	\$14,008,000	50	Mid-Term (2027-2034)	Roadway widening for additional lanes and intersection improvement of PA 50/I-79, from Mayer Street to Great Southern Shopping Center and from I-79 to Thoms Run Road in Collier Township, Allegheny County.	Safety	109640	Regionally Significant	
11	Allegheny, Beaver, Lawrence	Bridge NHS Preservation Line Item	\$43,094,000	Various	Mid-Term (2027-2034)	NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
11	Allegheny, Beaver, Lawrence	Bridge Non-NHS Preservation Line Item	\$16,922,000	Various	Mid-Term (2027-2034)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
11	Allegheny, Beaver, Lawrence	Local/Off System Bridges	\$49,573,000	Various	Mid-Term (2027-2034)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
11	Allegheny, Beaver, Lawrence	Efficiency & Operations NHS Line Item	\$4,162,000	Various	Mid-Term (2027-2034)	NHS Efficiency & Operations Reserve	Efficiency & Operations	TBD	Exempt	X1
11	Allegheny, Beaver, Lawrence	Roadway Non-NHS Preservation Line Item	\$22,800,000	Various	Mid-Term (2027-2034)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
11	Allegheny, Beaver, Lawrence	Roadway NHS Reconstruction Line Item	\$52,509,000	Various	Mid-Term (2027-2034)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
11	Allegheny, Beaver, Lawrence	Local, County, and State Slide Remediation & Reconstruction	\$40,000,000	Various	Mid-Term (2027-2034)	Funds anticipated for slide remediation and road reconstruction in Allegheny, Beaver, Lawrence Counties	Roadway Reconstruction	TBD	Exempt	S2
11	Allegheny, Beaver, Lawrence	Roadway Non-NHS Reconstruction Line Item	\$15,000,000	Various	Mid-Term (2027-2034)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
11	Allegheny, Beaver, Lawrence	District 11 Roundabout(s) TBD	\$10,000,000	Various	Mid-Term (2027-2034)	This project is for potential roundabout(s) locations within District 11.	Safety	TBD	Exempt	X1

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Beaver	SR 68 Glasgow Bridge	\$3,300,000	68	Mid-Term (2027-2034)	Bridge preservation on SR 68 over Little Beaver River in Glasgow Boro, Beaver County	Bridge Preservation	117006	Exempt	S19
11	Beaver	SR 4042, Old Rochester-Bridgewater Rd	\$5,768,000	4042	Mid-Term (2027-2034)	Bridge preservation on SR 4042, Old Rochester-Bridgewater Rd over Beaver River and Norfolk Southern Railroad in Rochester and Bridgewater Boroughs, Beaver County	Bridge Preservation	28918	Exempt	S19
11	Beaver	SR 18 Tornado Bridge	\$6,000,000	18	Mid-Term (2027-2034)	Bridge replacement on SR 18, Big Beaver Boulevard over Service Road and Wallace Run in City of Beaver Falls, Beaver County	Bridge Rehab/ Reconstruction	113669	Exempt	S19
11	Beaver	SR 1005 Chapel Drive over Brush Creek	\$5,700,000	1005	Mid-Term (2027-2034)	Bridge replacement on SR 1005, Chapel Drive over Brush Creek, in North Sewickley Township, Beaver County	Bridge Rehab/ Reconstruction	78326	Exempt	S19
11	Beaver	Ambridge-Alliquippa Bridge	\$30,900,000	3052	Mid-Term (2027-2034)	Bridge replacement on SR 3052 over the Ohio River in Ambridge and Alliquippa Boroughs, Beaver County	Bridge Rehab/ Reconstruction	117987	Exempt	S19
11	Beaver	SR 18, Big Beaver Boulevard	\$9,000,000	18	Mid-Term (2027-2034)	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	116315	Exempt	S10
11	Beaver	SR 51, Constitution Boulevard - Mill and Overlay	\$5,500,000	51	Mid-Term (2027-2034)	Mill and overlay on SR 51, Constitution Boulevard, between Beaver Rochester Road to Brady's Run Creek in Fallston Borough, Beaver County	Roadway Preservation	115203	Exempt	S10
11	Beaver	Midland Beaver Road	\$14,600,000	68	Mid-Term (2027-2034)	Mill and overlay on SR 68, Midland Beaver Road from Segment 10 to Segment 210 in Center and Chippewa Townships, Beaver County	Roadway Preservation	109356	Exempt	S10
11	Beaver	SR 351/Fairlane Blvd	\$7,000,000	351	Mid-Term (2027-2034)	Mill/overlay and realignment located on SR 351 (Fairlane Boulevard) in Big Beaver Borough, Beaver County	Roadway Preservation	102628	Exempt	S10
11	Beaver	PA 51/McKinley-Ohio State Line	\$18,700,000	51	Mid-Term (2027-2034)	Reconstruction of Constitution Boulevard from McKinley Road to the Ohio State Line in Chippewa Township, Beaver County	Roadway Reconstruction	101232	Exempt	S10

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Beaver	SR 51, Constitution Boulevard - CPR	\$5,665,000	51	Mid-Term (2027-2034)	Concrete pavement reconstruction located on SR 51 (Constitution Boulevard) in the City of Aliquippa, Beaver County	Roadway Reconstruction	116587	Exempt	S10
11	Lawrence	Rose Point Bridge	\$4,400,000	T-741	Mid-Term (2027-2034)	Bridge replacement or restoration on Old Route 422 (T-741) over Slippery Rock Creek in Slippery Rock Township, Lawrence County	Bridge Rehab/ Reconstruction	29402	NA	
11	Lawrence	PA 18 Resurfacing	\$6,300,000	18	Mid-Term (2027-2034)	Resurface on PA 18 from the Beaver County Line to the Mahoning River in the City of New Castle, Neshannock and North Beaver Townships, and Wampum and New Beaver Boroughs, Lawrence County	Roadway Preservation	100916	NA	
11	Lawrence	PA 18, Wilmington Road	\$5,500,000	18	Mid-Term (2027-2034)	Mill and overlay on SR 18, Wilmington Road in Wilmington and Neshannock Townships, Lawrence County	Roadway Preservation	100917	NA	
11	Lawrence	SR 19, Perry Highway	\$8,000,000	19	Mid-Term (2027-2034)	Mill and overlay on SR 19, Perry Highway, from Segment 90 to Segment 200 in Scott Township, Lawrence County	Roadway Preservation	109389	NA	
11	Lawrence	PA 19: Perry Highway	\$4,393,000	19	Mid-Term (2027-2034)	Mill and overlay on SR 19, Perry Highway, from Segment 10 to Segment 80 in Shenango and Slippery Rock Townships, Lawrence County	Roadway Preservation	109386	NA	
11	Lawrence	SR 422, Benjamin Franklin Hwy	\$10,506,000	422	Mid-Term (2027-2034)	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	116560	NA	
11	Lawrence	SR 956 Mercer Rd - New Wilim Twp Line - Safety Improvements	\$6,180,000	956	Mid-Term (2027-2034)	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	20192018	NA	
12	Fayette	Layton Bridge	\$26,780,000	4038	Mid-Term (2027-2034)	This project is for the improvement of the Layton Bridge (State Route 4038, Layton Street) over the Youghiogheny River and Great Allegheny Passage Trail in Perry Township, Fayette County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	81192	Exempt	S19
12	Fayette	SR 819 over Yough River - Bearing Replacement	\$1,500,000	819	Mid-Term (2027-2034)	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	116917	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Fayette	US 119 Uniontown Bypass	\$5,100,000	119	Mid-Term (2027-2034)	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	119629	Exempt	S10
12	Fayette	PA 21 Corridor - S&T Drive to PA 166	\$20,000,000	21	Mid-Term (2027-2034)	This project is for safety improvements along the PA 21 (McClellandtown Road) Corridor from S&T Drive to PA 166 (Edeborn Road) in German Township, Fayette County.	Safety	119636	Exempt	S6
12	Fayette	SR 119 McClure/Kingview Road Interchange	\$22,455,000	119	Mid-Term (2027-2034)	This project is for intersection improvements on US 119 at McClure Road and Kingview Road in Upper Tyrone and Bullskin Townships, Fayette County. The project will eliminate two signalized intersections on US Route 119 with Kingview Road and McClure Road, and a new full access interchange would be constructed in between the two existing intersections. A new bridge carrying a new connector road would be constructed.	Safety	96661	Regionally Significant	
12	Fayette	Fayette County Concrete Patching Line Item	\$5,000,000	Various	Mid-Term (2027-2034)	Fayette County Concrete Patching Reserve	Roadway Preservation	119655	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	D12 Bridge Preservation Design	\$50,000,000	Various	Mid-Term (2027-2034)	District Wide Bridge Preservation Design Reserve	Bridge Preservation	81229	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Municipal Bridge Preservation Program	\$15,000,000	Various	Mid-Term (2027-2034)	District Wide Municipal Bridge Preservation Reserve	Bridge Preservation	119654	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Preservation Line Item	\$8,000,000	Various	Mid-Term (2027-2034)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Local/Off System Bridges	\$70,300,000	Various	Mid-Term (2027-2034)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/Reconstruction	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Reconstruction Line Item	\$35,840,000	Various	Mid-Term (2027-2034)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/Reconstruction	TBD	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Fayette, Greene, Washington, Westmoreland	Bridge NHS Reconstruction Line Item	\$4,190,000	Various	Mid-Term (2027-2034)	NHS Bridge Reconstruction Line Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Preservation Line Item	\$72,500,000	Various	Mid-Term (2027-2034)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	Roadway NHS Preservation Line Item	\$18,800,000	Various	Mid-Term (2027-2034)	NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	Slide Remediation & Reconstruction	\$45,000,000	Various	Mid-Term (2027-2034)	District Wide Slide Reserve Contract for FFY 2027-2034	Roadway Reconstruction	117586	Exempt	S2
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Reconstruction Line Item	\$42,000,000	Various	Mid-Term (2027-2034)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	Roadway NHS Reconstruction Line Item	\$23,390,000	Various	Mid-Term (2027-2034)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	District 12 Roundabout(s) TBD	\$10,000,000	Various	Mid-Term (2027-2034)	This project is for potential roundabout(s) locations within District 12.	Safety	119631	Exempt	X1
12	Fayette/ Westmoreland	SR 119 Bridge Rehabs	\$15,000,000	119	Mid-Term (2027-2034)	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	119610	Exempt	S19
12	Greene	PA 218 ov Br Smith Ck	\$1,000,000	218	Mid-Term (2027-2034)	This project is the rehabilitation/replacement of the structure carrying PA 218 (Smith Creek Road) over a branch of Smith Creek in Franklin Township, Greene County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	81849	Exempt	S19
12	Greene	SR 3011 over Hargus Creek	\$2,200,000	3011	Mid-Term (2027-2034)	This project is for the rehabilitation of the structure carrying State Route 3011 (Hargus Creek Road) over Hargus Creek in Center Township, Greene County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	74220	Exempt	S19

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12	Greene	SR 21 Operations and Capacity Feasibility Study GRCO	\$2,500,000	21	Mid-Term (2027-2034)	This project is for a corridor operation and capacity feasibility study is along State Route 21 (Roy E Furman Highway) in Greene County.	Efficiency & Operations	119633	Exempt	X1
12	Greene	Greene County Concrete Patching Line Item	\$5,000,000	Various	Mid-Term (2027-2034)	Greene County Concrete Patching Reserve	Roadway Preservation	119656	Exempt	S10
12	Greene	PA 19/221 Ruff Creek Int	\$5,200,000	19	Mid-Term (2027-2034)	This project is the study to determine if improvements need made to the PA 19 (Washington Road) and PA 221 (Dunn Station Road/Lippencott Road) intersection in Washington Township, Greene County.	Safety	105358	Exempt	X1
12	Greene	SR 21/SR 1006 Ceylon Road Intersection Improvement	\$7,000,000	21	Mid-Term (2027-2034)	This project is for safety improvements at the intersection of State Route 21 (Roy E Furman Highway) and State Route 1006 (Ceylon Road) in Cumberland Township, Greene County.	Safety	119632	Exempt	R2
12	Washington	B'ville High Level Brdg	\$25,000,000	40	Mid-Term (2027-2034)	This project is for the preservation of the structure carrying US 40 over the Monongahela River, PA 88 (Blainsburg Hill Road), State Route 4003 (Brownsville Road), State Route 4036 (Market Street) and 2 railroads in West Brownsville Borough, Fayette County and Brownsville Borough, Washington County	Bridge Preservation	98847	Exempt	S19
12	Washington	Donora-Monessen Bridge Preservation	\$3,100,000	1077	Mid-Term (2027-2034)	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	116850	Exempt	S19
12	Washington	PA 18 over Chartiers Ck-1	\$4,000,000	18	Mid-Term (2027-2034)	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	79365	Exempt	S19
12	Washington	PA 88 ov Br Peter Crk	\$2,500,000	88	Mid-Term (2027-2034)	This project is for the replacement/rehabilitation of the structure carrying PA 88 over Peters Creek in Finleyville Borough, Washington County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	116204	Exempt	S19
12	Washington	Old B'ville Bridge Rehab	\$7,000,000	2067	Mid-Term (2027-2034)	This project is the rehabilitation of the Old Brownsville Bridge (SR 2067 over NS R/R, Mon, City St) in West Brownsville Borough, Washington County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	91135	Exempt	S19

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12	Washington	Washington Road US 19/Weavertown Rd	\$1,100,000	19	Mid-Term (2027-2034)	This project is for roadway improvements at US 19 (Washington Road) and SR 1025 (Weavertown Road) in North Strabane, Washington County.	Efficiency & Operations	119628	Exempt	X1
12	Washington	SR 3005/US 40 Interchange	\$10,000,000	40	Mid-Term (2027-2034)	This project is for roadway/intersection improvements at State Route 3005 (Liberty Road) and US 40 interchange in Donegal Township, Washington County.	Efficiency & Operations	119635	Exempt	X1
12	Washington	Weavertown Rd SR 1025/I-79 NB Exit Ramp/Hook St	\$500,000	1025	Mid-Term (2027-2034)	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	119627	Exempt	R1
12	Washington	I-70 Interstate Detour Improvement Plan Implementation	\$8,240,000	Various	Mid-Term (2027-2034)	This project is various pavement and intersection improvements to the ancillary State Routes that are used as detour routes for Interstate 70 in various municipalities in Washington County	Efficiency & Operations	119641	Regionally Significant	
12	Washington	I-79 Interstate Detour Improvement Plan Implementation	\$8,240,000	Various	Mid-Term (2027-2034)	This project is various pavement and intersection improvements to the ancillary State Routes that are used as detour routes for Interstate 79 in various municipalities in Washington County	Efficiency & Operations	119639	Regionally Significant	
12	Washington	SR 1055: I-70 to Dual Lane Roundabout	\$3,100,000	1055	Mid-Term (2027-2034)	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	119634	Exempt	S10
12	Washington	Washington County Concrete Patching Line Item	\$5,000,000	Various	Mid-Term (2027-2034)	Washington County Concrete Patching Reserve	Roadway Preservation	119658	Exempt	S10
12	Washington	PA 136 Reconstruction & Realignment	\$10,000,000	136	Mid-Term (2027-2034)	This project is for the reconstruction and realignment of PA 136 (Dry Run Road) in Carroll Township, Washington County.	Roadway Reconstruction	119630	Exempt	S10
12	Westmoreland	US 30 over SR 3077 Preservation	\$8,240,000	30	Mid-Term (2027-2034)	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	119608	Exempt	S19
12	Westmoreland	SR 56, Vandergrift Bridge	\$6,000,000	56	Mid-Term (2027-2034)	This project is for preservation activities of the Vandergrift Bridge carrying PA 56 over PA 2054, Railroad, and Kiskiminetas River in East Vandergrift Borough, Westmoreland County. *No new capacity will be added*	Bridge Preservation	112391	Exempt	S19

