PROGRAM GUIDANCE AND PROCEDURES: CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM

August 2021

Table of Contents

Table of Contents ____ *i*

Background ____ *1*

Program Objective ____ *1*

Federal Performance Measures ____ *2*

Schedule & CMAQ Evaluation Committee ____ *4*

CMAQ Evaluation Committee ____ 5

Funding and Local Match Requirements ____ *5*

Sponsor and Project Eligibility ____ *5*

Sponsor Eligibility ____ 5

Project Eligibility ____ 6

Project Grouping ____ 6

Ineligible Activities ____ 7

How to Submit Completed Candidate Project Applications ____ *7*

Application Process ____ *7*

Project Application Forms ____ 7

Pre-Qualification Screening ____ 8

Application Review ____ 8

Project Carryover Limitations ____ 8

Project Evaluation Criteria ____ *9*

Air Quality Technical Analysis ____ 9

Ancillary Selection Factors ____ 9

Deliverability/Project Readiness ____ 13

Appendix A: CMAQ Program Management and Other Regulatory Requirements ____ *A. 1*

Other Regulatory Requirements: ____ A. 2

Appendix B: Tables ____ *B. 1*

Appendix C: Maps – Air Quality Nonattainment & Maintenance Areas in Southwestern PA C. 1

Appendix D: Links to Additional Information and Staff Contacts ____ *D. 1*

Southwestern Pennsylvania Commission's Congestion Mitigation and Air Quality Improvement Program 2023-2026 Program Guidance

Background

This document has been prepared to guide sponsors of candidate projects through the Southwestern Pennsylvania Commission's (SPC) application process for the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. The Program Guidance and Procedures document includes the schedule and guidelines for submitting applications for candidate projects, the project selection process, and the project selection criteria.

The following sections of this document provide background information about SPC's CMAQ project solicitation, evaluation, prioritization, and selection process; instructions for completing and submitting applications for candidate projects for CMAQ funding; and a summary of the process that will be followed to manage the region's CMAQ Program after the Transportation Improvement Program (TIP) is approved.

Four appendices are included at the end of this document. APPENDIX A contains the processes and regulatory requirements of delivering a successful and on time transportation project with Federal CMAQ funds; APPENDIX B contains additional Tables; APPENDIX C contains maps of the air quality nonattainment and maintenance areas in Southwestern Pennsylvania and the NHS network in the Pittsburgh urbanized area; and, APPENDIX D contains a list of links to additional information and guidance of use to applicants, and SPC staff contacts.

Program Objective

The federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) provides funds for transportation projects and programs that will contribute to attainment or maintenance of the national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), and particulate matter (PM).

The CMAQ program supports two important goals of the federal Department of Transportation: improving air quality and relieving congestion. These goals were strengthened in provisions added to the CMAQ Program by the *Moving Ahead for Progress in the 21st Century Act* (MAP-21; Pub. L. 112-141) and continued in the Fixing America's Surface Transportation Act (FAST Act; Pub. L. 114-94). These provisions emphasize cost-effective emission reduction and congestion mitigation activities when using CMAQ funding.

It is the Southwestern Pennsylvania Commission's policy to program projects on the TIP for CMAQ funding that provide the best air quality benefit for the investment, consistent with Federal Highway Administration (FHWA) CMAQ Program Guidance (*Final Program Guidance, The Congestion Mitigation and Air Quality [CMAQ] Improvement Program under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users*, FHWA, October, 2008; and *Congestion Mitigation and*

Air Quality [CMAQ] Program Interim Guidance: MAP-21 – Moving Ahead for Progress in the 21st Century, FHWA, November 12, 2013). Projects selected for CMAQ funding are also expected to be consistent with the policies set forth in SPC's adopted Long-Range Transportation Plan (*Smart Moves for a Changing Region, June 2019*). The FAST Act of 2015 added eligibility for verified technologies for non-road vehicles and non-road engines that are used in port-related freight operations located in ozone, PM_{10} or $PM_{2.5}$ nonattainment or maintenance areas. The Act also specifically makes eligible the installation of vehicle-to-infrastructure communications equipment

Once projects are programmed on the Transportation Improvement Program (TIP) for CMAQ funding, close coordination is necessary between SPC, the Pennsylvania Department of Transportation (PennDOT), and project sponsors to ensure that CMAQ funds are used appropriately and to maximize their effectiveness in satisfying SPC's CMAQ policy and meeting federal transportation and Clean Air Act (CAA) goals. It is also essential that the CMAQ funds are able to be obligated in the year in which they are programmed to the TIP.

The TIP is a four-year program of projects that is updated every two years. During each two-year cycle, projects programmed in the first two TIP years are expected to be funded. The second two years of one TIP will become the first two years of the following TIP. Because of this there is very limited, if any, funding for new projects on a new TIP's first two years. Most of the awarded CMAQ projects will be programmed for the TIP's third and fourth years, which are the federal fiscal years of 2025 and 2026 (Oct. 1, 2024 – Sept. 30, 2026).

FHWA has directed that the CMAQ project selection process should be conducted in accordance with the metropolitan transportation planning process (23 CFR 450). In addition, the CMAQ project selection process should be transparent, in writing, and publicly available. The process should identify the agencies involved in rating proposed projects, clarify how projects are rated, and name the committee or group responsible for making the final recommendation to the Metropolitan Planning Organization (MPO) board, which is the Southwestern Pennsylvania Commission for this region. The selection process should also clearly identify the basis for rating projects, including emissions benefits, cost effectiveness, and any other ancillary selection factors such as congestion relief, greenhouse gas reductions, safety, system preservation, access to opportunity, sustainable development and freight, reduced SOV reliance, multi-modal benefits, and others. The ensuing sections of this Program Guidance provide information on the project selection process.

Federal Performance Measures

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and Fixing America's Surface Transportation (FAST) Act established Performance-Based Planning and Programming (PBPP) requirements as part of Transportation Performance Management rules for both highway programs and public transportation.

National transportation goals cover a range of key management issues: highway safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability and reduced delivery delays (23 U.S. Code Section 150). The legislative framework also establishes performance measure requirements for the National Highway Performance Program (NHPP), the Highway Safety Improvement Program (HSIP), and Congestion Mitigation and Air Quality Improvement Program (CMAQ).

The Performance Measures specifically related to the CMAQ Program, PM1 and PM3, are listed in Table 1 and described in the subsequent paragraph accordingly. These measures, SPC region and statewide CMAQ Performance Targets and additional relevant information, are detailed further in SPC's CMAQ 2019 Mid Performance Period Report (September 2020). Applicants should also reference the SPC TPM webpage to help them prepare their candidate project applications.

National Performance Management Measures
Congestion Mitigation and Air Quality Program

Performance Measure	Measure/Target Applicability	Metric Data & Collection Frequency	Metric
Annual Hours of Peak-Hour Excessive Delay Per Capita[1]	Mainline NHS in urbanized areas with a population over 1M/200K in nonattainment or maintenance for any of the criteria pollutants under the CMAQ program	All traffic/vehicles data in NPMRDS or equivalent data set – every 15 minutes (bus, car and truck volumes in HPMS; occupancy factors published by FHWA	Total Peak-Hour Excessive Delay in person hours
Percent of Non-SOV Travel	Urbanized areas with a population over 1M/200K in nonattainment or maintenance for any of the criteria pollutants under the CMAQ program	ACS, local survey, or local counts (includes bike/pedestrian counts)	Percent Non-SOV Travel
Total Emission Reductions	All nonattainment and maintenance areas for CMAQ criteria pollutants	CMAQ Public Access System	Co, NOx, VOC & PM Emission Reduction from Funded CMAQ Projects

Table 1, August 2021

NHS – National Highway System
NPMRDS – National Performance Management Research Data Set
HPMS – Highway Performance Monitoring System
ACS – American Community Survey, U.S. Census Bureau
CMAQ Public Access System – Database of CMAQ Project Information

Additionally, the federal Safety performance measures, PM 1, will factor into the safety component of the evaluation criteria. The FHWA final rule for the *National Performance Management Measures: Highway Safety Improvement Program* (Safety PM) and *Highway Safety Improvement Program* (HSIP) were published in the Federal Register (81 FR 13881 and 81 FR 13722) on March 15, 2016 and became effective on April 14, 2016.

