Regional Traffic Signal Program Program Guidance and Application Instructions



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Southwestern Pennsylvania Commission (SPC) Regional Traffic Signal Program Guidelines and Application Instructions

Program Guidelines

1. Overview

Primary funding for the Regional Traffic Signal Program's 4th Cycle is from the federal Congestion Mitigation Air Quality (CMAQ) Program included in the region's Transportation Improvement Program. The CMAQ Program provides funds for transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards for ozone, carbon monoxide, and particulate matter. More details about the federal CMAQ program can be found at: http://www.fhwa.dot.gov/environment/air_quality/cmaq/

2. Introduction

The Southwestern Pennsylvania Commission (SPC) is the cooperative forum for regional collaboration, planning, and public decision-making. The Commission serves as the official Metropolitan Planning Organization (MPO) for a 10-county region including the City of Pittsburgh and the counties of Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland. SPC's Regional Traffic Signal Program will be assisting local governments with implementing projects that optimize the operations of traffic signals throughout the region.

Traffic signal coordination is a cost effective way of reducing vehicle emissions, improving mobility, and enhancing safety on the region's arterials. Many of the region's traffic signals have either retiming/coordination needs or equipment needs.

SPC anticipates that up to \$4,000,000 in federal funds are available from the 2023-2026 Transportation Improvement Program to implement multiple traffic signal projects.

3. Goals of the Regional Traffic Signal Program

The goals and objectives of the Regional Traffic Signal Program are to provide the necessary funding, technical assistance, and streamlined project management in order to facilitate implementation of optimized traffic signal operations through improvements along corridors in the Southwestern Pennsylvania region. The results of these corridor improvements are improved safety for all users, reduced fuel consumption, reduced vehicle stops, and reduced emissions.

4. Project Types

Optimizing the operations of traffic signals will be accomplished through two types of projects within the Program:

- 1) Regional Signals In Coordination (SINC) projects; and
- 2) Regional Signals In Coordination with Equipment Upgrades (SINC-UP) projects.

These projects are described as follows:

- <u>Regional Signals in Coordination (SINC) Projects:</u> SPC plans to launch a number of SINC projects providing funding and technical assistance to agencies that own, maintain, and operate traffic signals in the SPC region. This technical assistance will include improving traffic signal coordination and optimization through simulation modeling and implementation of revised phasings and/or timings at 2 or more intersections. Proposals for SINC projects involving two or more signals shall involve signals that have controller clocks that can be synchronized to a common reference (via interconnect, GPS, etc.) and are currently running in free operation or whose coordination plans have not been updated in the past three years. If this is not the case, and signals are not adequately equipped, the applicant should consider applying for a SINC-UP project instead of a SINC project. SPC's consultant tasks will include:
 - Field Reconnaissance and Data Collection: Field reconnaissance to inspect and verify field conditions and collect information on the study area required for capacity analyses. Turning movement counts during typical weekday and/or weekend peak period conditions.
 - Capacity analysis of existing conditions utilizing SYNCHRO/SIM Traffic and Highway Capacity Software (HCS). Based on the above analyses of existing conditions, the consultant will recommend short-term operational improvements such as revised signal phasing, optimized signal timings, and offsets, additional signal coordination, revised pavement markings, and revised signage. Another capacity analysis of optimized existing conditions incorporating these short term operational improvements will also be completed.
 - A review of the accident history.
 - Draft report issued.
 - Implementation and Evaluation: Assistance with implementation of new settings and timings, fine-tuning of timings in the field, recording any changes, and monitoring

effectiveness of changes. Activities will include coordinating implementation with local governments and their signal maintainers.