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12	Westmoreland	SR 4093, W Leechburg Bridge (Full Paint/Deck/Barrier)	\$5,000,000	4093	Mid-Term (2027-2034)	This project is for preservation activities of the West Leechburg Bridge carrying PA 4093 over the railroad and Kiskiminetas River in West Leechburg Borough, Westmoreland County. *No new capacity will be added*	Bridge Preservation	112395	Exempt	S19
12	Westmoreland	West Newton Bridge	\$7,000,000	136	Mid-Term (2027-2034)	This project is the replacement of the structure carrying PA 136 (Main Street) over Youghiogheny River in West Newton Borough, Westmoreland County. *No new capacity will be added*	Bridge Rehab/ Reconstruction	98869	Exempt	S19
12	Westmoreland	PA 366 over PA 400/380	\$17,510,000	366	Mid-Term (2027-2034)	Improvements to the structure carrying PA 366 over PA 400 and PA 380 in Murrysville Borough, Westmoreland County	Bridge Rehab/ Reconstruction	88617	Exempt	S19
12	Westmoreland	Salina Bridge	\$13,390,000	1060	Mid-Term (2027-2034)	The State Route 1060 (Bridge Street)/Salina Bridge over the Kiskiminetas River and Norfolk Southern Railroad connects Bell Township, Westmoreland County with Kiskiminetas Township, Armstrong County. The project proposes to replace the Salina Bridge on a new alignment located immediately downstream from the existing bridge. The proposed bridge is anticipated to be a 3-span continuous composite steel plate girder bridge. The project will also address the existing deteriorated retaining wall parallel with SR 1060 approaching the bridge from the south. The approach roadway will be widened to provide 11' travel lanes and 5' shoulders. The intersections at each end of the bridge will be modified to improve maneuverability. Drainage will be upgraded as well as the guiderail, signs, and pavement markings. *No new capacity will be added*	Bridge Rehab/ Reconstruction	81747	Exempt	S19
12	Westmoreland	North Greengate Road SR 4002 RR Tunnel	\$15,500,000	4002	Mid-Term (2027-2034)	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	119609	Exempt	R4
12	Westmoreland	SR 4073 over PA 56	\$5,150,000	4073	Mid-Term (2027-2034)	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	83686	Exempt	S19
12	Westmoreland	PA 130 Corridor Review & Improvements	\$10,000,000	130	Mid-Term (2027-2034)	This project is for roadway improvements along the PA 130 corridor in Westmoreland County.	Efficiency & Operations	119638	Exempt	X1

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Westmoreland	LVTIP: Norvelt to Pleasant Unity	\$36,565,000	981	Mid-Term (2027-2034)	This project is for corridor improvements to PA 981 from the village of Norvelt to the village of Pleasant Unity in Mt Pleasant Township, Westmoreland County. SR 981, Section V20 is approximately 3.5 miles and begins north of the SR 981 and SR 2021 (Kecksburg Road)/Mt. Pleasant Road intersection (Norvelt intersection) in Mount Pleasant Township. From just north of the Norvelt intersection, the project area extends generally along SR 2023 to the intersection with SR 130 in Unity Township. Section V20 primarily follows existing SR 2023 with some offline shifts to improve the roadway.	Efficiency & Operations	108010	Exempt	R4
12	Westmoreland	LVTIP: Pleasant Unity to Airport	\$30,000,000	981	Mid-Term (2027-2034)	The LVTIP (Laurel Valley Transportation Improvement Project) project will upgrade 1.2 miles of the PA 981 corridor from the intersection with PA 819 in Mount Pleasant Township to the Westmoreland County Airport in Unity Township. The LVTIP will be constructed in three separate sections. Section Y10 is the northern most and will tie into the recently completed 981-V10 project near the airport. SR 981-Y10 is approximately 2.5 miles in length and begins just south of the intersection of Bingham Road and the SR 2023 (Hill Churches Road) intersection in Mt. Pleasant Township. SR 981- Y10 then primarily follows existing SR 2023 northward to near the intersection with Green Street. At this point, the alignment proceeds in a northward direction to the Westmoreland Airport. It then extends through the Airport along the southern portion of Bay Hill Drive then intersects with existing SR 981 just south of the Arnold Palmer Airport. Corridor improvements would include on-line upgrades as well as segments of new alignment where upgrades are not feasible due to physical/environmental constraints	Efficiency & Operations	108140	Exempt	R4
12	Westmoreland	US 119 West Tec Drive	\$4,500,000	119	Mid-Term (2027-2034)	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	119625	Exempt	S10
12	Westmoreland	Westmoreland County Concrete Patching Line Item	\$5,000,000	Various	Mid-Term (2027-2034)	Westmoreland County Concrete Patching Reserve	Roadway Preservation	119659	Exempt	S10

**SPC Long Range Transportation Plan
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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Westmoreland	SR 66: US 22 to County Line	\$21,630,000	66	Mid-Term (2027-2034)	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	119637	Exempt	S10
12	Westmoreland	SR 4032 Reconstruction: 7th Street to Turkey Ridge Road	\$5,000,000	4032	Mid-Term (2027-2034)	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	119640	Exempt	S10
12	Westmoreland	US 30 Corridor Impvmts - Western Section	\$22,380,000	30	Mid-Term (2027-2034)	This project is for safety improvements to the western section of the US 30 Corridor Safety Improvement Study Area from the intersection of US 30/PA 48 to Malts Lane in Allegheny and Westmoreland Counties.	Safety	110900	Regionally Significant	
10	Armstrong	SR 422 Worthington No. 1	\$8,555,000	422	Long-Term (2035-2050)	Bridge preservation of the existing structure carrying US 422 over Buffalo Creek in Worthington Borough, Armstrong County	Bridge Preservation	202326003	Exempt	S19
10	Armstrong	SR 28 Buffalo Creek Bridges Rehabilitation	\$38,000,000	28	Long-Term (2035-2050)	Rehabilitation of the Northbound and Southbound bridges carrying PA 28 over Buffalo Creek in Buffalo Township at the Butler County Line	Bridge Rehab/ Reconstruction	202326244	Exempt	S19
10	Armstrong	SR 422 Graff Bridge Rehabilitation	\$50,000,000	422	Long-Term (2035-2050)	Bridge rehabilitation of the existing structure carrying US 422 over the Allegheny River in Franklin Township, Armstrong County	Bridge Rehab/ Reconstruction	202326243	Exempt	S19
10	Armstrong	PA 839 Mahoning Cr.	\$6,728,000	839	Long-Term (2035-2050)	Replacement of the existing structure carrying PA 839 over Mahoning Creek in Wayne Township.	Bridge Rehab/ Reconstruction	99129	Exempt	S19
10	Armstrong	Citizens Bridge over Allegheny	\$14,000,000	1038	Long-Term (2035-2050)	Bridge rehabilitation of the existing structure carrying SR 1038 over the Allegheny River in Kittanning Borough, Armstrong County	Bridge Rehab/ Reconstruction	202326245	Exempt	S19
10	Armstrong	SR 28 & SR 1035 (Oscar Rd) Vertical Improvement	\$17,100,000	28	Long-Term (2035-2050)	Roadway realignment and the intersection improvements at PA 28 and SR 1035 (Oscar Road) in Boggs Township, Armstrong County	Efficiency & Operations	202326323	Exempt	R4
10	Armstrong	SR 28 & Sloan Hill Rd & Mechling Rd.- Intersection Improvement	\$1,300,000	28	Long-Term (2035-2050)	Intersection improvements along PA 28 at the intersections of Sloan Hill Road and Mechling Road in Rayburn Township, Armstrong County	Efficiency & Operations	202326322	Exempt	X1

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10	Armstrong	US 422 & Dutch Ridge Rd Intersection	\$18,500,000	422	Long-Term (2035-2050)	Intersection improvements including addition of turning lanes at Dutch Ridge Road & US 422 in Elderton Borough, Armstrong County	Efficiency & Operations	990037	Exempt	R1
10	Armstrong	PA 28 Resurfacing	\$6,600,000	28	Long-Term (2035-2050)	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	99933	Exempt	S10
10	Armstrong	SR 422 Kittanning Bypass PM	\$19,700,000	422	Long-Term (2035-2050)	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	112432	Exempt	S10
10	Armstrong	US 422 Kittanning East PM	\$12,262,000	422	Long-Term (2035-2050)	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	115094	Exempt	S10
10	Armstrong	PA 28 Slabtown South	\$19,000,000	28	Long-Term (2035-2050)	Highway reconstruction along PA 28 between SR 1035 and T 821 (Heffelfinger Road) in Boggs Township.	Roadway Reconstruction	101134	Exempt	S10
10	Armstrong	SR 28 Corridor Improvements - Kittanning to Clarion County Line	\$11,600,000	28	Long-Term (2035-2050)	Corridor and safety improvements including roadway reconstruction, intersection improvements, and roadway realignments to improve traffic and freight movement operations through the corridor	Safety	990038	Exempt	S6
10	Armstrong, Butler, Indiana	Bridge NHS Preservation Line Item	\$58,513,000	Various	Long-Term (2035-2050)	NHS Bridge Preserservation Reserve	Bridge Preservation	TBD	Exempt	S19
10	Armstrong, Butler, Indiana	Bridge Non-NHS Preservation Line Item	\$57,633,000	Various	Long-Term (2035-2050)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
10	Armstrong, Butler, Indiana	Local/Off System Bridges	\$112,100,000	Various	Long-Term (2035-2050)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Armstrong, Butler, Indiana	Bridge NHS Reconstruction Line Item	\$56,227,000	Various	Long-Term (2035-2050)	NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
10	Armstrong, Butler, Indiana	Bridge Non-NHS Reconstruction Line Item	\$29,262,000	Various	Long-Term (2035-2050)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
10	Armstrong, Butler, Indiana	Efficiency & Operations NHS Line Item	\$44,668,000	Various	Long-Term (2035-2050)	NHS Efficiency & Operations Reserve	Efficiency & Operations	TBD	Exempt	X1
10	Armstrong, Butler, Indiana	Roadway NHS Preservation Line Item	\$29,606,000	Various	Long-Term (2035-2050)	NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
10	Armstrong, Butler, Indiana	Roadway Non-NHS Preservation Line Item	\$20,800,000	Various	Long-Term (2035-2050)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
10	Armstrong, Butler, Indiana	Roadway Non-NHS Reconstruction Line Item	\$29,100,000	Various	Long-Term (2035-2050)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
10	Armstrong, Butler, Indiana	Roadway NHS Reconstruction Line Item	\$19,637,500	Various	Long-Term (2035-2050)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
10	Armstrong, Butler, Indiana	Safety Line Item	\$17,100,000	Various	Long-Term (2035-2050)	Safety Reserve	Safety	TBD	Exempt	S6
10	Armstrong/ Butler	SR 28 AVE Reconstruction	\$95,000,000	28	Long-Term (2035-2050)	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	112427	Exempt	S10
10	Butler	SR 3001 Picklegate Crossing	\$9,267,000	3001	Long-Term (2035-2050)	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	202326251	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Butler	SR 422 Moraine EB & WB Bridges	\$20,000,000	422	Long-Term (2035-2050)	Bridge rehabilitation of the Eastbound and Westbound structures over Lake Arthur in Muddy Creek Township, Butler County	Bridge Rehab/ Reconstruction	202326253	Exempt	S19
10	Butler	SR 422 over SR 4005 Bridge	\$17,109,000	422	Long-Term (2035-2050)	Bridge replacement of the existing structure carrying US 422 over SR 4005 (Pleasant Valley Road) in Muddy Creek Township, Butler County	Bridge Rehab/ Reconstruction	202326252	Exempt	S19
10	Butler	PA 528 over Lake Arthur	\$20,000,000	528	Long-Term (2035-2050)	Reconstruction of the existing structure carrying PA 528 over Lake Arthur in Franklin Township, Butler County.	Bridge Rehab/ Reconstruction	24241	Exempt	S19
10	Butler	US 422 & Greenwood Drive Intersection	\$5,000,000	422	Long-Term (2035-2050)	Intersection improvements to include congestion reduction at the US 422 and Greenwood Drive intersection in Butler Township, Butler County	Efficiency & Operations	202326241	Exempt	X1
10	Butler	Mars RR Bridge West Expansion	\$28,433,000	228	Long-Term (2035-2050)	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	92908	Regionally Significant	
10	Butler	SR 19 Cranberry PM	\$26,020,000	19	Long-Term (2035-2050)	Preventative maintenance along SR 19 from the Allegheny/Butler County line north to Zellenople in Cranberry and Jackson Townships, Butler County.	Roadway Preservation	112422	Exempt	S10
10	Butler	SR 422 Butler Bypass PM	\$29,941,000	422	Long-Term (2035-2050)	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	112434	Exempt	S10
10	Butler	US 422 Bonnie Brook East PM	\$7,129,000	422	Long-Term (2035-2050)	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	115109	Exempt	S10
10	Indiana	SR 56 Buena Vista Bridge Pres.	\$8,781,000	56	Long-Term (2035-2050)	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	98805	Exempt	S19
10	Indiana	US 119 Hamil Northbound Bridge	\$6,416,000	119	Long-Term (2035-2050)	Preservation (preventative maintenance) of the existing structure carrying US 119 northbound over PA 286 in White Township.	Bridge Preservation	95727	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
10	Indiana	US 119 Hamill Southbound Bridge	\$6,416,000	119	Long-Term (2035-2050)	Preservation (preventative maintenance) of the existing structure carrying US 119 Southbound over PA 286 in White Township.	Bridge Preservation	95728	Exempt	S19
10	Indiana	US 119 Sullivan SB Bridge	\$6,416,000	119	Long-Term (2035-2050)	Reconstruction of the existing structure carrying US 119 southbound over SR 954 in White Township, Indiana County.	Bridge Rehab/ Reconstruction	25616	Exempt	S19
10	Indiana	US 119 Sullivan NB Bridge	\$6,416,000	119	Long-Term (2035-2050)	Reconstruction of the existing structure carrying US 119 northbound over SR 954 in White Township, Indiana County.	Bridge Rehab/ Reconstruction	112537	Exempt	S19
10	Indiana	US 119 Lutz School Rd NB Bridge	\$6,416,000	119	Long-Term (2035-2050)	Reconstruction of the existing structure carrying US 119 northbound over SR 1003 (Lutz School Road) in White Township, Indiana County.	Bridge Rehab/ Reconstruction	112632	Exempt	S19
10	Indiana	US 119 Lutz School Rd SB Bridge	\$6,416,000	119	Long-Term (2035-2050)	Reconstruction of the existing structure carrying US 119 southbound over SR 1003 (Lutz School Road) in White Township, Indiana County.	Bridge Rehab/ Reconstruction	112661	Exempt	S19
10	Indiana	Rossmoyne Bridges 1, 2, and 3 (SR 210)	\$7,129,000	210	Long-Term (2035-2050)	Bridge reconstruction on SR 210 over a Tributary to Ross Run South Mahoning Township Bridge Replacement	Bridge Rehab/ Reconstruction	202326009	Exempt	S19
10	Indiana	SR 403 Bridges - Dixonville	\$2,500,000	403	Long-Term (2035-2050)	Bridge replacement of a group of three bridges along SR 403 in Green Township, Indiana County	Bridge Rehab/ Reconstruction	202326277	Exempt	S19
10	Indiana	US 22 & SR 217 Interchange Improvement	\$23,000,000	22	Long-Term (2035-2050)	Interchange reconstruction along US 22 and PA 217 in Burrell Township and Blairsville Borough.	Efficiency & Operations	25543	Exempt	R3
10	Indiana	SR 422 Cheese Rn Rd to Trim Tree Rd	\$17,032,000	422	Long-Term (2035-2050)	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	100289	Exempt	R4
10	Indiana	Wayne Ave Safety (From Multimodal Study)	\$5,000,000	4005	Long-Term (2035-2050)	Safety improvements including pedestrian upgrades along Wayne Avenue in Indiana Borough and White Township, Indiana County	Efficiency & Operations	202326233	Exempt	X12