[1] As per Federal Regulations (CFR 23 PART 490), "Excessive Delay means the extra amount of time spent in congested conditions defined by speed thresholds that are lower than a normal delay threshold. For the purposes of this rule, the speed threshold is 20 miles per hour (mph) or 60 percent of the posted speed limit, whichever is greater. Peak Period is defined as weekdays from 6 a.m. to 10 a.m. and either 3 p.m. to 7 p.m. or 4 p.m. to 8 p.m. State DOTs and MPOs may choose whether to use 3 p.m. to 7 p.m. or 4 p.m. to 8 p.m."

The Safety PM Final Rule established five performance measures as the five-year rolling averages to include:

- Number of Fatalities
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)
- Number of Serious Injuries
- Rate of Serious Injuries per 100 million VMT
- Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries

PennDOT and SPC are responsible for the coordination, development and tracking of the CMAQ program performance targets for Southwestern Pennsylvania. SPC reports progress on achieving its performance targets in the Metropolitan Long-Range Plan and through CMAQ performance reports, which are included in PennDOT Biennial Performance Reports.

Schedule & CMAQ Evaluation Committee

The application period for candidate projects for CMAQ funding in the 2023-2026 TIP is being publicly announced by SPC through its technical committees (Transit Operators Committee [TOC] and Transportation Technical Committee [TTC]), SPC's website and social media, and other forums as appropriate.

The project application period will begin on Monday, August 23, 2021 and close on Friday, September 24, 2021. To prepare potential sponsors for submitting and possibly delivering a federally funded transportation project, SPC will host a virtual Project Delivery Workshop on August 19th, 2021. (Please refer to SPC's Website for additional information). Following the close of the application period, SPC staff and the CMAQ Evaluation Committee will complete the screening and evaluation of candidate projects by early December, 2021. Table 2 below summarizes the CMAQ Program development schedule for the 2023-2026 TIP.

CMAQ Program Schedule & Process Timeline for the 2023-2026 TIP	
August 23, 2021	CMAQ Application Period Opens
August 19, 2021	SPC Project Delivery Workshops for Candidate Sponsors
September 24, 2021	CMAQ Application Period Closes
September – December 2021	Application Review and Technical Scoring by SPC and CMAQ Evaluation Committee
December 9, 2021	TTC Action to Recommend SPC Endorsement of CMAQ Program
December 13, 2021	SPC Action to Endorse CMAQ Program for Preliminary Draft 2023-2026 TIP
December 27, 2021	SPC Submits Draft TIP to PennDOT for Review

February - June 2022	Completion of Air Quality Conformity Analysis, Finalization of Draft TIP Report, Opening of Joint SPC /PennDOT Public Review & Comment Period
June 27, 2022	SPC Action to Adopt 2023-2026 TIP
October 1, 2022	Federal Fiscal Year 2023 Begins (Effective Date for 2023-2026 TIP)

Table 2, August 2021

CMAQ Evaluation Committee

The CMAQ Evaluation Committee (CEC) will be convened in September 2021. It will assist in prioritizing the candidate projects for CMAQ funding on the 2023-2026 TIP, reporting their findings, and making recommendations to SPC's Transportation Technical Committee, which will ultimately recommend the final CMAQ program for inclusion on the TIP. Membership of the CEC is designed to be a balanced and diverse representation of the SPC committees and air quality planning partners. The CEC will prioritize the candidate projects based on the air quality technical analysis, the ancillary selection factor ratings that will be completed by SPC staff, the evaluation of deliverability/project readiness that will be completed by the CEC, and SPC's Regional Priorities for Competitive Transportation Funding Programs. Recommendations will be developed by early December 2021. These recommendations will be presented to SPC's Transportation Technical Committee and others, as appropriate, in December prior to presentation to SPC's Executive Committee at its December 13, 2021 meeting. Table B-3 summarizes the CMAQ Evaluation Committee membership.

Funding and Local Match Requirements

The CMAQ Program provides up to 80% of total eligible project costs associated with costs for infrastructure type projects, and activities and operating costs for non-infrastructure. The minimum local share is 20%, per project phase, and must be provided from local, state, or other non-federal sources. Costs associated with a non-CMAQ funded phase of the project are not considered as part of the local share. CMAQ funds are able to be combined with other federal funds on the same project, but the full amount of local match for all federal funds is still required.

Sponsor and Project Eligibility

Sponsor Eligibility

Any qualified government entity, including local governments, public transit agencies, port authorities, and state agencies is eligible to apply for CMAQ funding. Non-profits and private sector entities may partner with an eligible entity to apply for CMAQ funding; however, there must be a formal agreement in place with their partnering public agency in order to receive funding. All applicants are required to contact county and municipal government(s) where the project will be implemented to inform them of their intent to apply and to coordinate the project effort. The same case applies to applicants seeking to implement

public transportation improvements, these applicants however are also required to contact the public transit agency that provides service in the proposed project area.

Project Eligibility

The federal CMAQ program provides funds for transportation projects that ease congestion and contribute to the attainment and maintenance of air quality standards for ozone, carbon monoxide and particulate matter. The program emphasizes cost effective emission reduction and congestion mitigation activities. It is SPC's policy to program CMAQ projects on the TIP that provide the best air quality benefit for the investment and support two important goals of the federal Department of Transportation: improve air quality and relieve congestion.

In Southwestern Pennsylvania, congested corridors are identified as part of the regional Congestion Management Process (CMP). The CMP also identifies and prioritizes congestion mitigation strategies for each of these corridors. SPC's regional priority for CMAQ funding is to identify projects that provide the best congestion and air quality benefits for the investment. These are often derived from the CMP and are contained in documents such as the region's adopted Long-Range Transportation Plan, Regional Operations Plan, Regional Freight Plan, Regional Transportation Demand Management Plan, Regional Active Transportation Plan, and the Transit Development Plans for the transit operators in the region. Examples include Intelligent Transportation System (ITS) deployments (both highway and transit), park-n-ride lots, travel demand management activities, traffic signal improvements, geometric/operational upgrades, and bottleneck mitigation projects. As described on page 11, under the *Congestion Management (CMP) Corridor Rating Section*, projects on CMP corridors receive additional points toward their application.

All federal eligibility requirements for transportation projects must be met and be consistent with FHWA's CMAQ Program Guidance. Specific activities and projects are explicitly identified as either eligible or ineligible for CMAQ funding within FHWA's CMAQ Program Guidance. Projects and activities will be placed into one of the six Project Category activities below.