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10	Indiana	US 22 Gas Center PM	\$17,109,000	22	Long-Term (2035-2050)	Highway resurfacing along US 22 from PA 403 east to the Cambria County Line in East Wheatfield Township, Indiana County.	Roadway Preservation	99324	Exempt	S10
10	Indiana	US 22 Clyde PM	\$15,683,000	22	Long-Term (2035-2050)	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	112862	Exempt	S10
10	Indiana	SR 119 South PM	\$47,050,000	119	Long-Term (2035-2050)	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	112421	Exempt	S10
10	Indiana	SR 119 Indiana Bypass Reconstruction	\$58,959,500	119	Long-Term (2035-2050)	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	112431	Exempt	S10
10	Indiana	SR 422 Indiana Bypass Reconstruction	\$50,770,000	422	Long-Term (2035-2050)	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	112430	Exempt	S10
11	Allegheny	US 30 Westinghouse Bridge	\$22,909,000	30	Long-Term (2035-2050)	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	111624	Exempt	S19
11	Allegheny	Marshall Ave Interchange - Bridge Preservation	\$40,000,000	65	Long-Term (2035-2050)	Bridge preservation located on the SR 8049 (Marshall Interchange area at Chateau Street & California Avenue) in the City of Pittsburgh, Allegheny County	Bridge Preservation	119021	Exempt	S19
11	Allegheny	Clairton-Glassport Bridge	\$19,570,000	2038	Long-Term (2035-2050)	Bridge rehabilitation on SR 2038 over Monongahela River in the City of Clairton, Allegheny County	Bridge Preservation	20192019	Exempt	S19
11	Allegheny	SR 2048 Hall Station Bridge	\$18,357,000	2048	Long-Term (2035-2050)	Bridge preservation on SR 2048 over Thompson Run in Monroeville Borough, Allegheny County	Bridge Preservation	111630	Exempt	S19
11	Allegheny	Hulton Bridge Preservation	\$14,000,000	2082	Long-Term (2035-2050)	Bridge preservation located on SR 2082 (Hulton Bridge) over the Allegheny River in Harmar Township and Oakmont Borough, Allegheny County	Bridge Preservation	119168	Exempt	S19

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11	Allegheny	Liberty Bridge Preservation	\$24,200,000	3069	Long-Term (2035-2050)	Bridge preservation located on SR 3069 (Liberty Bridge) over the Monongahela River in the City of Pittsburgh, Allegheny County	Bridge Preservation	119018	Exempt	S19
11	Allegheny	Rankin Bridge	\$24,238,000	Local	Long-Term (2035-2050)	(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	56960	Exempt	S19
11	Allegheny	S. Millvale Avenue Bridge	\$21,928,000	Local	Long-Term (2035-2050)	(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	27138	Exempt	S19
11	Allegheny	Sutersville Bridge	\$10,581,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge preservation on 1st Street (Sutersville Bridge) over Younghiogheny River in Elizabeth Township, Allegheny County. (Sponsor = Allegheny County)	Bridge Preservation	93913	Exempt	S19
11	Allegheny	Corapolis Bridge	\$10,581,000	Local	Long-Term (2035-2050)	(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	119348	Exempt	S19
11	Allegheny	Mansfield Bridge	\$7,343,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge preservation on Mansfield Bridge over the Monongahela River in Dravosburg Borough, Allegheny County	Bridge Preservation	117775	Exempt	S19
11	Allegheny	6th Street Bridge Preservation	\$5,300,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge preservation located on 6th Street Bridge (Roberto Clemente Bridge) in the City of Pittsburgh, Allegheny County	Bridge Preservation	119363	Exempt	S19
11	Allegheny	7th Street Bridge Preservation	\$5,300,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge preservation located on 7th Street Bridge (Andy Warhol Bridge) in the City of Pittsburgh, Allegheny County	Bridge Preservation	119366	Exempt	S19
11	Allegheny	9th Street Bridge Preservation	\$5,300,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge preservation located on 9th Street Bridge (Rachel Carson Bridge) in the City of Pittsburgh, Allegheny County	Bridge Preservation	119368	Exempt	S19
11	Allegheny	Shades Run Brdg No. 3	\$5,000,000	Local	Long-Term (2035-2050)	(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	119349	Exempt	S19

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11	Allegheny	Levi Bird Duff Bridge Preservation	\$3,000,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge preservation located on Center Ave over the Parkway North/I-279 in the City of Pittsburgh, Allegheny County	Bridge Preservation	119357	Exempt	S19
11	Allegheny	SR 28 Deck Replacements	\$124,041,000	28	Long-Term (2035-2050)	Bridge deck replacements (8 Structures) on SR 28 in Harmar Township, Allegheny County	Bridge Rehab/ Reconstruction	100959	Exempt	S19
11	Allegheny	SR 51 Cloverleaf Bridge Replacement	\$9,267,000	51	Long-Term (2035-2050)	Bridge rehabilitation on PA 51, Clairton Boulevard over Lebanon Church Road in Pleasant Hills Borough, Allegheny County.	Bridge Rehab/ Reconstruction	119351	Exempt	S19
11	Allegheny	SR 65, Spruce Run Rd Bridge	\$68,437,000	65	Long-Term (2035-2050)	Bridge replacement on SR 65 (Spruce Run Road) over Spruce Run in Ben Avon Borough, Allegheny County	Bridge Rehab/ Reconstruction	56883	Exempt	S19
11	Allegheny	SR 65, Eckert Street Bridge	\$52,753,000	65	Long-Term (2035-2050)	Bridge replacement on SR 65 (Ohio River Boulevard) over Eckert Street in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	115421	Exempt	S19
11	Allegheny	SR 65 over Abandoned Roadway at McKees Rocks Bridge	\$29,500,000	65	Long-Term (2035-2050)	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	119352	Exempt	S19
11	Allegheny	Dilworth Run Bridge Replacement (SR 65)	\$17,500,000	65	Long-Term (2035-2050)	Bridge Replacement on PA 65, Ohio River Boulevard over Dilworth Run in the Borough of Bellevue, Allegheny County	Bridge Rehab/ Reconstruction	119353	Exempt	S19
11	Allegheny	Dilworth Run Bridge No. 3	\$10,385,500	65	Long-Term (2035-2050)	Bridge rehabilitation located on Ohio River Blvd over Dilworth Run between Home Ave and Riverview Ave in Bellevue Borough, Allegheny County	Bridge Rehab/ Reconstruction	119355	Exempt	S19
11	Allegheny	Kennedywood Bridge Deck Replacement	\$28,515,000	837	Long-Term (2035-2050)	Bridge deck replacement located on SR 837 (Duquesne Boulevard) at Kennedywood Park Bridge over abandoned Union Railroad yard in West Mifflin Borough and City of Duquesne, Allegheny County	Bridge Rehab/ Reconstruction	119167	Exempt	S19
11	Allegheny	Glenwood Bridge	\$15,000,000	885	Long-Term (2035-2050)	Bridge rehabilitation on Glenwood Bridge located in Baldwin, Pittsburgh and West Homestead, Allegheny County	Bridge Rehab/ Reconstruction	202326326	Exempt	S19

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11	Allegheny	Highland Park Bridge/Ramps Reconstruction	\$92,700,000	1005	Long-Term (2035-2050)	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	118946	Exempt	S19
11	Allegheny	Business 22 over Rodi Rd Replacement	\$34,218,000	2048	Long-Term (2035-2050)	Bridge replacement on SR 2048, William Penn Highway over Rodi Road and Chalfont Run in Wilkins Township, Allegheny County	Bridge Rehab/ Reconstruction	119335	Exempt	S19
11	Allegheny	Birmingham Bridge	\$67,980,000	2085	Long-Term (2035-2050)	Bridge rehabilitation on SR 2085, Birmingham Bridge in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	118912	Exempt	S19
11	Allegheny	Forbes Avenue over South Neville Street	\$7,500,000	2108	Long-Term (2035-2050)	Bridge rehabilitation on Forbes Avenue over South Neville Street and Hammerschlag Drive in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	119406	Exempt	S19
11	Allegheny	Smithfield Street Bridge Deck Replacement	\$30,000,000	3027	Long-Term (2035-2050)	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	119169	Exempt	S19
11	Allegheny	Liberty Bridge Ramps Deck Replacements	\$95,526,000	8067	Long-Term (2035-2050)	Bridge improvement on the northern end of the Liberty Bridge (SR 3069) in the City of Pittsburgh, Allegheny County. Includes BRKEY's 45326, 45327, 2731, 2732, 2733, 2739.	Bridge Rehab/ Reconstruction	119334	Exempt	S19
11	Allegheny	Windgap Bridge	\$25,085,500	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge rehabilitation located over Edmore and Creek Road near Chartiers Creek #2 in McKees Rocks Borough, Allegheny County	Bridge Rehab/ Reconstruction	119354	Exempt	S19
11	Allegheny	Murray Ave over Beechwood Boulevard	\$16,000,000	Local	Long-Term (2035-2050)	(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	119404	Exempt	S19
11	Allegheny	Hartman's Run Bridge No. 4	\$15,686,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge rehabilitation located on Congress Street over Hartman's Run, McKeesport Borough, Allegheny County	Bridge Rehab/ Reconstruction	119356	Exempt	S19
11	Allegheny	Fleming Park Bridge	\$15,000,000	Local	Long-Term (2035-2050)	(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	93418	Exempt	S19

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	Meadow St over Negley Run Boulevard	\$13,000,000	Local	Long-Term (2035-2050)	(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	119403	Exempt	S19
11	Allegheny	16th Street Bridge	\$11,000,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge rehabilitation on 16th Street Bridge in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	202326328	Exempt	S19
11	Allegheny	Jacks Run Road Bridge No. 1	\$10,300,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge rehabilitation. Calif. Ave structure over Jacks Run. City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	27799	Exempt	S19
11	Allegheny	Lincoln Ave over Washington Boulevard	\$9,516,000	Local	Long-Term (2035-2050)	(Sponsor = Pittsburgh) Bridge rehabilitation on Lincoln Avenue over Washington Boulevard in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	119402	Exempt	S19
11	Allegheny	BI01 - Universal Road over Union Railroad	\$8,555,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Bridge rehabilitation located on Universal Road over the Union Railroad in the Township of Penn Hills, Allegheny County	Bridge Rehab/ Reconstruction	119371	Exempt	S19
11	Allegheny	Chartiers Ave Bridge over West Busway	\$5,000,000	Local	Long-Term (2035-2050)	(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	83132	Exempt	S19
11	Allegheny	McArdle Rdwy over Hillside	\$4,277,000	Local	Long-Term (2035-2050)	(Sponsor = Pittsburgh) Bridge rehabilitation on P.J. McArdle Roadway northwest of the Wabash Tunnel in the City of Pittsburgh, Allegheny County	Bridge Rehab/ Reconstruction	119376	Exempt	S19
11	Allegheny	Route 8 at Wildwood Intersection Improvement	\$6,100,000	8	Long-Term (2035-2050)	Signal improvement/upgrade located at the intersection for State Route 8 (William Flynn Highway) and State Route 4070 (Wildwood Road) in Hampton Township, Allegheny County.	Efficiency & Operations	119183	Exempt	R2
11	Allegheny	Lowries Run/Rochester Road Intersection Improvement	\$10,000,000	4075	Long-Term (2035-2050)	Intersection improvements located at the intersection of State Route 4011/4075 (Rochester Road) and State Route 4021 (Lowries Run Road) in Ross Township, Allegheny County.	Efficiency & Operations	119187	Exempt	R2
11	Allegheny	PGH CBD Signals Phase 7	\$6,500,000	Various	Long-Term (2035-2050)	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	TBD	Regionally Significant	

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	Greensburg Pike	\$15,000,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Roadway improvements, add sidewalks and bike lanes on Greensburg Pike, Allegheny County	Roadway Preservation	119370	Exempt	S10
11	Allegheny	SR 8, William Flinn Hwy, Saxonburg to Butler Plank	\$18,340,000	8	Long-Term (2035-2050)	Reconstruction of SR 8 from Saxonburg Blvd to Butler Plank Road in Shaler Township, Allegheny County.	Roadway Reconstruction	119340	Exempt	S10
11	Allegheny	SR 19, Wexford Flats	\$17,488,000	19	Long-Term (2035-2050)	Highway reconstruction on Perry Highway, SR 19, from McKnight Rd to Brown Rd. in McCandless and Pine Townships, Allegheny County	Roadway Reconstruction	119337	Exempt	S10
11	Allegheny	SR 28, Yutes Run to Bull Creek	\$15,000,000	28	Long-Term (2035-2050)	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	100777	Exempt	S10
11	Allegheny	PA 28: Millvale-Etna Interchange	\$10,000,000	28	Long-Term (2035-2050)	Mill and overlay located on SR 28 from Millvale to Etna Interchange in Allegheny County	Roadway Reconstruction	92271	Exempt	S10
11	Allegheny	US 30 Lincoln Highway, SR 148 to WECO Line	\$21,015,000	30	Long-Term (2035-2050)	Reconstruction of US 30 from intersection with SR 148 to Westmoreland County line in North Versailles and East McKeesport, Allegheny County	Roadway Reconstruction	81691	Exempt	S10
11	Allegheny	SR 65, Ohio River Blvd, MR Bridge to Terrace Dr.	\$31,712,000	65	Long-Term (2035-2050)	Reconstruction of SR 65 from McKees Rocks Bridge to Terrace Dr. in Ensworth, Allegheny County	Roadway Reconstruction	94646	Exempt	S10
11	Allegheny	PA 65: Fort Duquesne Br to Cal Ave	\$17,109,000	65	Long-Term (2035-2050)	Concrete pavement restoration of SR 65 from the Fort Duquesne Bridge to California Avenue in the City of Pittsburgh Allegheny County.	Roadway Reconstruction	92279	Exempt	S10
11	Allegheny	SR 400, Bigelow Blvd, Chatham St to Bloomfield Bridge	\$17,193,000	400	Long-Term (2035-2050)	Reconstruction of SR 400, Bigelow Blvd from Chatham St to Bloomfield Bridge. Ramps in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	119350	Exempt	S10
11	Allegheny	Lebanon Church Road, Brownsville Rd to Buttermilk Hollow	\$25,600,000	2040	Long-Term (2035-2050)	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	119345	Exempt	S10

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	SR 2046, Streets Run Reconstruction and Flood Mitigation	\$15,934,000	2046	Long-Term (2035-2050)	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	119336	Exempt	S10
11	Allegheny	McKnight Road, Venture to Perrymont	\$62,468,000	4003	Long-Term (2035-2050)	Reconstruction on SR 4003, McKnight Road, from Venture St. to Perrymont in the City of Pittsburgh, Ross and McCandless Townships, Allegheny County	Roadway Reconstruction	119333	Exempt	S10
11	Allegheny	Painters Run Rd	\$32,000,000	Local	Long-Term (2035-2050)	(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	118882	Exempt	S10
11	Allegheny	Wall Ave, Station to Mosside	\$10,000,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Roadway and sidewalk improvements on Wall Ave from Station St to Mosside Blvd, Allegheny County	Roadway Reconstruction	119372	Exempt	S10
11	Allegheny	5th Avenue, US 30 to Station St	\$10,000,000	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Roadway reconstruction located on 5th Avenue from Lincoln Highway (US 30) to Station Street, Allegheny County	Roadway Reconstruction	119374	Exempt	S10
11	Allegheny	Grant Street Phase 1	\$10,000,000	Local	Long-Term (2035-2050)	(Sponsor = Pittsburgh) Reconstruction on Grant Street from the Parkway to Fifth Avenue in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	119399	Exempt	S10
11	Allegheny	Monroeville Blvd	\$9,365,400	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Roadway reconstruction located on Monroeville Boulevard in Monroeville Borough, Allegheny County	Roadway Reconstruction	119360	Exempt	S10
11	Allegheny	Grand Ave, Neville Twp	\$7,404,600	Local	Long-Term (2035-2050)	(Sponsor = Allegheny County) Roadway reconstruction located on Grand Avenue in Neville Township, Allegheny County	Roadway Reconstruction	119359	Exempt	S10
11	Allegheny	Stauben Street, Crafton/Ingram	\$7,000,000	Local	Long-Term (2035-2050)	(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	119369	Exempt	S10
11	Allegheny	Warrington Av Reconstruction	\$7,000,000	Local	Long-Term (2035-2050)	(Sponsor = Pittsburgh) Highway reconstruction on Warrington Avenue in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	119407	Exempt	S10

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	Hot Metal Bridge	\$21,386,000	Local	Long-Term (2035-2050)	(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	119367	Exempt	S19
11	Allegheny	SR 28 - Resurfacing and Bridge Preservation	\$27,810,000	28	Long-Term (2035-2050)	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	118921	Exempt	S10
11	Allegheny	PA 51 - Liberty Tunnels to Whited Street	\$20,000,000	51	Long-Term (2035-2050)	Roadway work on SR 51, Saw Mill Run Boulevard, from Liberty Tunnels to Whited Street in the City of Pittsburgh, Allegheny County	Roadway Preservation	119224	Exempt	S10
11	Allegheny	PA 51 - Whited Street to Bausman Street	\$20,000,000	51	Long-Term (2035-2050)	Roadway work on SR 51, Saw Mill Run Boulevard, from Whited Street to Bausman Street, in the City of Pittsburgh, Allegheny County	Roadway Preservation	119225	Exempt	S10
11	Allegheny	PA 51, Hayden Boulevard	\$19,961,000	51	Long-Term (2035-2050)	Mill and overlay on PA 51, Hayden Boulevard, from Aery Road to Hutchinson Road in Forward and Elizabeth Townships, Allegheny County	Roadway Preservation	105450	Exempt	S10
11	Allegheny	Washington Blvd Reconstruction	\$20,600,000	8	Long-Term (2035-2050)	Reconstruction of Washington Boulevard to improve flooding conditions in City of Pittsburgh, Allegheny County. Contingent upon study recommendations	Roadway Reconstruction	118819	Exempt	S10
11	Allegheny	SR 19, Banksville Road	\$16,735,000	19	Long-Term (2035-2050)	Reconstruction of SR 19 from McFarland Rd to I-376 in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	119343	Exempt	S10
11	Allegheny	SR 28, Allegheny Valley Expressway, HP Bridge to RIDC	\$32,018,000	28	Long-Term (2035-2050)	Reconstruction of SR 28 from Highland Park Interchange to RIDC Park in the city of Pittsburgh, Allegheny County.	Roadway Reconstruction	119344	Exempt	S10
11	Allegheny	SR 28, Allegheny Valley Expressway, SR 8 to HP Bridge	\$12,303,000	28	Long-Term (2035-2050)	Reconstruction located on SR 28 from SR 8 to the Highland Park Interchange, in Sharpsburg and Aspinwall, Allegheny County.	Roadway Reconstruction	119338	Exempt	S10
11	Allegheny	SR 51 - Clairton Blvd, Coal Valley to Lebanon Ch Rd	\$21,396,000	51	Long-Term (2035-2050)	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	88454	Exempt	S10

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny	SR 88 - Conner Road to Park Ent.	\$13,200,000	88	Long-Term (2035-2050)	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	119163	Exempt	S10
11	Allegheny	Babcock Blvd, McKnight to Three Degree	\$5,703,000	4011	Long-Term (2035-2050)	Pavement reconstruction located on SR 4009 (Babcock Boulevard) from McKnight Road to 3 Degree (Duncan Avenue intersection) in McCandless Township, Allegheny County.	Roadway Reconstruction	91805	Exempt	S10
11	Allegheny	Smallman Street Reconstruction	\$11,330,000	Local	Long-Term (2035-2050)	Sponsor = Pittsburgh) Highway reconstruction on Smallman Street from 31st Street to 21st Street in the City of Pittsburgh, Allegheny County.	Roadway Reconstruction	118879	Exempt	S10
11	Allegheny	Smithfield Street Reconstruction Phase 2	\$7,416,000	Local	Long-Term (2035-2050)	(Sponsor = Pittsburgh) Reconstruction on Smithfield Street from Fort Pitt Boulevard to Sixth Avenue in the City of Pittsburgh, Allegheny County	Roadway Reconstruction	119400	Exempt	S10
11	Allegheny	ALCO Roads (Bethel Ch., Lebanon Ch., McKees Rks, Strochein Rd, Haymaker Rd.	\$66,950,000	Various	Long-Term (2035-2050)	(Sponsor = Allegheny County) Roadway restoration of various roadways (Bethel Ch, Lebanon Ch, McKees Rks, Strochein Rd, Haymarker Rd) in Allegheny County	Roadway Reconstruction	118877	Exempt	S10
11	Allegheny, Beaver, Lawrence	Bridge Non-NHS Preservation Line Item	\$190,419,000	Various	Long-Term (2035-2050)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
11	Allegheny, Beaver, Lawrence	Bridge NHS Preservation Line Item	\$32,917,000	Various	Long-Term (2035-2050)	NHS Bridge Preserservation Reserve	Bridge Preservation	TBD	Exempt	S19
11	Allegheny, Beaver, Lawrence	Bridge Non-NHS Reconstruction Line Item	\$264,284,000	Various	Long-Term (2035-2050)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
11	Allegheny, Beaver, Lawrence	Local/Off System Bridges	\$178,697,000	Various	Long-Term (2035-2050)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
11	Allegheny, Beaver, Lawrence	Bridge NHS Reconstruction Line Item	\$70,389,000	Various	Long-Term (2035-2050)	NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Allegheny, Beaver, Lawrence	Efficiency & Operations NHS Line Item	\$162,400,000	Various	Long-Term (2035-2050)	NHS Efficiency & Operations Reserve	Efficiency & Operations	TBD	Exempt	X1
11	Allegheny, Beaver, Lawrence	Roadway Non-NHS Preservation Line Item	\$198,100,000	Various	Long-Term (2035-2050)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
11	Allegheny, Beaver, Lawrence	Roadway NHS Preservation Line Item	\$21,929,000	Various	Long-Term (2035-2050)	NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
11	Allegheny, Beaver, Lawrence	Roadway Non-NHS Reconstruction Line Item	\$113,000,000	Various	Long-Term (2035-2050)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
11	Allegheny, Beaver, Lawrence	Local, County, and State Slide Remediation & Reconstruction	\$100,000,000	Various	Long-Term (2035-2050)	Funds anticipated for slide remediation and road reconstruction in Allegheny, Beaver, Lawrence Counties	Roadway Reconstruction	TBD	Exempt	S2
11	Allegheny, Beaver, Lawrence	Roadway NHS Reconstruction Line Item	\$19,961,000	Various	Long-Term (2035-2050)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
11	Allegheny, Beaver, Lawrence	Safety Line Item	\$133,100,000	Various	Long-Term (2035-2050)	Safety Reserve	Safety	TBD	Exempt	S6
11	Allegheny, Beaver, Lawrence	District 11 Roundabout(s) TBD	\$10,000,000	Various	Long-Term (2035-2050)	This project is for potential roundabout(s) locations within District 11.	Safety	TBD	Exempt	X1
11	Beaver	SR 51, Beaver Rochester Bridge	\$14,685,000	51	Long-Term (2035-2050)	Bridge replacement on SR 51 over Beaver River in Beaver Borough, Beaver County	Bridge Preservation	111604	Exempt	S19
11	Beaver	Shippingport Bridge (SR 168)	\$16,500,000	168	Long-Term (2035-2050)	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	119016	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Beaver	Ramp E to Monaca-Rochester Super Replacement (SR 8037)	\$12,500,000	8037	Long-Term (2035-2050)	Bridge rehabilitation on SR 8037, Ramp E Road, over SR 65 Northbound in Rochester Borough, Beaver County	Bridge Rehab/Reconstruction	113635	Exempt	S19
11	Beaver	Intersection of SR 151/SR 3007/SR 3038 (Brodhead Rd)	\$15,000,000	151	Long-Term (2035-2050)	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	119188	Exempt	R1
11	Beaver	SR 51 Constitution Blvd, Rochester Br to I-376	\$31,712,000	51	Long-Term (2035-2050)	Constitution Boulevard, SR 51, from the Rochester Beaver Bridge to I-376 interchange in Bridgewater, Fallston, Chippewa and Patterson, Beaver county	Roadway Reconstruction	88442	Exempt	S10
11	Beaver	SR 51, Constitution Boulevard - Mill and Overlay 2	\$16,154,000	51	Long-Term (2035-2050)	Mill and overlay located on state route 51 (Constitution Boulevard) between Dilworth Run and Branch Small Run in Darlington Township, Beaver County.	Roadway Reconstruction	116588	Exempt	S10
11	Beaver	SR 65, Ohio River Blvd, 19th to Crows Run	\$37,443,000	65	Long-Term (2035-2050)	Reconstruction of SR 65 from 19th St. in Ambridge to Crows Run, Beaver County.	Roadway Reconstruction	94647	Exempt	S10
11	Beaver	SR 151 @ Brodhead Road Slide/Roadway Recon	\$21,000,000	3007	Long-Term (2035-2050)	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	119339	Exempt	S10
11	Lawrence	Mahoning Ave Viaduct	\$50,971,000	18	Long-Term (2035-2050)	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	119017	Exempt	S19
11	Lawrence	SR 422 over Shenango River and SR 18 Super Replacements	\$99,803,000	422	Long-Term (2035-2050)	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	118853	Exempt	S19
11	Lawrence	SR 18 Jefferson St/Wilmington Rd	\$24,835,000	18	Long-Term (2035-2050)	Reconstruction of SR 18, from Mahoning Ave to Mitchell Road in the City of New Castle and Neshannock Township, Lawrence County.	Roadway Reconstruction	119342	Exempt	S10
11	Lawrence	SR 18, Columbus Innerbelt	\$8,000,000	18	Long-Term (2035-2050)	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	110891	Exempt	S10

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
11	Lawrence	SR 422, Benjamin Franklin Highway, Ohio Line to I-376	\$35,915,000	422	Long-Term (2035-2050)	Reconstruction on SR 422 from Ohio State Line to I-376, in Union, Pulaski and Mahoning Townships, Lawrence County.	Roadway Reconstruction	92281	Exempt	S10
12	Fayette	SR 119 Cheat River Bridge Preservation	\$5,200,000	119	Long-Term (2035-2050)	This project is for preservation activities on the structure carrying US 119 over Cheat River in Point Marion Borough, Fayette County.	Bridge Preservation	98546	Exempt	S19
12	Fayette	SR 21 Operational & Safety (Also see New Cap)	\$30,900,000	21	Long-Term (2035-2050)	The project is for efficiency and operations improvements to the SR 21 (Row E. Furman Highway) corridor in Masontown Borough and German Township, Fayette County	Efficiency & Operations	119619	Regionally Significant	
12	Fayette	US 119 Operations & Safety	\$51,500,000	119	Long-Term (2035-2050)	This project is for safety and operations improvements to the US 119 (Morgantown Street, Morgantown Road, Main Street, George C. Marshall Parkway, University Drive, Morrell Avenue, Eighth Street, Memorial Boulevard) Corridor from the West Virginia State Line to the Westmoreland County Line in various municipalities in Fayette County.	Efficiency & Operations	119622	Regionally Significant	
12	Fayette	US 40/ US 119 Interchange Reconstruction	\$40,000,000	40 & 119	Long-Term (2035-2050)	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	119651	Exempt	R3
12	Fayette	PA 21 Corridor - S&T Drive to Thompson Crossroads	\$8,000,000	21	Long-Term (2035-2050)	This project is for roadway improvements to PA 21 (McClellandtown Road) from S&T Drive to Thompson Crossroads in Fayette County.	Roadway Reconstruction	119643	Exempt	S10
12	Fayette	US Route 119 Reconstruction: Uniontown to Penn State	\$90,000,000	119	Long-Term (2035-2050)	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	119653	Exempt	S10
12	Fayette	US Route 119 Reconstruction: Connellsville to Kingview	\$90,000,000	119	Long-Term (2035-2050)	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	119652	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	Interstate Bridge Preservation I-79 & I-70	\$46,000,000	79 & 70	Long-Term (2035-2050)	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	119616	Exempt	S19

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District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Preservation Line Item	\$61,800,000	Various	Long-Term (2035-2050)	Non-NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Bridge NHS Preservation Line Item	\$32,600,000	Various	Long-Term (2035-2050)	NHS Bridge Preservation Reserve	Bridge Preservation	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Local/Off System Bridges	\$191,600,000	Various	Long-Term (2035-2050)	Local/Off System Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Bridge Non-NHS Reconstruction Line Item	\$131,600,000	Various	Long-Term (2035-2050)	Non-NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Bridge NHS Reconstruction Line Item	\$69,953,000	Various	Long-Term (2035-2050)	NHS Bridge Reconstruction Reserve	Bridge Rehab/ Reconstruction	TBD	Exempt	S19
12	Fayette, Greene, Washington, Westmoreland	Efficiency & Operations NHS Line Item	\$5,018,000	Various	Long-Term (2035-2050)	NHS Efficiency & Operations Reserve	Efficiency & Operations	TBD	Exempt	X1
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Preservation Line Item	\$90,700,000	Various	Long-Term (2035-2050)	Non-NHS Roadway Preservation Reserve	Roadway Preservation	TBD	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	Roadway NHS Preservation Line Item	\$94,536,000	Various	Long-Term (2035-2050)	NHS Roadway Preservation Reserve	Roadway Reconstruction	TBD	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	Local, County, and State Slide Remediation & Reconstruction	\$77,250,000	Various	Long-Term (2035-2050)	Funds anticipated for slide remediation and road reconstruction in Fayette, Greene, Washington, Westmoreland Counties	Roadway Reconstruction	119660	Exempt	S2
12	Fayette, Greene, Washington, Westmoreland	Roadway NHS Reconstruction	\$32,100,000	Various	Long-Term (2035-2050)	NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Fayette, Greene, Washington, Westmoreland	Roadway Non-NHS Reconstruction Line Item	\$28,170,000	Various	Long-Term (2035-2050)	Non-NHS Roadway Reconstruction Reserve	Roadway Reconstruction	TBD	Exempt	S10
12	Fayette, Greene, Washington, Westmoreland	Safety Line Item	\$40,610,000	Various	Long-Term (2035-2050)	Safety Reserve	Safety	TBD	Exempt	S6
12	Fayette, Greene, Washington, Westmoreland	District 12 Roundabout(s) TBD	\$10,000,000	Various	Long-Term (2035-2050)	This project is for potential roundabout(s) locations within District 12.	Safety	119631	Exempt	X1
12	Fayette/ Greene	PA 21 Widening	\$50,000,000	21	Long-Term (2035-2050)	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	TBD	Regionally Significant	
12	Greene	I-79 over SR 188 and 10 mi Creek	\$5,000,000	79	Long-Term (2035-2050)	This project is for Bridge Improvements to the structures carrying I-79 over PA 188 and Ten Mile Creek in Washington Township, Greene County. *No new capacity will be added*	Bridge Preservation	119617	Exempt	S19
12	Greene	I-79 over PA 221	\$5,000,000	79	Long-Term (2035-2050)	This project is for the improvements to the structures carrying Interstate 79 over PA 221 in Washington Township, Greene County. *No new capacity will be added*	Bridge Preservation	119623	Exempt	S19
12	Greene	Point Marion Bridge	\$5,200,000	88	Long-Term (2035-2050)	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	112387	Exempt	S19
12	Greene	PA 21 Corridor - Masontown Bridge to Khedive	\$45,000,000	21	Long-Term (2035-2050)	The project is for improvements to PA 21 from the Masontown Bridge to Khedive in Monongahela, Cumberland, and Jefferson Townships, Greene County.	Roadway Reconstruction	119650	Exempt	S10
12	Greene	SR 21 Khedive to I-79 Safety Improvements	\$20,000,000	21	Long-Term (2035-2050)	This project is for safety improvements along SR 21 (Roy E Furman Hwy) to I-79 in Jefferson Township, Greene County.	Safety	119612	Exempt	S6