Project Grouping

Listed in TABLE B-2 are the six Project Category activities and examples of projects and activities that are eligible for CMAQ funding. All projects will be placed into a project category, which will be used for grouping and comparison purposes. These categories are:

1. Commuter Bicycle and Pedestrian Improvements
2. Transportation Demand Management
3. Traffic Flow Improvements
4. Diesel Emissions Reductions and Alternative Fuel Technologies
5. Transit Improvements and Programs
6. Other Projects (Eligible projects under Federal CMAQ Guidance that do not fit into any of the above categories)

Ineligible Activities

The following projects are ineligible for CMAQ funding:

- Light-duty vehicle scrappage programs.
- Projects that add new capacity for SOVs are ineligible for CMAQ funding unless construction is limited to high-occupancy vehicle (HOV) lanes. This HOV lane eligibility includes the full range of HOV facility uses authorized under 23 U.S.C 166, such as high-occupancy toll (HOT) and low-emission vehicles.
- Routine maintenance and rehabilitation projects (e.g., replacement-in-kind of track or other equipment, reconstruction of bridges, stations, and other facilities, and repaving or repairing roads) are ineligible for CMAQ funding as they only maintain existing levels of highway and transit service, and therefore do not reduce emissions. Other funding sources, such as Surface Transportation Block Grant Program and FTA's Urbanized Area Formula Program (49 U.S.C. 5307), are available for such activities.
- Administrative costs of the CMAQ program may not be defrayed with program funds (e.g., support for a State's "CMAQ Project Management Office" is not eligible).
- Projects that do not meet the specific eligibility requirements of Titles 23 and 49, United States Code, are ineligible for CMAQ funds.
- Stand-alone projects to purchase fuel.
- Models and Monitors—Acquisition, operation, or development of models or monitoring networks are not eligible for CMAQ funds. As modeling or monitoring emissions, traffic operations, travel demand or other related variables do not directly lead to an emissions reduction, these activities or acquisitions are not eligible. Such efforts may be appropriate for Federal planning funds.
- Litigation costs surrounding CMAQ or other Federal-aid projects.

How to Submit Completed Candidate Project Applications

All completed applications for CMAQ funding must be submitted electronically via SPC's SharePoint site. The SPC SharePoint site requires a username and password. The Project Sponsor must contact Kristin Baum at kbaum@spcregion.org on or before September 17, 2021 to indicate intent to submit one or more CMAQ application(s) and to obtain a temporary username and password. The Project Sponsor will be provided with a secure folder in which the CMAQ application files are to be uploaded prior to the submission deadline. Any technical difficulties using SPC's SharePoint site should be directed to Kristin Baum at the email address listed above.

Application Process

The CMAQ program is structured to fund cost effective transportation projects and programs in non-attainment and maintenance areas which reduce transportation-related emissions. A complete CMAQ candidate project application will consist of several components to ensure selected projects are efficiently and effectively implemented.

Project Application Forms

A complete application will consist of several components, including:

- Application Checklist form (needed for all projects)
- Candidate Project Description form (needed for all projects)
- Project Budget and Schedule form (needed for all projects)
- Project Type form appropriate for the project category (TABLE B-2)
- Additional Information forms (as many as needed to fully describe the project)
- Supporting information (maps, drawings, photographs, reports, etc.)
- Project Delivery Checklist form (needed for all projects)

Eleven separate application forms are posted on the SPC CMAQ website along with this document. Project sponsors should download needed forms from the SPC website, enter appropriate information about the candidate project on each form, and save the files to a project folder. If supporting information is part of the project application package, the project sponsor should identify each piece of supporting information on an Additional Information form. All of the application forms are interactive files. Data entry must be done on the computer. Completed forms must be saved as interactive files. SPC will extract the submitted CMAQ project information via SharePoint. Handwritten paper copies, or electronic copies without the interactive features cannot be accepted.

Pre-Qualification Screening

To be eligible for CMAQ funds a project must be a transportation project consistent with the region's adopted Long-Range Transportation Plan (*Smart Moves for a Changing Region*), be located in an air quality nonattainment or maintenance area, and have demonstrated air quality benefits. Please refer to the FHWA Program Guidance for more information about CMAQ Program eligibility.

SPC staff will prepare a map identifying the location of each candidate project in relation to the region's air quality nonattainment areas. Project screening will be done by SPC staff for review by the CEC. Screening criteria address provisions of the FAST Act and assess consistency with *Smart Moves for a Changing Region*, local comprehensive plans, as well as the Commonwealth's Smart Transportation goals. Sponsors must explain how their candidate project is consistent with FAST Act eligibility requirements, *Smart Moves for a Changing Region*, and at least one of the other documents or it will not be considered further.

Application Review

SPC staff will review applications submitted by the September 24, 2021 deadline for completeness. Applicants will be notified by September 29 if the applications are incomplete and will be given one week (October 6, 2021) to submit missing or incomplete information.

Project Carryover Limitations

All CMAQ projects (or project phases) will have two TIP cycles to obligate their allocated CMAQ funding, beginning with the year in which they are originally programmed onto the TIP. If CMAQ funds allocated to a project (or project phase) are not obligated in this timeframe, the funds for the project (or project phase) will be removed from the TIP and reverted back to the regional CMAQ line item for redistribution. The project sponsor will then have to reapply to the CMAQ program if the project remains a priority.

The time frames to obligate CMAQ funds are:

TIP Program Year	TIP Obligation Deadline
2019 &2020	2022 (September 30, 2022)
2021 & 2022	2024 (September 30, 2024)
2023 & 2024	2026 (September 30, 2026)
2025 & 2026	2028 (September 30, 2028)

Table 3, August 2021

Project Evaluation Criteria

Projects will be prioritized based on the five Air Quality Technical Analysis factors, the six Ancillary Selection Factors, and the Deliverability/Project Readiness Factors described in this Section. A CMAQ Project Rating Scorecard, completed by SPC staff and members of the CEC, will rate candidate projects on these factors. To assist in developing the final recommended list of projects, the CEC will also utilize a decision support tool (Decision Lens) to dynamically analyze the impacts on project ranking that result from adjusting the emphasis on various scoring factors. The CEC's recommendations for project funding will be based on this information as well as the projections of available CMAQ funding for each year of the four-year TIP period.

A copy of the CMAQ Project Rating Scorecard is presented in Table B-1.

Air Quality Technical Analysis

All projects that pass the pre-qualification screening will be grouped by project category (as defined above) and evaluated for their effect on air quality using a standardized set of analysis tools developed for PennDOT. Evaluation results will enable the projects to be rated based on the following Air Quality and cost/benefit factors:

- Change in emissions in the nonattainment area where the project is located (VOC, NOx, PM, CO).
- Change in vehicle miles traveled (VMT).
- Change in vehicle trips.
- CMAQ cost per unit change in emissions.
- CMAQ cost per unit change in vehicle trips and vehicle miles traveled.

Ancillary Selection Factors

The Ancillary Selection Factors rely heavily on outcome driven, performance-based metrics. The increased focus on performance-based planning and programming is a result of MAP-21 and the FAST Act's aim to create a streamlined and performance-based surface transportation program. StateDOTs and MPOs must make investments and policy decisions to achieve the national performance goals. There are six national performance goals for federal highway programs:

- **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

- **Congestion Reduction** - To achieve a significant reduction in congestion on the National Highway System.

- **System Reliability** - To improve the efficiency of the surface transportation system.

- **Freight Movement and Economic Vitality** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

- **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment.

- **Reduced Project Delivery Delays** - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

These national goals are reflected in *Smart Moves for a Changing Region* through the plan performance measures, which are ultimately implemented through the TIP and programs such as CMAQ.

Details on how each of the six Ancillary Selection Factors will be scored are presented below:

1. Consistency with Smart Moves for a Changing Region

All applicants must demonstrate consistency with the region's adopted Long-Range Transportation Plan's (LRTP) Regional Vision, Relevant Strategies, and Air Quality related policies (listed below). Project sponsors will be given a checklist with the following Vision and Strategies and will be asked to check each one that the candidate project will help to advance.