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Greene	SR 88 Safety Improvements at SR 2016 and 2014	\$6,180,000	88	Long-Term (2035-2050)	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	990032	Exempt	S6
12	Greene	I-79 Mt. Morris Interchange Area Improvements	\$7,210,000	Various	Long-Term (2035-2050)	The project is for safety improvements on the local road system surrounding the Mt. Morris Interchange in Mt. Morris Township, Greene County.	Safety	990033	Exempt	S6
12	Washington	I-70 over SR 4051 & Alghy Val RR (Molicorp Bridge)	\$5,000,000	70	Long-Term (2035-2050)	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	119620	Exempt	S19
12	Washington	Donora-Monessen High Bridge Preservation	\$9,500,000	1077	Long-Term (2035-2050)	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	112389	Exempt	S19
12	Washington	I-70 over Railroad Street	\$30,000,000	70	Long-Term (2035-2050)	This project is the removal of two structures carrying Interstate 70 over Eighth and Railroad Streets and replacing both structures with a box culvert in Donegal Township, Washington County	Bridge Rehab/ Reconstruction	112257	Exempt	S19
12	Washington	US 19 Corridor and Intersection Improvement (Old Oak - Waterdam)	\$9,880,000	19	Long-Term (2035-2050)	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	119615	Exempt	R1
12	Washington	McMurray Rd US 19 to Morganza Rd	\$11,832,000	1002	Long-Term (2035-2050)	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	119614	Exempt	X1
12	Washington	Weavertown Rd Corridor from US 19 to Morganza Rd (Concept 7)	\$16,695,000	1025	Long-Term (2035-2050)	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	119618	Exempt	X1
12	Washington	SR 1032 Southpointe Blvd from I-79 to Morganza Rd (Concept 4)	\$15,450,000	1032	Long-Term (2035-2050)	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	119624	Exempt	X1

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Washington	US 19/40: I-79 to Chestnut Street	\$3,254,000	19 & 40	Long-Term (2035-2050)	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 Anwell Townships, and the City of Washington, Washington County.	Roadway Preservation	105493	Exempt	S10
12	Washington	SR 18: Within Burgettstown Borough	\$13,390,000	18	Long-Term (2035-2050)	This project is for the reconstruction of SR 18 (Main Street, J.L. Brunner Memorial Bypass) within the Burgettstown Borough Limits in Burgettstown Borough, Washington County	Roadway Reconstruction	119642	Exempt	S10
12	Washington	I-79 Ramp at McClelland Rd	\$6,153,000	79	Long-Term (2035-2050)	This project is for intersection improvements to the I-79 Ramp to SR 1023 (McClelland Road) Intersection in North Strabane Township, Washington County.	Safety	105352	Exempt	S6
12	Westmoreland	Avonmore Bridge	\$6,000,000	156	Long-Term (2035-2050)	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	112392	Exempt	S19
12	Westmoreland	US 30 Walworth Viaduct	\$17,747,000	30	Long-Term (2035-2050)	This project is for the replacement/rehabilitation of the Walworth Viaduct on US 30 (Lincoln Highway) in Hempfield Township, Westmoreland County.	Bridge Rehab/ Reconstruction	20192103	Exempt	S19
12	Westmoreland	Larimer Bridge	\$5,200,000	993	Long-Term (2035-2050)	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	112394	Exempt	S19
12	Westmoreland	US 30 Operation & Safety	\$49,440,000	30	Long-Term (2035-2050)	This project is for corridor operation and safety improvements along US 30 in various locations and municipalities in Westmoreland County.	Efficiency & Operations	119621	Exempt	S6
12	Westmoreland	Route 30 Interchange with Donohoe Road	\$30,000,000	30	Long-Term (2035-2050)	This project is for roadway improvements at US 30 and SR 1026 (Donohoe Road) in Hempfield Township, Westmoreland County.	Efficiency & Operations	119626	Exempt	R1
12	Westmoreland	US 30 & Georges Station Intersection	\$29,579,000	30	Long-Term (2035-2050)	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	114390	Exempt	R1
12	Westmoreland	PA 366: Allegheny Co Line to PA 66	\$7,210,000	366	Long-Term (2035-2050)	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	119646	Exempt	S10

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

District	County	Title	Estimated Cost	Route	Stage	Narrative	Investment Category	MPMS/GIS ID	AQ Status	Exempt Code
12	Westmoreland	US Route 30 Reconstruction, Ledger to Lincoln	\$46,300,000	30	Long-Term (2035-2050)	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	119647	Exempt	S10
12	Westmoreland	US Route 30 Reconstruction, Lincoln to Irwin	\$46,300,000	30	Long-Term (2035-2050)	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	119649	Exempt	S10
12	Westmoreland	SR 119 Sony to Youngwood	\$112,000,000	119	Long-Term (2035-2050)	This projects for roadway improvements on US 119 from Sony to Youngwood Borough in Westmoreland County.	Roadway Reconstruction	119648	Exempt	S10
12	Westmoreland	US 119: Youngwood to US 30 Interchange	\$25,000,000	119	Long-Term (2035-2050)	This project is for roadway improvements on US 119 from Youngwood Borough to the US 30 Interchange in South Greensburg, Westmoreland County.	Roadway Reconstruction	119645	Exempt	S10
12	Westmoreland	PA 286: Allegheny Co Line to Indiana Co Line	\$13,390,000	286	Long-Term (2035-2050)	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	119644	Exempt	S10
12	Westmoreland	PA 201 Ramp to PA 51 South	\$6,153,000	201	Long-Term (2035-2050)	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	105350	Exempt	S6

PA. Turnpike Commission (Programming / Planning)

Widening & Maintenance Projects - (Mainline) I-76		Project Name / Description / Notes	23-26 TIP Phases	Est. Comp. Year	Exist. #Lanes	Improved #Lanes	Total Cost Estimate	Regional Conformity	
County	MilePost#							Status	Determination
BECO	13-21	Replacement of Beaver River Bridge (Widening from 4 lanes to 6 lanes)	C	2028	4	6	\$250,000,000	Significant	
BUCO ALCO	28-31	Total Reconstruction (Cranberry to Pine Twp.) (Widening from 4 lanes to 6 lanes)	C	2023	4	6	\$80,000,000	Significant	
ALCO	49-53	Total Reconstruction (Allegheny Valley Int. to Pittsburgh Int.) (Widening from 4 lanes to 6 lanes)	C	2033	4	6	\$250,000,000	Significant	
ALCO	53 -57	Total Reconstruction (Allegheny Valley Int. to Pittsburgh Int.) (Widening from 4 lanes to 6 lanes)	C	2030	4	6	\$425,000,000	Significant	
ALCO WECO	57-66	Total Reconstruction (Pittsburgh Int. to Irwin Int.) (Widening from 4 lanes to 6 lanes)	E C	2033 2037	4	6	\$400,000,000	Significant	
WECO	99-109	Total Reconstruction (Widening from 4 lanes to 6 lanes) -NOTE: only 1 mile of this is in SPC region	C	2025	4	6	\$160,000,000	Significant	
Regional	Line Item	Overlay, Resurfacing, Bridge Rehabilitation, Maintenance	C	2026	NA	NA	NA	Exempt	S6, S7, S10 S11, S19

Data Source: PA. Turnpike Commission

New Projects (new capacity) - PA. Turnpike		Project Name / Description / Notes	2045LRP Phases	Est. Comp. Year	Exist. #Lanes	Total Lanes	Total Cost Estimate	Regional Conformity	
County	MilePost#							Status	Determination
ALCO		Mon-Fayette Expressway (SR 51 to I-376) (Construct new 4-lane highway)	E C	2030 2042	0	4	\$3,150,000,000	Significant	

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

SPC Sept 2023

2027- 2050 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	Bus Rapid Transit Project New Service additions and extensions to East End destinations.	ALCO	2027	Non-Attain	Non-Attain	Significant	
Pittsburgh Regional Transit	119328	SR 837 Transit Improvements (CORRIDOR R) Construct enhanced bus stop facilities and transit signal priority, along PA routes 837 and 148 from McKeesport to Homestead.	ALCO	2027	Non-Attain	Non-Attain	Significant	
Regional Line item		Transit Vehicle Replacement 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		Transit Vehicle Preservation & Rehab Preservation and rehabilitation of existing vehicles. Years 2027-2050.	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	M3
Regional Line item		Transit Capital Maintenance 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		Transit Studies / Facility Planning Studies for Multimodal Improvements and TOD. New Facilities Planning & Design. Years 2027-2050.	Regional	Ongoing	Non-Attain	Non-Attain	Exempt	X1
Regional Line item		Transit Operations 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.

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Sample MOVES Input Files – PM2.5 Runs

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Sample MOVES Input Files – PM2.5 Runs

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      <filename>C:\SPCMOVES3\CBC6\PMAPG\C6_2050\42003_2050_00_05_C6_2050\CDM\roadTypeDistribution.csv</filename>
    </roadTypeDistribution>
  </parts>
</roadtypedistribution>

<sourcetypepopulation>
  <description><![CDATA[]]></description>
  <parts>
    <sourceTypeYear>
      <filename>C:\SPCMOVES3\CBC6\PMAPG\C6_2050\42003_2050_00_05_C6_2050\CDM\SourceTypePopulation.csv</filename>
    </sourceTypeYear>
  </parts>
</sourcetypepopulation>

<vehicletypevmt>
  <description><![CDATA[]]></description>
  <parts>
    <hpmsVTypeYear>
      <filename>C:\SPCMOVES3\CBC6\PMAPG\C6_2050\42003_2050_00_05_C6_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\dayvmtfraction_avgday.csv</filename>
    </dayvmtfraction>
    <hourvmtfraction>
      <filename>C:\SPCMOVES3\CBC6\PMAPG\C6_2050\42003_2050_00_05_C6_2050\CDM\hourvmtfraction.csv</filename>
    </hourvmtfraction>
  </parts>
</vehicletypevmt>

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

Sample MOVES Input Files – PM2.5 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 – 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 ANNAVG C6_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"/>
<month id="8"/>
<month id="9"/>
<month id="10"/>
<month id="11"/>
<month id="12"/>
<day id="5"/>
  <beginhour id="1"/>
  <endhour id="24"/>
<aggregateBy key="Hour"/>
</timespan>
<onroadvehicleselections>

<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"/>
```

Sample MOVES Input Files – PM2.5 Runs

```
<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>
<offroadvehicseleselections>
</offroadvehicseleselections>
<offroadvehicseleselections>
</offroadvehicseleselections>
<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="118" pollutantname="Composite - NonECPM" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="118" pollutantname="Composite - NonECPM" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="118" pollutantname="Composite - NonECPM" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="118" pollutantname="Composite - NonECPM" processkey="91" processname="Auxiliary Power Exhaust"/>
<pollutantprocessassociation pollutantkey="112" pollutantname="Elemental Carbon" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="112" pollutantname="Elemental Carbon" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="112" pollutantname="Elemental Carbon" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="112" pollutantname="Elemental Carbon" processkey="91" processname="Auxiliary Power Exhaust"/>
<pollutantprocessassociation pollutantkey="119" pollutantname="H2O (aerosol)" processkey="1" processname="Running Exhaust"/>
<pollutantprocessassociation pollutantkey="119" pollutantname="H2O (aerosol)" processkey="2" processname="Start Exhaust"/>
<pollutantprocessassociation pollutantkey="119" pollutantname="H2O (aerosol)" processkey="90" processname="Extended Idle Exhaust"/>
<pollutantprocessassociation pollutantkey="119" pollutantname="H2O (aerosol)" processkey="91" processname="Auxiliary Power Exhaust"/>
<pollutantprocessassociation pollutantkey="110" pollutantname="Primary Exhaust PM2.5 - Total" processkey="1" processname="Running Exhaust"/>
<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" numberofrunspersimulation="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_C6_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_C6_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 fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="41" sourcetyname="Intercity Bus"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="32" sourcetyname="Light Commercial Truck"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="54" sourcetyname="Motor Home"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="11" sourcetyname="Motorcycle"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="21" sourcetyname="Passenger Car"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="31" sourcetyname="Passenger Truck"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="51" sourcetyname="Refuse Truck"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetyname="School Bus"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="52" sourcetyname="Single Unit Short-haul Truck"/>
      <onroadvehicleselection fueltpeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="42" sourcetyname="Transit Bus"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="41" sourcetyname="Intercity Bus"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="32" sourcetyname="Light Commercial Truck"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="54" sourcetyname="Motor Home"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetyname="Motorcycle"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="21" sourcetyname="Passenger Car"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="31" sourcetyname="Passenger Truck"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="51" sourcetyname="Refuse Truck"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="43" sourcetyname="School Bus"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="52" sourcetyname="Single Unit Short-haul Truck"/>
      <onroadvehicleselection fueltpeid="1" fueltypedesc="Gasoline" sourcetypeid="42" sourcetyname="Transit Bus"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="62" sourcetyname="Combination Long-haul Truck"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="61" sourcetyname="Combination Short-haul Truck"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="41" sourcetyname="Intercity Bus"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="32" sourcetyname="Light Commercial Truck"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="54" sourcetyname="Motor Home"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="11" sourcetyname="Motorcycle"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="21" sourcetyname="Passenger Car"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="31" sourcetyname="Passenger Truck"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="51" sourcetyname="Refuse Truck"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="43" sourcetyname="School Bus"/>
      <onroadvehicleselection fueltpeid="3" fueltypedesc="Compressed Natural Gas (CNG)" sourcetypeid="53" sourcetyname="Single Unit Long-haul Truck"/>
    </onroadvehicleselections>
  </importer >
</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_C6_2050_OZALL_mi"/>
<agedistribution>
  <description><![CDATA[]]></description>
  <parts>
    <sourceTypeAgeDistribution>
</sourceTypeAgeDistribution>
</parts>
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```

Sample MOVES Input Files – Ozone Runs

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```

Sample MOVES Input Files – Ozone Runs

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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 C6_2050 Emission Inventory with user's
data]]></description>
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<month id="07"/>
<day id="5"/>
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<onroadvehicleselection fueltypeid="1" fueltypedesc="Gasoline" sourcetypeid="11" sourcetyponame="Motorcycle"/>
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<onroadvehicleselection fueltypeid="2" fueltypedesc="Diesel Fuel" sourcetypeid="43" sourcetyponame="School Bus"/>
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```

Sample MOVES Input Files – Ozone Runs

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```

Sample MOVES Input Files – Ozone Runs

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  <distancefactors selected="true" units="Miles"/>
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</outputfactors>
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</savadata>
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</donotexecute>
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</runspec>
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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
2024 Existing Year - Base (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Allegheny (Partial)	Off-Network	N/A	N/A	765.08	36.30
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,743,515	40.1	2.06	0.10
	Urban Restricted	2,871,231,256	48.4	984.32	35.49
	Urban UnRestricted	5,294,315,621	28.5	2,037.41	102.99
	<i>Subtotal</i>	<i>8,173,290,392</i>		<i>3,788.87</i>	<i>174.87</i>
Armstrong (Partial)	Off-Network	N/A	N/A	3.68	0.15
	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	43,808,882	44.8	18.35	0.66
	<i>Subtotal</i>	<i>43,808,882</i>		<i>22.03</i>	<i>0.81</i>
Beaver	Off-Network	N/A	N/A	109.79	5.45
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	12,338,290	38.0	4.07	0.18
	Urban Restricted	321,051,262	56.8	89.14	2.92
	Urban UnRestricted	955,481,988	37.1	296.84	13.64
	<i>Subtotal</i>	<i>1,288,871,541</i>		<i>499.84</i>	<i>22.20</i>
Butler	Off-Network	N/A	N/A	188.49	7.75
	Rural Restricted	69,527,582	47.7	24.63	0.87
	Rural UnRestricted	143,204,679	34.7	50.67	2.29
	Urban Restricted	485,912,389	56.4	238.46	6.94
	Urban UnRestricted	1,361,451,233	37.8	508.79	21.24
	<i>Subtotal</i>	<i>2,060,095,883</i>		<i>1,011.03</i>	<i>39.09</i>
Washington	Off-Network	N/A	N/A	235.41	8.93
	Rural Restricted	196,733,530	56.9	60.42	1.93
	Rural UnRestricted	121,988,622	36.2	37.69	1.80
	Urban Restricted	987,582,511	56.8	622.44	17.78
	Urban UnRestricted	1,064,887,865	37.3	393.15	17.00
	<i>Subtotal</i>	<i>2,371,192,527</i>		<i>1,349.11</i>	<i>47.44</i>
Westmoreland	Off-Network	N/A	N/A	349.24	13.75
	Rural Restricted	53,411,662	53.0	20.23	0.65
	Rural UnRestricted	126,309,644	30.7	57.32	2.61
	Urban Restricted	899,298,275	56.9	632.74	17.64
	Urban UnRestricted	2,017,839,140	36.9	934.22	37.63
	<i>Subtotal</i>	<i>3,096,858,722</i>		<i>1,993.75</i>	<i>72.28</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	21,962,154	44.3	9.08	0.33
	<i>Subtotal</i>	<i>21,962,154</i>		<i>10.68</i>	<i>0.39</i>
Lawrence (Partial)	Off-Network	N/A	N/A	1.11	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	350,362	25.0	0.24	0.01
	Urban UnRestricted	14,812,381	42.3	5.62	0.21
	<i>Subtotal</i>	<i>15,162,743</i>		<i>6.97</i>	<i>0.26</i>
Region Subtotal		17,071,242,845		8,682.27	357.33
Off-Model Project Emission Benefits				0.00	0.00
Region Total		17,071,242,845	(Kg/Year)	8,682.27	357.33
				7,876,429	324,167