Vision:

A world-class, safe and well maintained, integrated transportation system that provides mobility for all, enables resilient communities, and supports a globally competitive economy.

Relevant Strategies:

- Integrate multiple forms of public/ private transportation to provide increased mobility equitably for all users including those in underserved rural areas and disadvantaged populations.
- Develop and deploy appropriate infrastructure to facilitate safe and efficient use of Connected Infrastructure as well as Connected and Autonomous Vehicles (CAVs).
- Offset impacts associated with Connected and Autonomous Vehicles on safety, public sector revenue, congestion, and local quality of life.
- Fund additional transportation infrastructure through private sector partnerships, user fees, value capture, and other appropriate mechanisms; broaden revenue tools available to local governments to fund infrastructure projects.
- Employ holistic planning for mobility and accessibility when developing and prioritizing projects. Make transportation improvements fit community context and enhance local quality of life.

- Support and encourage transportation projects and programs that will contribute to attainment or maintenance of the national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), and particulate matter (PM).
- Invest in strategies that adapt to and decelerate the impacts of climate change. This includes investment in disaster preparedness, response, and recovery, as well as, creating awareness about climate change, its projected impacts, and regional strategies.
- Improve infrastructure efficiency through technology implementation in project development, design, construction, operation, and maintenance.

Projects that meet the Vision and seven (or more) Strategies, will receive a ***High (3)*** rating for this scoring factor, projects that meet the Vision and four to six Strategies, will receive ***Medium (2),*** and projects that meet the Vision and one to three Strategies will receive ***Low (1).*** Projects that do not advance the Vision or Strategies will receive 0 points.

2. Congestion Management Process (CMP) Corridor Rating

Federal transportation legislation requires that each metropolitan planning organization maintain an ongoing Congestion Management Process (CMP). SPC's CMP identifies corridors in the region with existing traffic congestion and corridors where congestion is expected in the future. The CMP also assesses the suitability of 25 congestion management strategies within identified corridors, and the potential effectiveness each strategy has in reducing congestion. The CMP is extensively documented on SPC's website, and within APPENDIX D.

Projects on CMP corridors that include high priority congestion management strategies suited to the corridor as part of the project scope will be scored ***High (3)***. Projects on CMP corridors that include fewer effective strategies suited to the corridor will be scored ***Medium (2).*** Projects not located on a CMP corridor that implement a CMP strategy suited to the corridor will be scored ***Low (1).*** Projects not on a CMP corridor will be scored as ***Not Addressed (0).***

3. Safety Improvements

Safety is an essential consideration to all transportation improvement projects. In order to evaluate the safety impacts of the candidate CMAQ projects, similar project categories will be grouped together and calculated as follows:

- **Transit, Active Transportation and Transportation Demand Management (TDM)**: Regional crash rate per million vehicle miles traveled*projected reduction in vehicle miles traveled = expected reduction in crashes. For Active Transportation projects, reduction in level of traffic stress will also be factored.
- **Traffic Flow:**
  - Two way AADT*regional crash rate (by federal functional classification)*365/1,000,000 = number of crashes per mile
  - Number of crashes per mile*mileage of project = total number of crashes
  - Expected reduction in crashes = total number of crashes*crash reduction factor[2]

[2] Crash Reduction Factor (CRF) A CRF is the percentage crash reduction that might be expected after implementing a given countermeasure. (In some cases, the CRF is negative, i.e. the implementation of a countermeasure is expected to lead to a percentage increase in crashes.) A CRF should be regarded as a general estimate of the effectiveness of a countermeasure for planning purposes only. The estimate is a useful guide, but, ultimately, it remains necessary to apply engineering judgment and to consider site-specific environmental, traffic volume, traffic mix, geometric, and operational conditions which will affect the safety impact of a countermeasure.

The Diesel Emissions Reductions and Alternative Fuel Technologies category receives no points for the Safety factor. Projects in the Other Projects category will be scored accordingly on a case-by-case basis.

Projects that are expected to reduce 2.0 or more crashes per year will get a ***High (3)*** score. Projects with an expected reduction in crashes from .75 to 1.99 crashes per year will get a ***Medium (2)*** score, and projects with an expected reduction of less than .74 crashes will score will score ***Low (1).*** Projects with no demonstrable impact on safety will receive a score of ***(0)*** for this factor.

Candidate CMAQ Projects at locations listed in the most recent Highway Safety Network Screening data will automatically achieve a High (3) score if the location is in the top 20% of intersections in the region that are underperforming from a safety standpoint (highest number of "excess crashes").

4. Funding

There are two considerations for this factor: federal share and non-traditional funding sources. Projects that bring significant non-federal and non-traditional funding to the TIP will warrant additional consideration. Projects requesting funding of less than 50% of the total project cost from federal funding programs (including CMAQ) will receive a ***High (3)*** score for this scoring factor. Projects requesting between 50% and 70% federal share will receive a ***Medium (2)*** score. Projects requesting between 70% and 80% federal share will score ***Low (1).*** Projects with a federal share above 80% will score ***Not Addressed (0)***.

In addition, projects that can show a firm, in writing, commitment of non-traditional funding to the project will get 1 additional point. These projects are typically public/private partnerships that provide some of the required non-federal matching funds from private donations, philanthropic sources, local businesses, or other non-government resources. As stated previously, these projects are subject to the requirements outlined in FHWA's *CMAQ Program Guidance*.

5. Air Quality Nonattainment Status in Project Area

Projects in the Clairton PM2.5 nonattainment area with demonstrated PM2.5 emission benefits will score ***High (3)*** for this scoring factor. Projects that are not in the Clairton PM2.5 nonattainment area, but in areas that are nonattainment or maintenance for both PM2.5 and Ozone will score ***Medium (2)***. Projects in areas that are nonattainment or maintenance for either Ozone only or PM2.5 only will score ***Low (1)*** Projects that are not in a nonattainment or maintenance area, or do not demonstrate emissions benefits for the nonattainment pollutant, will score ***Not Addressed (0)***.

Projects in an ozone nonattainment area should be able to demonstrate reductions in ozone precursor emissions. Likewise, projects in PM nonattainment areas should be able to demonstrate reductions in particulate emissions. Maps of the nonattainment and maintenance areas in southwestern Pennsylvania are in APPENDIX C.

Projects that are on the National Highway System (NHS) in the Pittsburgh Urbanized Area will receive a bonus point. A map of the NHS in the Pittsburgh urbanized area is also in APPENDIX C.

6. Diesel Emissions Reduction Potential

Diesel retrofit projects in PM2.5 nonattainment areas will receive 1 bonus point. All other project types will receive a score of 0.

Deliverability/Project Readiness

The CEC will evaluate each candidate project in terms of its ability to be delivered on-time and within budget. Utilizing the collective knowledge of the CEC and the completed *Project Delivery Checklist* form, will enable the Committee to best assess a particular project's deliverability.

Applicants must clearly demonstrate project readiness with a well-defined scope, schedule, cost estimate, project understanding, commitments of needed non-federal funding, and documentation of support from the other participating agencies in the project. Project sponsors should consult with PennDOT Local Project Delivery Manual; PennDOT Publication 740, June 2019 in order to proactively identify any potential deliverability issues the candidate project(s) may experience and factor them into their schedules and cost estimates.

Applications that clearly demonstrate that the project can be delivered within the proposed project schedule will be scored ***High (3)***. Applications that do not adequately demonstrate project readiness will be scored as ***Medium (2).*** Projects with potentially significant issues that could impact project deliverability will be rated ***Low (1)***. Applications with insufficient information to determine project readiness will be scored as ***Not Addressed (0)***. Applications that receive a *Low* or *Not Addressed* score will be unlikely to receive a recommendation from the CEC.

Appendix A: CMAQ Program Management and Other Regulatory Requirements

CMAQ Program Management

Once a project is programmed on the TIP, project sponsors have significant work to complete to obligate the funds. A project being placed on the TIP does not guarantee that funding will be made available for the project; the project sponsor must demonstrate to the satisfaction of the funding agencies that the project is deliverable on the schedule shown on the TIP, that other needed project funding is in place, and that the project sponsor has the needed technical and managerial capability and capacity to implement the project.

The additional steps that must be completed by project sponsors after successfully having a project programmed on the TIP include key milestones such as: securing commitments from project partners for the non-federal funds needed for the project; assessments of project readiness by funding agencies; a determination that the project sponsor has the capability to deliver the project; review of the project scope, schedule, and cost to ensure that they are still applicable; and execution of reimbursement agreements or grant contracts for federal funds.

The CMAQ Program is a reimbursement program; not a grant program. Any costs incurred on the project prior to execution of a reimbursement agreements (with PennDOT) or grant contracts (FTA) cannot be reimbursed by the federal government. As eligible costs are incurred after the reimbursement agreements are in place, the sponsor will generally pay invoices with its own funds, and then request reimbursement from the funding agency (PennDOT or FTA). This means that the sponsor must demonstrate that it has the resources and cash flow to complete the project under the required reimbursement agreements.

Ideally, a project will advance according to its programmed schedule. But, projects can be delayed due to unforeseen obstacles such as environmental, utility and right-of-way issues, community concerns, changes in the cost and availability of materials, or changes in the project sponsor's priorities. Please refer to the following section, *Other Regulatory Requirements*, to learn more about these obstacles and to prepare your project to avoid them. Tracking each project's progress is necessary so that delays can be identified and remedied as soon as possible and so that scarce CMAQ resources can be reallocated as necessary.

Shortly after TIP adoption, SPC staff will contact the sponsor of each CMAQ project programmed on the TIP. The sponsor will be required to finalize key project milestones and a schedule for ensuring that CMAQ funds will be approved (obligated) during the year in which funding for the project is programmed on the TIP. Project sponsors are required to provide a preliminary set of milestones and schedule as part of the CMAQ project application. Milestones could include items such as: a date for securing needed non-federal matching funds; deadline for documenting compliance with local ordinances and zoning codes; deadline for executing the PennDOT project reimbursement agreement or federal grant contract; schedule for final state and/or federal concurrence on project scope and cost; schedule for completion of final designs; dates for completion and approval of environmental reviews. The project milestones are intended to identify the key steps in advancing the project toward funding approval and, ultimately, implementation. They will be unique to each project depending on the project type, complexity, and coordination required.

SPC staff and PennDOT will work with project sponsors to establish realistic milestones and schedules for each project.

Once the project milestones are set, SPC will require periodic status updates from the project sponsor in order to monitor progress against the milestones. The content and format of the updates will be reviewed with project sponsors in more detail when the project is on the TIP.

As stated previously, PennDOT has provided guidance to sponsors of local projects of the processes associated with developing a local transportation project (PennDOT Local Project Delivery Manual; PennDOT Publication 740, June 2019). The document describes the requirements for implementing local projects using federal funding. The early understanding of these requirements by project sponsors helps to streamline the overall project development process by saving project sponsors' and PennDOT staffs' time, by reducing omissions in projects causing substantial downstream delays, and by making efficient use of federal, state, and local funds.

Before submitting its application for CMAQ funds, project sponsors should understand, and carefully consider:

- PennDOT guidance
- USDOT funding approval processes
- SPC's CMAQ Program Carryover Policy
- Rules for consultant procurement
- Requirements for federal and state oversight during project implementation.

Other Regulatory Requirements:

There are a number of State and Federal regulatory requirements that apply to this program. Most, if not all, of these requirements (competitive bidding, minority business participation, Davis Bacon Act, prevailing wage rates, Buy American Act, and Americans with Disabilities Act) can be unfamiliar to project sponsors. In most cases, for compliance with environmental regulations during preliminary engineering, it is expected that project sponsors will secure professional assistance (consulting engineers, landscape architects) to assist them in satisfying these requirements and advancing their project. PennDOT District staff should be contacted to assist with the interpretation and application of these requirements. In addition, sponsors should refer to the PennDOT Local Project Delivery Manual; PennDOT Publication 740, June 2019.

A list of some of these requirements, as well as a brief discussion of each, follows.

Agreements and Eligible Costs

The project sponsor must execute required agreement(s) with PennDOT or an FTA grant prior to proceeding with any work on the project. Any project costs incurred prior to the execution of a reimbursement agreement for which federal dollars are requested will not be eligible for reimbursement. PennDOT will provide guidance, if requested. Interest payments made by municipalities or other project sponsors to finance any portion of the project costs are not reimbursable. Reimbursement agreements are required for each phase of the project (Preliminary Engineering, Right of Way, Construction).

Budget

The sponsor must demonstrate that there is an acceptable funding strategy for the project. A well-defined scope of work is needed to develop an accurate budget. Budget considerations are very important and an itemized list of anticipated expenses (including labor, supplies, materials and other anticipated costs) should be provided in an application attachment. The budget must be prepared and should be divided into project development phases that include environmental clearance, right-of-way, design and construction phases. The budget should identify all sources of funding and how each itemized activity will be funded. Estimated funding for the project that may be from sources other than CMAQ should be identified, such as other federal funds, state, local, donated services, in-kind services, volunteer, etc.

As sponsors develop their estimated budget, they should talk with PennDOT Engineering District staff and other professionals familiar with PennDOT policies and regulations, such as architects, designers, engineers, contractors, or other appropriate individuals that have PennDOT project experience. **Important**: Project sponsors should design their project cost estimates for the year in which the project is anticipated to be delivered (current cost + 2%/yr. inflation). Note also that 12-15% of the estimated construction cost is used for project inspection. The 12-15% inspection cost must be included in the Total Construction Costs.

Reimbursement

CMAQ is a federal cost reimbursement program and no money is provided upfront. No reimbursement will be provided for costs incurred before a Federal Form 4232/FTA grant agreement is authorized; ***this does not occur automatically once a project is awarded or placed on the TIP***. Sponsors are advised to contact PennDOT District or SPC staff soon after their notice of award has been received to review the appropriate next steps.

PennDOT utilizes a "certified invoice" process whereby project sponsors, upon receipt of invoices for project activities, certify their accuracy and immediately forward them to PennDOT. PennDOT will then initiate a procedure to pay the sponsor. Upon receipt of reimbursement from PennDOT (usually 4-6 weeks), the sponsor pays the contractor within ten days after getting reimbursed from PennDOT. By using this process, the project sponsor does not have to use its own funds. This process is further described in the PennDOT Local Project Delivery Manual; PennDOT Publication 740, June 2019, which is provided to awarded project sponsors.

PennDOT Connects

PennDOT recognizes the profound economic and quality of life implications that transportation has on communities. To better identify the needs of communities early in the project planning process, PennDOT Connects requires the consideration of local planning studies, comprehensive plans and other local government input at the onset of project planning.

Project sponsors will be required to meet with SPC staff to fulfill the requirements of the PennDOT Connects initiative. Other meeting participants will be dependent on the project sponsor, the proposed project, and its location. SPC will work with individual sponsors to determine a meeting time, location, and a list of participants.