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

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Allegheny (Partial)	Off-Network	N/A	N/A	728.64	36.00
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,510,031	40.6	1.99	0.10
	Urban Restricted	2,856,908,889	48.5	871.70	32.59
	Urban UnRestricted	5,276,427,332	28.6	1,828.96	96.56
	<i>Subtotal</i>	<i>8,141,846,252</i>		<i>3,431.28</i>	<i>165.25</i>
Armstrong (Partial)	Off-Network	N/A	N/A	3.52	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	43,937,822	44.8	16.46	0.61
	<i>Subtotal</i>	<i>43,937,822</i>		<i>19.98</i>	<i>0.76</i>
Beaver	Off-Network	N/A	N/A	103.57	5.36
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	12,206,791	37.8	3.61	0.17
	Urban Restricted	315,501,809	57.2	76.61	2.64
	Urban UnRestricted	943,317,526	36.7	264.24	12.86
	<i>Subtotal</i>	<i>1,271,026,126</i>		<i>448.04</i>	<i>21.04</i>
Butler	Off-Network	N/A	N/A	180.57	7.63
	Rural Restricted	72,279,155	49.4	22.53	0.80
	Rural UnRestricted	144,995,041	34.7	45.88	2.19
	Urban Restricted	494,237,270	56.5	216.22	6.41
	Urban UnRestricted	1,362,418,009	37.9	457.42	19.86
	<i>Subtotal</i>	<i>2,073,929,474</i>		<i>922.61</i>	<i>36.88</i>
Washington	Off-Network	N/A	N/A	224.45	8.65
	Rural Restricted	219,599,689	57.2	58.99	1.97
	Rural UnRestricted	117,648,871	35.9	32.90	1.65
	Urban Restricted	957,191,411	55.8	549.57	15.91
	Urban UnRestricted	1,067,197,016	37.2	356.68	16.01
	<i>Subtotal</i>	<i>2,361,636,987</i>		<i>1,222.59</i>	<i>44.20</i>
Westmoreland	Off-Network	N/A	N/A	333.68	13.36
	Rural Restricted	53,801,276	51.4	18.32	0.63
	Rural UnRestricted	120,191,243	30.6	50.18	2.35
	Urban Restricted	903,674,565	56.8	573.46	15.98
	Urban UnRestricted	2,007,532,979	36.8	853.24	35.06
	<i>Subtotal</i>	<i>3,085,200,063</i>		<i>1,828.89</i>	<i>67.38</i>
Greene (Partial)	Off-Network	N/A	N/A	1.52	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	21,933,183	44.3	8.00	0.30
	<i>Subtotal</i>	<i>21,933,183</i>		<i>9.52</i>	<i>0.36</i>
Lawrence (Partial)	Off-Network	N/A	N/A	1.00	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	391,331	25.0	0.24	0.01
	Urban UnRestricted	13,014,743	42.4	4.38	0.17
	<i>Subtotal</i>	<i>13,406,074</i>		<i>5.62</i>	<i>0.23</i>
Region Subtotal		17,012,915,981		7,888.52	336.08
Off-Model Project Emission Benefits				0.00	0.00
Region Total		17,012,915,981	(Kg/Year)	7,888.52	336.08
				7,156,351	304,890

Pittsburgh-Beaver Valley PM2.5 Annual Emission Summary
2026 TIP Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Allegheny (Partial)	Off-Network	N/A	N/A	696.95	35.75
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,799,839	40.1	1.66	0.09
	Urban Restricted	2,867,241,810	48.5	786.46	30.26
	Urban UnRestricted	5,261,788,517	28.5	1,676.18	91.27
	<i>Subtotal</i>	<i>8,136,830,166</i>		<i>3,161.24</i>	<i>157.36</i>
Armstrong (Partial)	Off-Network	N/A	N/A	3.35	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	43,592,989	44.8	14.80	0.56
	<i>Subtotal</i>	<i>43,592,989</i>		<i>18.16</i>	<i>0.70</i>
Beaver	Off-Network	N/A	N/A	104.59	5.72
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	12,489,311	37.9	3.33	0.16
	Urban Restricted	321,291,351	56.7	68.79	2.50
	Urban UnRestricted	957,046,522	37.2	239.95	12.07
	<i>Subtotal</i>	<i>1,290,827,184</i>		<i>416.66</i>	<i>20.45</i>
Butler	Off-Network	N/A	N/A	172.36	7.50
	Rural Restricted	68,601,729	47.7	19.50	0.73
	Rural UnRestricted	142,514,466	34.7	41.01	2.02
	Urban Restricted	488,358,438	56.4	193.39	5.77
	Urban UnRestricted	1,364,272,027	37.7	417.62	18.70
	<i>Subtotal</i>	<i>2,063,746,659</i>		<i>843.87</i>	<i>34.72</i>
Washington	Off-Network	N/A	N/A	215.43	8.40
	Rural Restricted	195,591,074	56.9	46.84	1.63
	Rural UnRestricted	121,423,219	36.2	30.48	1.59
	Urban Restricted	985,354,598	56.8	510.29	14.48
	Urban UnRestricted	1,061,065,692	37.3	322.94	14.86
	<i>Subtotal</i>	<i>2,363,434,584</i>		<i>1,125.98</i>	<i>40.96</i>
Westmoreland	Off-Network	N/A	N/A	319.64	13.02
	Rural Restricted	52,797,794	53.0	15.95	0.54
	Rural UnRestricted	125,634,393	30.7	48.33	2.29
	Urban Restricted	897,939,555	56.9	521.60	14.32
	Urban UnRestricted	2,017,683,820	36.9	785.64	32.67
	<i>Subtotal</i>	<i>3,094,055,562</i>		<i>1,691.17</i>	<i>62.85</i>
Greene (Partial)	Off-Network	N/A	N/A	1.44	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	21,832,193	44.3	7.14	0.28
	<i>Subtotal</i>	<i>21,832,193</i>		<i>8.58</i>	<i>0.33</i>
Lawrence (Partial)	Off-Network	N/A	N/A	1.00	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	351,047	25.0	0.20	0.01
	Urban UnRestricted	14,746,222	42.4	4.38	0.18
	<i>Subtotal</i>	<i>15,097,270</i>		<i>5.58</i>	<i>0.23</i>
Region Subtotal		17,029,416,606		7,271.23	317.60
Off-Model Project Emission Benefits				0.00	0.00
Region Total		17,029,416,606	(Kg/Year)	7,271.23	317.60
				6,596,352	288,121

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 _{2.5}
Allegheny (Partial)	Off-Network	N/A	N/A	563.25	31.26
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,904,225	40.1	1.00	0.06
	Urban Restricted	2,913,719,638	48.4	470.65	19.19
	Urban UnRestricted	5,353,003,634	28.4	1,147.88	67.51
	<i>Subtotal</i>	<i>8,274,627,496</i>		<i>2,182.79</i>	<i>118.03</i>
Armstrong (Partial)	Off-Network	N/A	N/A	2.91	0.13
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	44,232,795	44.8	9.09	0.35
	<i>Subtotal</i>	<i>44,232,795</i>		<i>12.00</i>	<i>0.47</i>
Beaver	Off-Network	N/A	N/A	84.64	5.09
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	12,958,590	37.8	2.22	0.12
	Urban Restricted	335,955,227	56.7	37.62	1.59
	Urban UnRestricted	994,172,304	37.4	154.91	8.73
	<i>Subtotal</i>	<i>1,343,086,121</i>		<i>279.38</i>	<i>15.53</i>
Butler	Off-Network	N/A	N/A	136.74	6.16
	Rural Restricted	68,249,175	47.8	11.29	0.46
	Rural UnRestricted	143,726,495	34.8	26.30	1.43
	Urban Restricted	498,816,311	56.4	113.51	3.22
	Urban UnRestricted	1,384,664,938	37.7	268.81	12.90
	<i>Subtotal</i>	<i>2,095,456,919</i>		<i>556.66</i>	<i>24.17</i>
Washington	Off-Network	N/A	N/A	174.41	6.42
	Rural Restricted	204,326,687	56.9	26.41	1.01
	Rural UnRestricted	122,636,077	36.2	19.49	1.13
	Urban Restricted	943,022,026	56.3	311.21	7.56
	Urban UnRestricted	1,116,169,279	38.0	219.30	10.42
	<i>Subtotal</i>	<i>2,386,154,070</i>		<i>750.82</i>	<i>26.54</i>
Westmoreland	Off-Network	N/A	N/A	274.74	11.55
	Rural Restricted	52,397,594	52.8	9.05	0.32
	Rural UnRestricted	126,681,495	30.7	34.40	1.62
	Urban Restricted	911,443,786	56.9	318.39	7.48
	Urban UnRestricted	2,062,574,261	36.8	546.94	22.16
	<i>Subtotal</i>	<i>3,153,097,136</i>		<i>1,183.52</i>	<i>43.13</i>
Greene (Partial)	Off-Network	N/A	N/A	1.13	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	22,565,230	44.4	4.40	0.18
	<i>Subtotal</i>	<i>22,565,230</i>		<i>5.53</i>	<i>0.23</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	409,399	25.0	0.18	0.01
	Urban UnRestricted	12,968,471	42.6	2.22	0.10
	<i>Subtotal</i>	<i>13,377,870</i>		<i>3.13</i>	<i>0.15</i>
Region Subtotal		17,332,597,637		4,973.83	228.25
Off-Model Project Emission Benefits				0.00	0.00
Region Total		17,332,597,637	(Kg/Year)	4,973.83	228.25
				4,512,180	207,067

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 _{2.5}
Allegheny (Partial)	Off-Network	N/A	N/A	563.57	24.15
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,544,699	40.2	0.98	0.06
	Urban Restricted	3,017,754,343	48.1	441.36	17.91
	Urban UnRestricted	5,339,799,798	27.9	1,085.59	64.21
	<i>Subtotal</i>	<i>8,366,098,840</i>		<i>2,091.50</i>	<i>106.33</i>
Armstrong (Partial)	Off-Network	N/A	N/A	2.93	0.10
	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	45,675,759	44.9	8.45	0.32
	<i>Subtotal</i>	<i>45,675,759</i>		<i>11.38</i>	<i>0.42</i>
Beaver	Off-Network	N/A	N/A	85.07	3.93
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	14,106,774	37.5	2.23	0.12
	Urban Restricted	337,754,741	56.2	33.25	1.41
	Urban UnRestricted	1,022,242,939	36.8	146.79	8.40
	<i>Subtotal</i>	<i>1,374,104,455</i>		<i>267.35</i>	<i>13.86</i>
Butler	Off-Network	N/A	N/A	134.69	4.67
	Rural Restricted	71,743,943	48.2	10.48	0.42
	Rural UnRestricted	136,733,308	33.6	23.66	1.32
	Urban Restricted	516,947,908	56.5	103.75	2.85
	Urban UnRestricted	1,404,491,238	37.6	250.03	12.01
	<i>Subtotal</i>	<i>2,129,916,397</i>		<i>522.61</i>	<i>21.27</i>
Washington	Off-Network	N/A	N/A	167.86	4.69
	Rural Restricted	245,158,192	57.5	26.99	1.02
	Rural UnRestricted	108,564,166	33.8	16.93	1.01
	Urban Restricted	945,116,292	55.8	282.50	6.57
	Urban UnRestricted	1,109,827,313	37.6	203.02	9.61
	<i>Subtotal</i>	<i>2,408,665,962</i>		<i>697.30</i>	<i>22.91</i>
Westmoreland	Off-Network	N/A	N/A	274.76	9.00
	Rural Restricted	51,065,081	51.3	8.04	0.29
	Rural UnRestricted	122,549,560	30.0	31.90	1.49
	Urban Restricted	931,904,338	56.7	291.02	6.53
	Urban UnRestricted	2,096,407,909	36.4	522.48	20.86
	<i>Subtotal</i>	<i>3,201,926,887</i>		<i>1,128.20</i>	<i>38.17</i>
Greene (Partial)	Off-Network	N/A	N/A	1.08	0.03
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	0	N/A	0.00	0.00
	Urban UnRestricted	23,291,393	44.4	4.07	0.17
	<i>Subtotal</i>	<i>23,291,393</i>		<i>5.15</i>	<i>0.20</i>
Lawrence (Partial)	Off-Network	N/A	N/A	0.74	0.03
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	441,051	25.0	0.18	0.01
	Urban UnRestricted	13,596,062	42.5	2.05	0.10
	<i>Subtotal</i>	<i>14,037,113</i>		<i>2.97</i>	<i>0.13</i>
Region Subtotal		17,563,716,806		4,726.45	203.29
Off-Model Project Emission Benefits				0.00	0.00
Region Total		17,563,716,806	(Kg/Year)	4,726.45	203.29
				4,287,764	184,421

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 _{2.5}
Allegheny (Partial)	Off-Network	N/A	N/A	577.14	22.92
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,039,567	39.9	0.90	0.06
	Urban Restricted	3,123,692,850	48.2	447.35	18.10
	Urban UnRestricted	5,356,450,944	27.9	1,079.91	63.79
	<i>Subtotal</i>	<i>8,488,183,361</i>		<i>2,105.30</i>	<i>104.86</i>
Armstrong (Partial)	Off-Network	N/A	N/A	2.97	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	45,195,552	44.9	8.27	0.31
	<i>Subtotal</i>	<i>45,195,552</i>		<i>11.24</i>	<i>0.40</i>
Beaver	Off-Network	N/A	N/A	87.20	3.73
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	14,340,305	37.5	2.25	0.12
	Urban Restricted	344,622,278	56.2	33.29	1.41
	Urban UnRestricted	1,041,084,036	36.8	147.41	8.45
	<i>Subtotal</i>	<i>1,400,046,620</i>		<i>270.15</i>	<i>13.70</i>
Butler	Off-Network	N/A	N/A	136.77	4.41
	Rural Restricted	71,105,152	48.1	10.21	0.41
	Rural UnRestricted	137,172,275	33.6	23.49	1.30
	Urban Restricted	523,487,026	56.6	103.28	2.82
	Urban UnRestricted	1,414,626,008	37.6	249.08	11.94
	<i>Subtotal</i>	<i>2,146,390,461</i>		<i>522.84</i>	<i>20.89</i>
Washington	Off-Network	N/A	N/A	168.00	4.33
	Rural Restricted	259,815,431	57.6	27.86	1.06
	Rural UnRestricted	108,699,593	33.7	16.81	1.00
	Urban Restricted	947,242,939	55.9	279.36	6.43
	Urban UnRestricted	1,116,545,707	37.6	201.99	9.54
	<i>Subtotal</i>	<i>2,432,303,670</i>		<i>694.02</i>	<i>22.36</i>
Westmoreland	Off-Network	N/A	N/A	279.15	8.56
	Rural Restricted	49,699,263	51.2	7.73	0.27
	Rural UnRestricted	121,383,582	30.0	31.47	1.47
	Urban Restricted	938,114,155	56.7	288.17	6.41
	Urban UnRestricted	2,123,662,959	36.4	523.68	20.83
	<i>Subtotal</i>	<i>3,232,859,959</i>		<i>1,130.20</i>	<i>37.53</i>
Greene (Partial)	Off-Network	N/A	N/A	1.22	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	23,796,671	44.4	4.11	0.17
	<i>Subtotal</i>	<i>23,796,671</i>		<i>5.33</i>	<i>0.20</i>
Lawrence (Partial)	Off-Network	N/A	N/A	0.76	0.03
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	444,011	25.0	0.18	0.01
	Urban UnRestricted	14,016,612	42.3	2.09	0.10
	<i>Subtotal</i>	<i>14,460,623</i>		<i>3.03</i>	<i>0.13</i>
Region Subtotal		17,783,236,916		4,742.11	200.10
Off-Model Project Emission Benefits				0.00	0.00
Region Total		17,783,236,916	(Kg/Year)	4,742.11	200.10
				4,301,975	181,528