Public Involvement

Early and continued public engagement in program activities will need to be sought to ensure consistency with the requirements for public involvement in the metropolitan and statewide planning regulations and with the National Environmental Policy Act (NEPA) project implementation guidelines. The applicant should contact SPC for more information. Generally, the public involvement activities handled through the application review and TIP approval process by SPC fulfills this requirement. However, the project sponsor should discuss their project locally in a public format, such as at local planning commission and/or municipal meetings, particularly if municipal approval, zoning amendment, etc. is needed.

Environmental Clearance

All projects will require an environmental clearance document as part of the preliminary engineering phase of work. The level of effort varies by the type of project, the anticipated impact and the degree of public controversy. The NEPA documentation may be a Categorical Exclusion (CE), Environmental Assessment (EA), or Environmental Impact Statement (EIS). Preparation of the document can be a cooperative venture. Normally, at the project scoping, a decision will be made on the type of documentation required and which entity will prepare the document. The project sponsor or their consultant will be required to prepare the environmental clearance document. At times, there may be costs associated with obtaining environmental clearance. It is important to note that project sponsors should not begin any construction activities or site preparation prior to receiving their environmental clearance.

Consultant Selection Procedures

There are various steps that need to be followed to advance a federally-funded project into the design phase starting with selecting an engineer/consultant who will complete the work. These federal procedures must be followed. Note that they may be different than the procurement procedures normally used by the project sponsor for their non-federally funded projects. Prior to advertising for consultant, all Local Project Sponsors must have their selection procedures reviewed by their respective PennDOT District Office (or FTA Region III office, if the CMAQ funds will be administered through an FTA grant). The District (FTA) will review the documentation and, if appropriate, forward their concurrence to the PennDOT Bureau of Project Delivery, Contract Management Section for review and approval. The Contract Management Section will document approval of the selection procedures via a letter to the District, who should notify the Local Project Sponsor. If this process is not followed, federal funds may be jeopardized. This approval process is found in PennDOT Publication 93, Chapter 7.3.3, Consultant Selection Procedure Approval, and Appendix 7A, Policy and Procedure for Consultant Selection. Selection Procedures need only to be approved one time (after July 1, 2011) and are acceptable to be used for future advertisements. If the Selection Procedures undergo significant revisions at any time, then they must be re-approved.

Project Engineering & Inspection

Projects must follow standard federal/state procedures for all phases of work. Project sponsors should acquire the services of a qualified Project Manager to oversee the development and implementation of the project (including project inspection) and ensure compliance with all state and federal requirements. This professional may be an engineer, architect, or landscape architect depending upon the nature and scope of the project. It is important to recognize that the project sponsor, not PennDOT, employs the design and/or construction professionals.

Design and Implementation Requirements

Certain projects will be required to adhere to design requirements defined in PennDOT Design Manual, Part 1, PennDOT Publication 10, November 2015. Specifically, Chapters 6 and 7 address key design requirements, including NEPA requirements, preliminary and final design processes, and key procedures for obtaining right of way and utility clearances. If required for the project, these steps, requirements and standards must be followed by the sponsor's project designer for the project to be funded through the CMAQ Program.

Right-of-Way Clearance

All right-of-way acquisition must follow federal regulations, including the Uniform Act (Uniform Relocation Assistance and Real Property Acquisition Policies of 1970). In particular, property owners must be advised that federal funding is being used to implement the project, and they are entitled to fair market value for their property. The property owner must be informed of this value, as determined by a qualified appraiser. In addition, if the sponsor does not have the authority to acquire property by eminent domain, the property owner must be so advised prior to any offer being made. This requirement does not preclude the voluntary donation of property to the project. Federal funds are not available for land that is already within the public domain, e.g., owned by a municipality; however, such land may be donated to the project as part of the sponsor's investment. Right-of-way certification will be required for all projects prior to advertising for construction bids.

- The requirements of the Uniform Act apply to any recent acquisition, regardless if federal funds are used for the purchase. Please contact your PennDOT Engineering District Right-of-Way Administrator if you have any questions or need specific guidance.

- Due to deliverability concerns, sponsors are encouraged not to utilize CMAQ funds for right-of-way acquisition. Requests for this usage will be evaluated on a project-by-project basis.

- More information is available in Chapter 5, Right of Way Phase, of the Local Project Delivery Manual

Utility Clearance

All projects must have a utility clearance form (PennDOT Form D-419) processed *prior* to the advertisement for bids. This procedure requires that the sponsor certify that all necessary arrangements have been completed for the relocation of any affected utility. PennDOT personnel will aid with this process. Due to deliverability concerns, sponsors are encouraged to not utilize CMAQ funds for the utility clearance phase of the project. Requests for this usage will be evaluated on a project-by-project basis.

Permits

It is the responsibility of the project sponsor to secure all necessary permits to design and/or implement the project. These may involve permits from the Pennsylvania Department of Environmental Protection or the U.S. Army Corps of Engineers, as well as local municipal permits and zoning approvals, PennDOT highway occupancy agreements, etc.

Public Utility Commission Involvement

Certain projects may require the involvement of the Public Utility Commission. It will be the responsibility of the project sponsor to contact the Public Utility Commission to secure the necessary actions by that agency.

Bidding

For projects that require a contractor to perform physical construction or rehabilitation, the sponsor's professional will assemble the contract proposal package. PennDOT's Engineering District Office will review the Plans, Specifications, and Estimate (PS&E) package. PennDOT will bid the project(s) through the ECMS system. ECMS (Engineering and Construction Management System) is an internet-based computer system used to manage the design and construction of PennDOT projects. Local project sponsors are required to register as a PennDOT ECMS Business Partner, as is any organization that has a business relationship with PennDOT. FTA grants will have a different procedure.

Construction

Project sponsors may proceed with the construction phase of the project only upon receipt of PennDOT's written authorization (notice to proceed), which ensures that all necessary approvals have been secured. An approved contractor must perform construction. All materials used in conjunction with the project must meet project specifications and special provisions included in the Plans, Specifications, and Estimate package.

NOTE*:* 12-15% of the estimated construction cost is used for project inspection. The 15% *must* be included in the Total Construction Costs.

Cost Increases/Changes in Scope of Work

Each programmed project has undergone air quality analysis and has been approved for a specific scope of work and funding level based on the information submitted by the project sponsor. When preparing a project scope and cost estimate, all project materials and labor costs should reflect the anticipated year of construction. It should not be assumed that cost increases can be covered with state or federal funds. There may be cases where the sponsor must bear any unforeseen project cost increases. It should be noted that **only the project in which funding is awarded is the project that can use CMAQ funds**. If the project that is awarded funding cannot proceed, the funding will return to the SPC CMAQ line item in the TIP.

Maintenance

As maintenance is required for all projects constructed with federal funds, the project sponsor will be responsible for the maintenance of the completed project. The project sponsor should develop a plan for maintenance, upkeep and operation of a project constructed with federal funding. As part of the application for funding, the sponsor should clearly illustrate its capacity to carry out on-going maintenance once the project is complete.

Project Cancellation

A project sponsor may, at any time in the project development process, decide to cancel the project and drop out of the program. The project sponsor will be responsible for the reimbursement of all federal funds received as of that date, as well as for PennDOT staff costs incurred as a part of the project. The sponsor will also be responsible for payment of all outstanding invoices to all project contractors.