Allegheny County, PA PM2.5 Annual Emission Summary
2024 Existing Year - Base (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Allegheny	Off-Network	N/A	N/A	776.48	36.87
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,727,453	40.1	2.05	0.09
	Urban Restricted	2,871,191,575	48.4	985.24	33.56
	Urban UnRestricted	5,430,519,988	28.5	2,081.68	100.17
	<i>Subtotal</i>	<i>8,309,439,017</i>		<i>3,845.45</i>	<i>170.69</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		8,309,439,017		3,845.45	170.69
			(Kg/Year)	3,488,534	154,847

SPC Sept 2023

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

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Allegheny	Off-Network	N/A	N/A	739.54	36.57
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,490,546	40.6	1.98	0.10
	Urban Restricted	2,856,872,623	48.5	872.58	32.62
	Urban UnRestricted	5,413,715,029	28.6	1,868.49	98.75
	<i>Subtotal</i>	<i>8,279,078,197</i>		<i>3,482.58</i>	<i>168.04</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		8,279,078,197		3,482.58	168.04
			(Kg/Year)	3,159,342	152,442

SPC Sept 2023

Allegheny County, PA PM2.5 Annual Emission Summary
2026 TIP Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Allegheny	Off-Network	N/A	N/A	707.32	36.32
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,783,619	40.1	1.65	0.09
	Urban Restricted	2,867,204,429	48.5	787.27	30.28
	Urban UnRestricted	5,397,456,699	28.5	1,712.28	93.37
	<i>Subtotal</i>	<i>8,272,444,747</i>		<i>3,208.52</i>	<i>160.06</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		8,272,444,747		3,208.52	160.06
			(Kg/Year)	2,910,722	145,205

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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 _{2.5}
Allegheny	Off-Network	N/A	N/A	571.58	31.76
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	7,888,354	40.1	1.00	0.06
	Urban Restricted	2,913,681,922	48.4	471.22	19.20
	Urban UnRestricted	5,489,705,873	28.5	1,171.61	69.08
	<i>Subtotal</i>	<i>8,411,276,150</i>		<i>2,215.42</i>	<i>120.10</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		8,411,276,150		2,215.42	120.10
			(Kg/Year)	2,009,796	108,956

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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 _{2.5}
Allegheny	Off-Network	N/A	N/A	571.68	24.53
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,529,386	40.2	0.98	0.06
	Urban Restricted	3,017,720,216	48.1	441.90	17.92
	Urban UnRestricted	5,463,837,145	28.0	1,106.47	65.61
	<i>Subtotal</i>	<i>8,490,086,747</i>		<i>2,121.02</i>	<i>108.13</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		8,490,086,747		2,121.02	108.13
			(Kg/Year)	1,924,158	98,091

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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 _{2.5}
Allegheny	Off-Network	N/A	N/A	585.42	23.29
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	8,026,366	39.9	0.90	0.06
	Urban Restricted	3,123,660,058	48.2	447.88	18.10
	Urban UnRestricted	5,479,563,912	28.0	1,100.44	65.18
	<i>Subtotal</i>	<i>8,611,250,336</i>		<i>2,134.65</i>	<i>106.62</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		8,611,250,336		2,134.65	106.62
			(Kg/Year)	1,936,520	96,726

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Indiana County PM2.5 Annual Emission Summary*
2024 Existing Year - Base (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Indiana (Partial)	Off-Network	N/A	N/A	12.70	0.44
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	218,487	25.0	0.21	0.01
	Urban UnRestricted	153,083,316	49.9	73.82	2.33
	<i>Subtotal</i>	<i>153,301,803</i>		<i>86.74</i>	<i>2.78</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		153,301,803		86.74	2.78
			(Kg/Year)	78,688	2,523

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

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

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Indiana (Partial)	Off-Network	N/A	N/A	12.20	0.43
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	224,875	25.0	0.21	0.01
	Urban UnRestricted	153,483,066	50.0	65.56	2.15
	<i>Subtotal</i>	<i>153,707,941</i>		<i>77.97</i>	<i>2.59</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		153,707,941		77.97	2.59
			(Kg/Year)	70,733	2,346

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

Indiana County PM2.5 Annual Emission Summary*
2026 TIP Year (By Road Type)

County	Road Type	Annual VMT	Speed (mph)	Emissions (Tons/Year)	
				NOx	PM _{2.5}
Indiana (Partial)	Off-Network	N/A	N/A	11.60	0.42
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	221,775	25.0	0.19	0.01
	Urban UnRestricted	153,080,608	49.9	58.45	1.95
	<i>Subtotal</i>	<i>153,302,383</i>		<i>70.24</i>	<i>2.38</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		153,302,383		70.24	2.38
			(Kg/Year)	63,723	2,161

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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 _{2.5}
Indiana (Partial)	Off-Network	N/A	N/A	9.32	0.35
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	240,871	25.0	0.16	0.01
	Urban UnRestricted	156,460,280	49.9	33.79	1.15
	<i>Subtotal</i>	<i>156,701,151</i>		<i>43.27</i>	<i>1.51</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		156,701,151		43.27	1.51
			(Kg/Year)	39,250	1,367

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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 _{2.5}
Indiana (Partial)	Off-Network	N/A	N/A	9.11	0.26
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	270,889	25.0	0.17	0.01
	Urban UnRestricted	161,204,008	50.1	30.60	1.01
	<i>Subtotal</i>	<i>161,474,898</i>		<i>39.88</i>	<i>1.28</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		161,474,898		39.88	1.28
			(Kg/Year)	36,181	1,159

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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 _{2.5}
Indiana (Partial)	Off-Network	N/A	N/A	9.17	0.23
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	0	N/A	0.00	0.00
	Urban Restricted	280,557	25.0	0.18	0.01
	Urban UnRestricted	163,103,631	50.0	30.47	1.00
	<i>Subtotal</i>	<i>163,384,188</i>		<i>39.82</i>	<i>1.24</i>
Off-Model Project Emission Benefits				0.00	0.00
Region Total		163,384,188		39.82	1.24
			(Kg/Year)	36,120	1,127

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

Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary
2024 Existing Year - Base (By Road Type)

County	Road Type	Summer Daily VMT	Speed (mph)	Emissions (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	4.060	2.093
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	26,681	40.1	0.001	0.006
	Urban Restricted	9,124,188	48.4	0.458	2.805
	Urban UnRestricted	17,913,723	28.5	1.397	6.128
	<i>Subtotal</i>	<i>27,064,592</i>		<i>5.917</i>	<i>11.033</i>
Armstrong	Off-Network	0	0.0	0.321	0.176
	Rural Restricted	293,164	54.5	0.015	0.106
	Rural UnRestricted	176,797	35.9	0.012	0.061
	Urban Restricted	94,385	32.9	0.007	0.052
	Urban UnRestricted	1,373,362	43.6	0.086	0.535
	<i>Subtotal</i>	<i>1,937,708</i>		<i>0.442</i>	<i>0.930</i>
Beaver	Off-Network	0	0.0	0.615	0.296
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	38,329	38.0	0.002	0.011
	Urban Restricted	1,020,415	56.8	0.044	0.254
	Urban UnRestricted	3,188,453	37.1	0.194	0.888
	<i>Subtotal</i>	<i>4,247,197</i>		<i>0.856</i>	<i>1.450</i>
Butler	Off-Network	0	0.0	0.924	0.527
	Rural Restricted	220,993	47.7	0.012	0.070
	Rural UnRestricted	464,886	34.7	0.033	0.148
	Urban Restricted	1,544,467	56.4	0.081	0.679
	Urban UnRestricted	4,571,959	37.8	0.302	1.525
	<i>Subtotal</i>	<i>6,802,304</i>		<i>1.351</i>	<i>2.949</i>
Washington	Off-Network	0	0.0	0.877	0.664
	Rural Restricted	625,330	56.9	0.027	0.173
	Rural UnRestricted	409,607	36.2	0.026	0.115
	Urban Restricted	3,139,056	56.8	0.171	1.771
	Urban UnRestricted	3,608,602	37.3	0.225	1.199
	<i>Subtotal</i>	<i>7,782,596</i>		<i>1.326</i>	<i>3.922</i>
Westmoreland	Off-Network	0	0.0	1.401	0.974
	Rural Restricted	169,757	53.0	0.008	0.058
	Rural UnRestricted	424,950	30.7	0.032	0.173
	Urban Restricted	2,858,411	56.9	0.161	1.798
	Urban UnRestricted	6,710,220	36.9	0.441	2.764
	<i>Subtotal</i>	<i>10,163,337</i>		<i>2.043</i>	<i>5.767</i>
Fayette	Off-Network	0	0.0	0.620	0.326
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	3,934	44.7	0.000	0.001
	Urban Restricted	506,818	46.9	0.030	0.217
	Urban UnRestricted	2,978,291	41.2	0.192	1.207
	<i>Subtotal</i>	<i>3,489,043</i>		<i>0.842</i>	<i>1.752</i>
Region Subtotal		61,486,777		12.776	27.801
Off-Model Project Emission Benefits				0.000	0.000
Region Total		61,486,777	(Kg/Day)	12.776	27.801
				11,590	25,221

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Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary
2025 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	3.919	1.985
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	29,460	40.6	0.002	0.006
	Urban Restricted	9,127,029	48.5	0.423	2.499
	Urban UnRestricted	17,961,357	28.6	1.293	5.536
	<i>Subtotal</i>	<i>27,117,846</i>		<i>5.636</i>	<i>10.026</i>
Armstrong	Off-Network	0	0.0	0.307	0.165
	Rural Restricted	287,918	54.4	0.014	0.093
	Rural UnRestricted	177,473	36.1	0.011	0.054
	Urban Restricted	94,874	32.9	0.007	0.048
	Urban UnRestricted	1,344,661	43.0	0.078	0.475
	<i>Subtotal</i>	<i>1,904,926</i>		<i>0.417</i>	<i>0.837</i>
Beaver	Off-Network	0	0.0	0.587	0.278
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	38,121	37.8	0.002	0.010
	Urban Restricted	1,008,079	57.2	0.040	0.220
	Urban UnRestricted	3,165,606	36.7	0.180	0.795
	<i>Subtotal</i>	<i>4,211,807</i>		<i>0.809</i>	<i>1.303</i>
Butler	Off-Network	0	0.0	0.891	0.504
	Rural Restricted	230,939	49.4	0.011	0.065
	Rural UnRestricted	474,841	34.7	0.031	0.135
	Urban Restricted	1,579,154	56.5	0.076	0.619
	Urban UnRestricted	4,594,545	37.9	0.280	1.377
	<i>Subtotal</i>	<i>6,879,480</i>		<i>1.289</i>	<i>2.699</i>
Washington	Off-Network	0	0.0	0.839	0.633
	Rural Restricted	701,658	57.2	0.028	0.169
	Rural UnRestricted	397,566	35.9	0.023	0.101
	Urban Restricted	3,058,350	55.8	0.155	1.572
	Urban UnRestricted	3,636,666	37.2	0.211	1.094
	<i>Subtotal</i>	<i>7,794,240</i>		<i>1.255</i>	<i>3.570</i>
Westmoreland	Off-Network	0	0.0	1.338	0.930
	Rural Restricted	171,900	51.4	0.008	0.052
	Rural UnRestricted	406,132	30.6	0.028	0.152
	Urban Restricted	2,887,460	56.8	0.149	1.639
	Urban UnRestricted	6,709,724	36.8	0.409	2.537
	<i>Subtotal</i>	<i>10,175,215</i>		<i>1.932</i>	<i>5.310</i>
Fayette	Off-Network	0	0.0	0.639	0.323
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	4,052	44.7	0.000	0.001
	Urban Restricted	506,450	46.9	0.027	0.196
	Urban UnRestricted	2,997,519	41.2	0.178	1.098
	<i>Subtotal</i>	<i>3,508,021</i>		<i>0.844</i>	<i>1.618</i>
Region Subtotal		61,591,534		12.183	25.363
Off-Model Project Emission Benefits				0.000	0.000
Region Total		61,591,534	(Kg/Day)	12.183	25.363
				11,053	23,009

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Pittsburgh-Beaver Valley 8-Hour Ozone Emission Summary
2026 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	3.710	1.877
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	27,019	40.1	0.001	0.005
	Urban Restricted	9,160,035	48.5	0.384	2.254
	Urban UnRestricted	17,899,484	28.5	1.167	5.067
	<i>Subtotal</i>	<i>27,086,538</i>		<i>5.263</i>	<i>9.203</i>
Armstrong	Off-Network	0	0.0	0.290	0.158
	Rural Restricted	293,065	54.4	0.013	0.084
	Rural UnRestricted	177,545	35.9	0.010	0.050
	Urban Restricted	94,518	32.9	0.006	0.044
	Urban UnRestricted	1,384,990	43.6	0.072	0.441
	<i>Subtotal</i>	<i>1,950,118</i>		<i>0.391</i>	<i>0.778</i>
Beaver	Off-Network	0	0.0	0.598	0.276
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	39,004	37.9	0.002	0.009
	Urban Restricted	1,026,575	56.7	0.037	0.197
	Urban UnRestricted	3,210,580	37.2	0.163	0.721
	<i>Subtotal</i>	<i>4,276,158</i>		<i>0.800</i>	<i>1.203</i>
Butler	Off-Network	0	0.0	0.845	0.477
	Rural Restricted	219,190	47.7	0.010	0.056
	Rural UnRestricted	465,099	34.7	0.027	0.121
	Urban Restricted	1,560,389	56.4	0.069	0.554
	Urban UnRestricted	4,602,889	37.7	0.256	1.256
	<i>Subtotal</i>	<i>6,847,567</i>		<i>1.208</i>	<i>2.463</i>
Washington	Off-Network	0	0.0	0.786	0.604
	Rural Restricted	624,948	56.9	0.023	0.135
	Rural UnRestricted	409,806	36.2	0.021	0.093
	Urban Restricted	3,148,369	56.8	0.142	1.460
	Urban UnRestricted	3,614,301	37.3	0.189	0.989
	<i>Subtotal</i>	<i>7,797,423</i>		<i>1.161</i>	<i>3.281</i>
Westmoreland	Off-Network	0	0.0	1.254	0.885
	Rural Restricted	168,691	53.0	0.007	0.046
	Rural UnRestricted	424,903	30.7	0.027	0.146
	Urban Restricted	2,869,114	56.9	0.134	1.490
	Urban UnRestricted	6,745,140	36.9	0.370	2.335
	<i>Subtotal</i>	<i>10,207,848</i>		<i>1.791</i>	<i>4.903</i>
Fayette	Off-Network	0	0.0	0.609	0.306
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	3,940	44.7	0.000	0.001
	Urban Restricted	508,766	46.9	0.025	0.180
	Urban UnRestricted	2,992,486	41.2	0.162	1.001
	<i>Subtotal</i>	<i>3,505,192</i>		<i>0.796</i>	<i>1.489</i>
Region Subtotal		61,670,843		11.410	23.319
Off-Model Project Emission Benefits				0.000	0.000
Region Total		61,670,843	(Kg/Day)	11.410	23.319
				10,351	21,155