Appendix B: Tables

2023-2026 TIP – CMAQ Project Rating Scorecard

Project Name:_____ ID: _____

	Scoring Factors	High (3)	Medium (2)	Low (1)	N/A (0)	Weight	Score
Air Quality Technical Analysis Factors							
1.	Change in Emissions					1	0
2.	Change in Vehicle Miles Traveled					1	0
3.	Change in Vehicle Trips					1	0
4.	CMAQ Cost per Unit Change in Emissions					1	0
5.	CMAQ Cost per Unit Change in Vehicle Trips & Vehicle Miles Traveled					1	0
	Air Quality Technical Analysis Factors Score						0
Ancillary Selection Factors							
1.	Consistency with *Smart Moves for a Changing Region*					1	0
2.	Congestion Management Process (CMP) Corridor Rating					1	0
3.	Safety Improvements					1	0
4.	Funding Bonus Point? Yes ☐ No ☐					1	0
5.	Air Quality Nonattainment Status in Project Area Bonus Point? Yes ☐ No ☐					1	0
6.	Diesel Emissions Reduction Potential Bonus Point? Yes ☐ No ☐					1	0
	Ancillary Selection Factors Score						0
Deliverability / Project Readiness							
1.	Project Scope					1	0
2.	Project Schedule					1	0
3.	Project Cost Estimate					1	0
	Deliverability / Project Readiness Score						0
	Total Score						0

Table B-1, August 2021

2023-2026 TIP – CMAQ Application Forms by Project Type

SPC CMAQ Application Form	Project Type
Application Checklist	All Projects
Candidate Project Description	All Projects
Project Budget and Schedule	All Projects
Project Delivery Checklist	All Projects
Commuter Bicycle and Pedestrian Improvements	Bicycle Use Marketing / Promotion Bikeway / Bike Lane Improvements Improved Bike Access to Transit Pedestrian Network Improvement
Transportation Demand Management	Area-wide Rideshare Program Carpool/Vanpool Parking Incentives Compressed Work Week Employer-Based Rideshare Program Expansion of Existing Vanpool Program Expansion of Existing Park-and-Ride Facilities Guaranteed Ride Home Programs New Park-and-Ride Facilities New Vanpool Program Off-Street Parking Management in Commercial/CBD Areas Public Education, Outreach, Marketing, Promotions Telework Promotion
Traffic Flow Improvements	Traffic Signal Improvements Intersection Improvements/ Roundabouts Bus Lanes (queue jump or bus-only thru) Bus Pull-Offs Electronic Toll Collection at Toll Plaza Incident Management / Traffic Control Center Deploy ITS HOV/HOT Facilities
Diesel Emissions Reductions and Alternative Fuel Technologies	Commercial Marine and Locomotive Diesel Engines Off-Road Diesel Engines Diesel Emission Control Technology and Equipment Alternate Fuel Vehicles
Transit Improvement and Programs	Bus Rapid Transit Change in Service Frequency for Existing Service Change in Time of Day for Existing Service Financial Incentives for Potential Transit Users High Speed Rail New Fixed-Guideway Service New Express Service New Local Service New Shuttle Service Transit Amenities Improvements Transit Center Transit Vehicle Replacement / Fleet Expansion
Other Projects	Advanced Technology Vehicles Vehicle-to-Infrastructure Communications Equipment Commuter Choice Tax Credit Long Distance Commuter Ferry Truck Stop Idling Reduction Freight and Intermodal Facilities Port-Related Freight Operations

Table B-2, August 2021

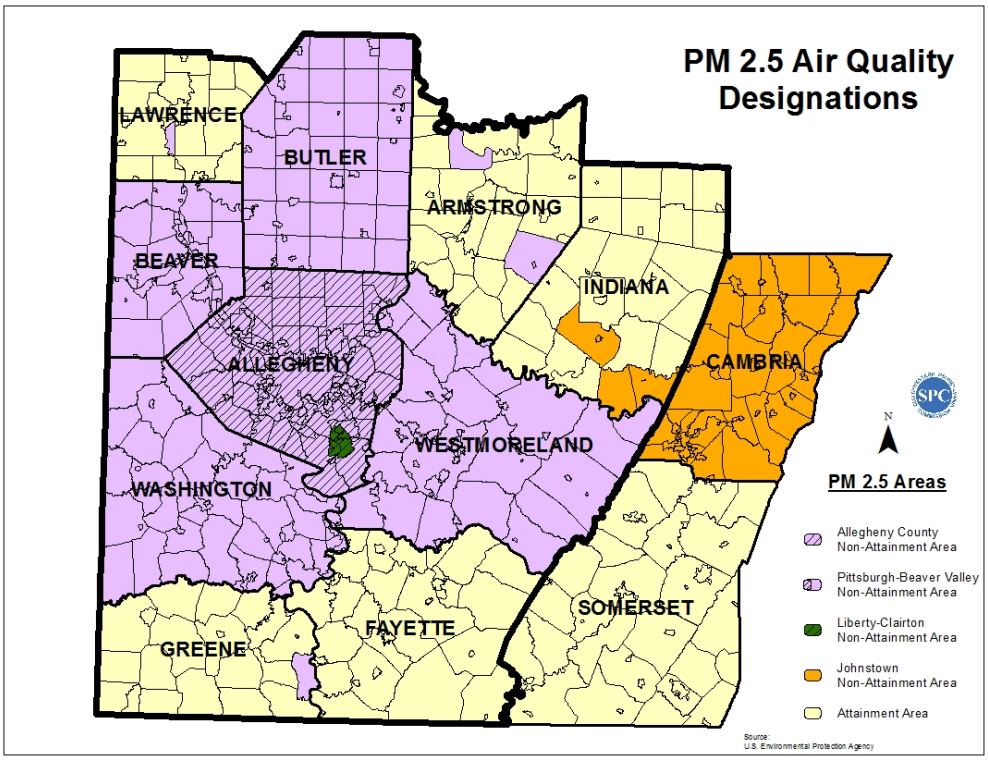
2023-2026 TIP – CMAQ Evaluation Committee Membership

Interest Group	Number from Group	Representing	Other Criteria
Planners	11	Counties/City of Pittsburgh	1 per SPC Member County/City of Pittsburgh
PennDOT Districts	3	PennDOT Districts	1 per local PennDOT District
Transit	3	Transit Operators	1 each - Urban, Small Urban, Rural
PennDOT Central Office	2	PennDOT Central Office	Select from: Program Center, Air Quality Section, Bureau of Public Transit
TMA	1	Transportation Management Associations	1 of ACTA, OTMA or PDP
Air Quality Agency	1	Air Quality Regulatory Agency	PaDEP or Allegheny County Health Department
Active Transportation	1	Active Transportation Organizations	Bike PGH, TBD
Freight	1	Freight Organization	Port of Pittsburgh Commission

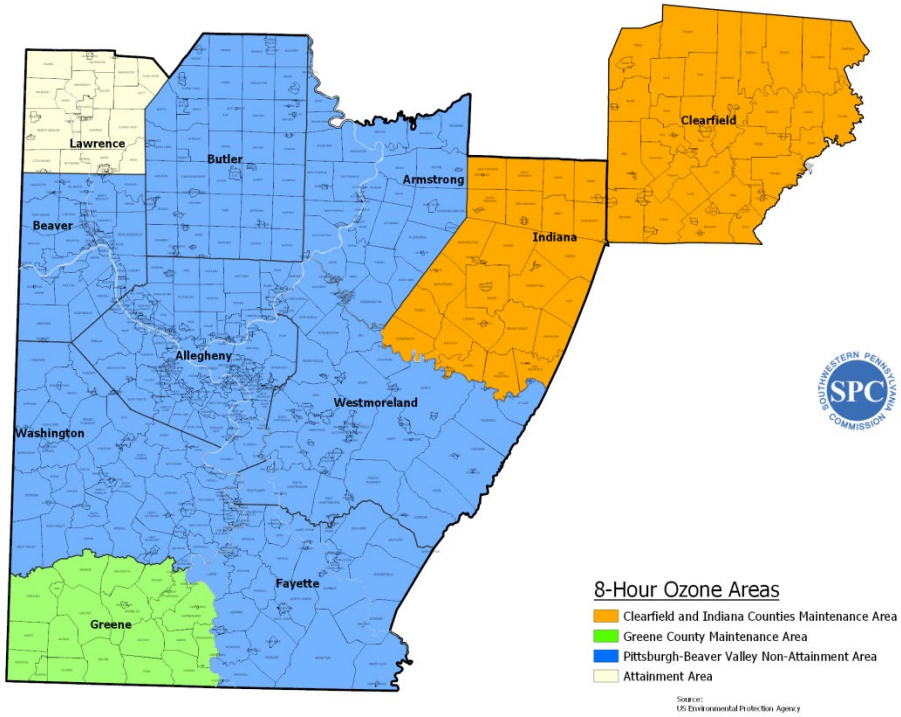
Resource Agencies
Federal Highway Administration – Pennsylvania Division
Federal Transit Administration – Region III
PennDOT – Rail Freight Bureau
SPC – CMAQ Program Staff

Table B-3, August 2021

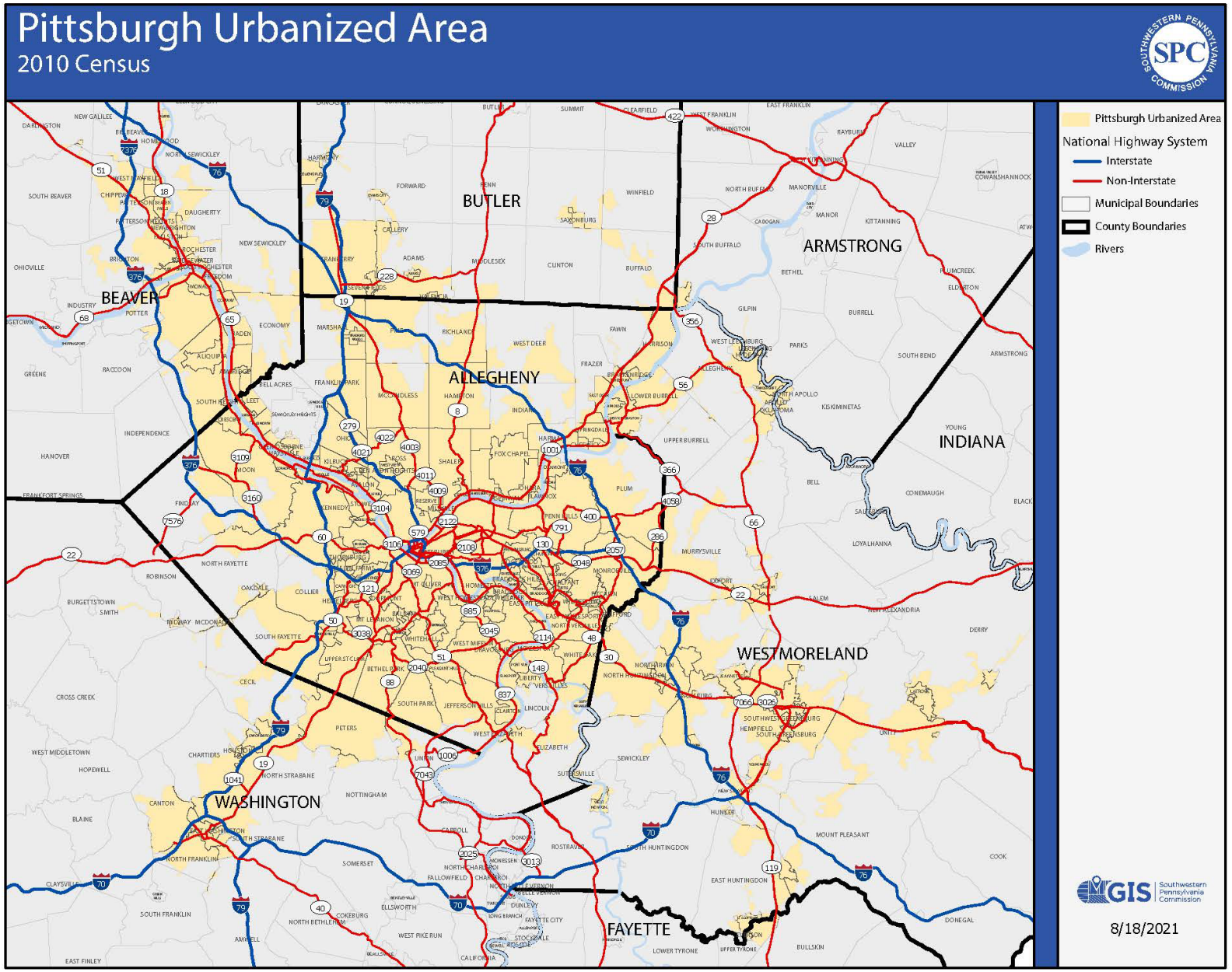
Appendix C: Maps – Air Quality Nonattainment & Maintenance Areas in Southwestern Pennsylvania, NHS in Pittsburgh Urbanized Area



Map A - PM2.5 Areas in Southwestern Pennsylvania, August, 2021



Map B - 8-Hour Ozone Areas in Southwestern Pennsylvania, August 2021



Map C-NHS in Pittsburgh Pennsylvania Urbanized Area August 2021

Appendix D: Links to Additional Information and Staff Contacts

The links presented below provide information and guidance about the CMAQ Program and related topics that should be very useful to project sponsors as they complete their candidate CMAQ project applications. Click on the hyperlinks for access to each resource item.

- SPC Homepage
- CMAQ Program Guidance and Procedures Document and Application Forms
- CMAQ Mid Performance Period Report, September, 2020
- SPC Transportation Performance Management Site
- PennDOT Local Project Delivery Manual (PennDOT Publication 740, June 2019)
- Code of Federal Regulations: Planning Assistance and Standards
- FHWA CMAQ Information Webpage
- FHWA's "CMAQ Public Access System", containing project data from state DOT annual reports
- FHWA CMAQ Program Interim Guidance, November, 2013
- FHWA Interim Guidance on CMAQ Operating Assistance under MAP-21, July 2014
- SPC Congestion Management Process (CMP) Webpage
- SPC CMP Corridors
- SPC CMP Strategies
- SPC Regional Active Transportation Plan
- SPC Transportation Demand Management Strategic Action Plan
- US Environmental Protection Agency – Diesel Retrofit Technology Verification Webpage
- Air Quality and Congestion Mitigation Measure Outcomes Assessment Study: Summary Report of Findings, FHWA, September 2014, (Report required by MAP-21 Section 1113)
- Air Quality and Congestion Mitigation Measure Outcomes Assessment Study: Final Technical Report, FHWA, September 2014, (Report required by MAP-21 Section 1113)
- CMAQ Evaluation and Assessment, Phase 1 Final Report, FHWA, October 2008, (Report required by SAFETEA-LU Section 1088)
- CMAQ Evaluation and Assessment, Phase 2 Final Report, FHWA, July 2009, (Report required by SAFETEA-LU Section 1088)

SPC Staff Contacts:

SPC CMAQ Coordinator:

Lillian Gabreski
lgabreski@spcregion.org
(412)-391-5590 ext. 327

SPC Air Quality Analysis Coordinator:

Dan Bernazzoli
dbern@spcregion.org
(412) 391-5590 ext. 346

SPC SharePoint Coordinator:

Kristin Baum
kbaum@spcregion.org
(412) 391-5590 ext. 329