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

County	Road Type	Summer Daily VMT	Speed (mph)	Emissions (Tons/Day)	
				VOC	NOx
Allegheny	Off-Network	N/A	N/A	2.855	1.408
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	27,385	40.1	0.001	0.003
	Urban Restricted	9,308,540	48.4	0.271	1.345
	Urban UnRestricted	18,207,271	28.5	0.830	3.447
	<i>Subtotal</i>	<i>27,543,195</i>		<i>3.957</i>	<i>6.203</i>
Armstrong	Off-Network	0	0.0	0.248	0.128
	Rural Restricted	282,069	54.4	0.008	0.045
	Rural UnRestricted	180,786	35.9	0.007	0.032
	Urban Restricted	112,381	33.2	0.005	0.037
	Urban UnRestricted	1,430,464	43.7	0.050	0.278
	<i>Subtotal</i>	<i>2,005,699</i>		<i>0.319</i>	<i>0.521</i>
Beaver	Off-Network	0	0.0	0.461	0.206
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	40,469	37.8	0.001	0.006
	Urban Restricted	1,073,440	56.7	0.027	0.108
	Urban UnRestricted	3,337,746	37.4	0.119	0.463
	<i>Subtotal</i>	<i>4,451,655</i>		<i>0.609</i>	<i>0.782</i>
Butler	Off-Network	0	0.0	0.647	0.358
	Rural Restricted	218,061	47.8	0.007	0.032
	Rural UnRestricted	468,649	34.8	0.019	0.077
	Urban Restricted	1,593,802	56.4	0.047	0.324
	Urban UnRestricted	4,681,016	37.7	0.182	0.806
	<i>Subtotal</i>	<i>6,961,529</i>		<i>0.903</i>	<i>1.597</i>
Washington	Off-Network	0	0.0	0.564	0.472
	Rural Restricted	652,859	56.9	0.017	0.076
	Rural UnRestricted	413,579	36.2	0.015	0.059
	Urban Restricted	3,013,139	56.3	0.089	0.889
	Urban UnRestricted	3,787,133	38.0	0.136	0.665
	<i>Subtotal</i>	<i>7,866,709</i>		<i>0.821</i>	<i>2.161</i>
Westmoreland	Off-Network	0	0.0	1.021	0.723
	Rural Restricted	167,414	52.8	0.005	0.026
	Rural UnRestricted	427,826	30.7	0.019	0.103
	Urban Restricted	2,912,267	56.9	0.087	0.909
	Urban UnRestricted	6,896,135	36.8	0.261	1.618
	<i>Subtotal</i>	<i>10,403,642</i>		<i>1.393</i>	<i>3.379</i>
Fayette	Off-Network	0	0.0	0.482	0.235
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	4,066	44.7	0.000	0.001
	Urban Restricted	516,141	46.9	0.017	0.113
	Urban UnRestricted	3,051,027	41.3	0.113	0.652
	<i>Subtotal</i>	<i>3,571,233</i>		<i>0.613</i>	<i>1.001</i>
Region Subtotal		62,803,663		8.614	15.643
Off-Model Project Emission Benefits				0.000	0.000
Region Total		62,803,663	(Kg/Day)	8.614	15.643
				7,814	14,191

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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	2.469	1.375
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	29,608	40.2	0.001	0.003
	Urban Restricted	9,640,935	48.1	0.245	1.260
	Urban UnRestricted	18,130,438	28.0	0.729	3.251
	<i>Subtotal</i>	<i>27,800,981</i>		<i>3.444</i>	<i>5.889</i>
Armstrong	Off-Network	0	0.0	0.223	0.126
	Rural Restricted	280,791	54.3	0.007	0.039
	Rural UnRestricted	182,344	35.7	0.006	0.030
	Urban Restricted	113,086	30.7	0.005	0.039
	Urban UnRestricted	1,470,849	43.3	0.046	0.262
	<i>Subtotal</i>	<i>2,047,070</i>		<i>0.287</i>	<i>0.496</i>
Beaver	Off-Network	0	0.0	0.399	0.202
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	44,055	37.5	0.001	0.006
	Urban Restricted	1,079,190	56.2	0.024	0.095
	Urban UnRestricted	3,436,308	36.8	0.107	0.438
	<i>Subtotal</i>	<i>4,559,553</i>		<i>0.532</i>	<i>0.741</i>
Butler	Off-Network	0	0.0	0.566	0.347
	Rural Restricted	229,222	48.2	0.006	0.030
	Rural UnRestricted	446,618	33.6	0.017	0.069
	Urban Restricted	1,651,743	56.5	0.042	0.296
	Urban UnRestricted	4,746,964	37.6	0.161	0.748
	<i>Subtotal</i>	<i>7,074,547</i>		<i>0.792</i>	<i>1.490</i>
Washington	Off-Network	0	0.0	0.459	0.451
	Rural Restricted	783,324	57.5	0.017	0.077
	Rural UnRestricted	366,099	33.8	0.012	0.052
	Urban Restricted	3,019,825	55.8	0.078	0.807
	Urban UnRestricted	3,767,823	37.6	0.118	0.616
	<i>Subtotal</i>	<i>7,937,071</i>		<i>0.686</i>	<i>2.002</i>
Westmoreland	Off-Network	0	0.0	0.888	0.712
	Rural Restricted	163,158	51.3	0.004	0.023
	Rural UnRestricted	413,610	30.0	0.016	0.096
	Urban Restricted	2,977,651	56.7	0.077	0.830
	Urban UnRestricted	7,009,761	36.4	0.233	1.544
	<i>Subtotal</i>	<i>10,564,181</i>		<i>1.218</i>	<i>3.205</i>
Fayette	Off-Network	0	0.0	0.433	0.230
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	4,276	44.7	0.000	0.001
	Urban Restricted	522,337	46.8	0.015	0.104
	Urban UnRestricted	3,128,571	41.3	0.101	0.611
	<i>Subtotal</i>	<i>3,655,183</i>		<i>0.550</i>	<i>0.946</i>
Region Subtotal		63,638,585		7.508	14.770
Off-Model Project Emission Benefits				0.000	0.000
Region Total		63,638,585	(Kg/Day)	7.508	14.770
				6.811	13.399

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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	2.472	1.402
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	27,868	39.9	0.001	0.003
	Urban Restricted	9,979,415	48.2	0.248	1.277
	Urban UnRestricted	18,185,567	28.0	0.718	3.233
	<i>Subtotal</i>	<i>28,192,850</i>		<i>3.439</i>	<i>5.915</i>
Armstrong	Off-Network	0	0.0	0.225	0.128
	Rural Restricted	280,914	54.3	0.007	0.039
	Rural UnRestricted	184,466	35.7	0.006	0.030
	Urban Restricted	113,715	30.7	0.005	0.038
	Urban UnRestricted	1,495,905	43.3	0.045	0.263
	<i>Subtotal</i>	<i>2,075,001</i>		<i>0.288</i>	<i>0.498</i>
Beaver	Off-Network	0	0.0	0.399	0.206
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	44,784	37.5	0.001	0.006
	Urban Restricted	1,101,125	56.2	0.024	0.095
	Urban UnRestricted	3,500,486	36.8	0.107	0.440
	<i>Subtotal</i>	<i>4,646,395</i>		<i>0.532</i>	<i>0.747</i>
Butler	Off-Network	0	0.0	0.567	0.351
	Rural Restricted	227,184	48.1	0.006	0.029
	Rural UnRestricted	447,911	33.6	0.016	0.069
	Urban Restricted	1,672,630	56.6	0.042	0.295
	Urban UnRestricted	4,781,190	37.6	0.160	0.745
	<i>Subtotal</i>	<i>7,128,915</i>		<i>0.791</i>	<i>1.488</i>
Washington	Off-Network	0	0.0	0.445	0.451
	Rural Restricted	830,156	57.6	0.018	0.080
	Rural UnRestricted	366,633	33.7	0.012	0.051
	Urban Restricted	3,026,607	55.9	0.077	0.798
	Urban UnRestricted	3,790,286	37.6	0.117	0.612
	<i>Subtotal</i>	<i>8,013,682</i>		<i>0.669</i>	<i>1.992</i>
Westmoreland	Off-Network	0	0.0	0.888	0.720
	Rural Restricted	158,790	51.2	0.004	0.022
	Rural UnRestricted	409,547	30.0	0.016	0.094
	Urban Restricted	2,997,488	56.7	0.076	0.822
	Urban UnRestricted	7,100,470	36.4	0.231	1.547
	<i>Subtotal</i>	<i>10,666,294</i>		<i>1.215</i>	<i>3.206</i>
Fayette	Off-Network	0	0.0	0.436	0.234
	Rural Restricted	0	N/A	0.000	0.000
	Rural UnRestricted	4,369	44.7	0.000	0.001
	Urban Restricted	528,322	46.8	0.015	0.104
	Urban UnRestricted	3,158,694	41.3	0.100	0.609
	<i>Subtotal</i>	<i>3,691,385</i>		<i>0.552</i>	<i>0.947</i>
Region Subtotal		64,414,522		7.486	14.794
Off-Model Project Emission Benefits				0.000	0.000
Region Total		64,414,522	(Kg/Day)	7.486	14.794
				6,791	13,421

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APPENDIX E

Common Acronyms

COMMON ACRONYMS

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 IJJA)
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
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
DEP	Pennsylvania Department of Environmental Protection (also PaDEP)
DOT	Department of Transportation
DVMT	Daily Vehicle Miles of Travel
EPA	Environmental Protection Agency (United States)
EPACT	Energy Policy Act of 1992 (federal)
FAST-Act	Fixing America’s Surface Transportation Act (federal transportation law – enacted 2015)
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographic Information System
HBW	Home-Based Work trips
HBO	Home-Based Other trips
HC	Hydrocarbons
HDDV	Heavy Duty Diesel Vehicle
HDGV	Heavy Duty Gasoline Vehicle
HDV	Heavy Duty Vehicle
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
I/M	Vehicle Emissions Inspection and Maintenance Program
IJJA	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

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 ₃	Ammonia
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
O ₃	Ozone
OVT	Out of Vehicle Travel Time
PaDEP	Pennsylvania Department of Environmental Protection (also DEP)
PennDOT	Pennsylvania Department of Transportation
PM ₁₀	Coarse Particulate Matter - particles with diameter less than 10 micrometers
PM _{2.5}	Fine Particulate Matter - particles with diameter less than 2.5 micrometers
PPB	Parts Per Billion
PPM	Parts Per Million
PPSUITE	Software tool to estimate DVMT, average speeds, and vehicle type mix for input to MOVES
RFG	Reformulated Gasoline
RFP	Reasonable Further Progress
RMS	PennDOT's Roadway Management System
ROW	Right of Way
RVP	Reid Vapor Pressure
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (federal – 2005)
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxides
SPC	Southwestern Pennsylvania Commission
SR	State Route number
STC	State Transportation Commission
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TAZ	Traffic Analysis Zone
TCM	Transportation Control Measure
TDM	Travel Demand Management
TEA-21	Transportation Equity Act for the 21st Century (federal transportation law – enacted 1998)
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TPD	Tons per Day
TPY	Tons per Year
TR	Traffic Route number
TSM	Transportation System Management
USC	United States Code
µG/M ³	Micrograms per Cubic Meter
USDOT	United States Department of Transportation
VHT	Vehicle Hours Traveled
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
VOYAGER	Suite of computer programs used to model travel demand

APPENDIX F

SPC Resolutions 5-23 and 6-23

SOUTHWESTERN PENNSYLVANIA COMMISSION
RESOLUTION NO. 5-23

A RESOLUTION OF THE SOUTHWESTERN PENNSYLVANIA COMMISSION to make a finding of conformity that the region's fiscally constrained 2050 Transportation Plan (a component of *SmartMoves for a Changing Region*) and the 2023-2026 Transportation Improvement Program (TIP) for the Pittsburgh Transportation Management Area (TMA) 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 designated 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 designated 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 designated 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 and 176(c) and (d) of the federal Clean Air Act (Sections 7504 and 7506(c) and (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 2050 Transportation Plan and the 2023-2026 TIP to the Clean Air Act; and

WHEREAS, the results of the conformity analysis were made available for public review and comment consistent with SPC's established public review procedures from May 11, 2023 through June 9, 2023

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 2050 Transportation Plan and the 2023-2026 TIP conform to the federal Clean Air Act by supporting its intention of achieving and maintaining the NAAQS; and

BE IT FURTHER RESOLVED that the region's 2050 Transportation Plan and the 2023-2026 TIP 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, Vincent Vicites, HEREBY CERTIFY that I am the 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 26th day of June 2023; and that said resolution is now in full force and effect.

IN TESTIMONY WHEREOF I hereto subscribe my name as



Secretary-Treasurer

SOUTHWESTERN PENNSYLVANIA COMMISSION
RESOLUTION NO. 6-23

A RESOLUTION OF THE SOUTHWESTERN PENNSYLVANIA COMMISSION to adopt *SmartMoves for a Changing Region*, the region's Long-Range Transportation Plan.

WHEREAS, the Infrastructure Investment and Jobs Act (IIJA), continues the requirements established in earlier federal legislation, that Metropolitan Planning Organizations (MPOs) conduct a performance based, continuous, cooperative and comprehensive, transportation planning process that includes developing and maintaining a fiscally-constrained Long Range Transportation Plan (Plan) consistent with federal metropolitan and statewide transportation planning regulations promulgated by the United States Department of Transportation (USDOT) and signed into law by the President of the United States on November 15, 2021;

WHEREAS, this Long-Range Transportation Plan utilizes the efforts of the previous 2019 planning process as a basis, and builds upon them to create a holistic, state of the practice plan that will enable the region to collaboratively work together to propel southwestern Pennsylvania into the future. The vision, goals, and strategies were reviewed and revised by SPC Policy Committee, SPC Commissioners, county planners, and the public and incorporated into this plan.

WHEREAS, *SmartMoves for a Changing Region* was developed to satisfy the requirements of federal law and the regulations promulgated by USDOT;

WHEREAS, updated population, household and employment forecasts were prepared by SPC staff to support development of this 2050 Plan and are included as part of the Plan;

WHEREAS, in accordance with the requirements of the Clean Air Act (as amended) and the Transportation Conformity Rule, qualitative and quantitative analysis of the Long-Range Transportation Plan has demonstrated that the Plan conforms 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 5-23.

WHEREAS, SPC's *Environmental Justice Benefits and Burdens Assessment for the 2050 Plan* report summarizes multiple analyses, outcomes, and activities that have been conducted as part of the region's planning process in accordance with environmental justice;

WHEREAS, SPC released the Long-Range Plan for a 30-day public review and comment in May consistent with SPC's established 30-day public review procedures; the public review period has passed, and public comments on the Plan and responses to them have been presented to the Commission and final revisions to the Plan and associated documents have been recommended; and,

WHEREAS, SPC's Transit Operators Committee and SPC's Transportation Technical Committee unanimously recommend Commission adoption of the Long-Range Plan.

NOW, THEREFORE, BE IT RESOLVED that the Southwestern Pennsylvania Commission adopts the ten-county *SmartMoves for a Changing Region* as the region's Long-Range Transportation Plan as required by USDOT.

I, Vincent A. Vicites , HEREBY CERTIFY that I am Secretary-Treasurer of the SOUTHWESTERN PENNSYLVANIA COMMISSION; that the foregoing resolution was adopted, in accordance with

the By-Laws, by the Members of said Commission at a meeting duly called and held on the 26th day of June 2023, a quorum being present; and that said resolution is now in full force and effect.

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

A handwritten signature in cursive script that reads "Vincent A. Whites".

Secretary-Treasurer

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