- A final report will be prepared to include a summary of the results of the above tasks. The report will include incorporation of comments received and measures of effectiveness obtained through Synchro's built-in calculations of delay, number of stops, travel time, and emissions. The associated benefits related to these factors and the proposed operational improvements will be documented in the report. The report will also include recordation of final phasings, timings, offsets, coordination data, and any other changes on marked-up signal permit drawings.
- Regional Signals In Coordination with Equipment Upgrades (SINC-UP) Projects: SINC-UP projects provide additional support from SPC and its planning partners to agencies that own, maintain, and operate traffic signals in the SPC region. SINC-UP projects typically implement minor traffic signal equipment upgrades that are required in order to improve traffic signal coordination and optimization at 2 or more intersections. Similar to SINC projects, SPC will provide the traffic engineering support listed above (traffic counts, analyses, and timing/coordination data). Preliminary engineering and design of these projects will be completed by SPC's engineering consultant. The construction phase for these projects will be overseen and managed by the Pennsylvania Department of Transportation in coordination with SPC. Funding will be transmitted via a reimbursement agreement between SPC and the Pennsylvania Department of Transportation (PennDOT). Design and construction reviews will be coordinated between SPC and PennDOT. Eligible traffic signal equipment upgrades will typically be limited to controller, communication, signal indications and other electrical components that will have a direct result in optimizing operations. Eligible projects may include traffic signal work scope that would improve progression and the operation of the signalized intersection while not impacting, disturbing, or modifying pedestrian usability such as:
 - A. Modifications to traffic signal timings.
 - B. Modifications to traffic signal phasing.
 - C. Replacement or modifications to traffic signal coordination equipment and cables.
 - D. Replacement or modifications to traffic signal controllers, controller cabinet assemblies, electrical service and related electronic equipment.
 - E. Replacement of incandescent vehicular and pedestrian signals with LED Module vehicular and pedestrian signals.

- F. Replacement or modifications to pavement markings on the roadway.
- G. Replacement or modifications to vehicular detectors and associated hardware.
- H. Replacement or modifications to traffic control signage
- Replacement or modifications to electrical and communication conduit and junction boxes that do not impact, disturb, or modify pedestrian usability.
- J. Replacement or modifications to traffic signal electrical cabling.
- K. Removal of existing signal installations which are no longer warranted.
- L. In-kind replacement or repair of existing sidewalks and accessible ramps only to the extent that is necessary due to the above mentioned work (areas must be less than 100 linear feet and less than 500 square feet).
- M. Maintenance and protection of traffic and other incidental items related to the above work.

Special projects such as projects that involve adaptive traffic signal technologies, emergency pre-emption, and transit signal priority are eligible as SINC-UP projects, however, these projects will be considered on a case-by-case basis, given their complexity and higher cost.

Due to the fiscal constraints of the program, SINC-UP projects typically <u>will not</u> include the following signal scope items, unless approved by selection committee:

- A. Relocation or replacement of traffic signal pole or mast structures.
- B. Signalizing intersections which are currently unsignalized.
- B. The addition of pedestrian features to an intersection where none currently exist (e.g., new sidewalks or accessible ramps where none currently exist; new pedestrian signals where none currently exist).
- C. Roadway widening.
- D. Work which will permanently impact, disturb, or modify pedestrian usability.
- E. Work which involves new right-of-way or major utility considerations.
- F. Funding of complete replacement of signal infrastructure (unless otherwise authorized by project selection committee).

<u>Successful applicants will be required to provide minimum local match funding of 20% of total</u> <u>project costs.</u>

In addition to receiving requests for projects, SPC and its planning partners will target and select key arterial corridors in the region where projects could be beneficial based on the data available.

5. Eligibility

All local governments who own and operate traffic signals in the SPC region are eligible to apply. Other public agencies within these areas, such as transit agencies and councils of government, are also eligible to apply if authorized (in writing) to act on behalf of the local governments that own and operate traffic signals within the proposed project limits. <u>Multi-municipal and multi-agency coordination and joint applications are encouraged</u>. Projects will be evaluated and selected based on the potential to decrease delay, enhance mobility, improve signal system efficiency and improve air quality. All applications must be for projects involving two or more intersections.

6. Program Requirements

Within a time frame designated by SPC, recipients will be required to enter into a Local Project Agreement with SPC to waive all claims and indemnify SPC and others against any third-party claims that may result from the agency's participation in the program. A sample draft agreement is attached to this document. SPC's typical indemnification and insurance requirements with our consultants are available by request for preliminary review by your agency.

Prior to commencement of any work, the executed Local Project Agreement shall:

- 1) Indicate the recipient's commitment to their responsibility for local match funding share required for the project; and
- 2) Indicate scope, schedule, budget and each agency's responsibilities for the project.

This agreement document will be executed only after applicant has been selected and a scope and budget have been agreed upon in an initial meeting between SPC and the applicant.

After completion of the project, recipients will be encouraged to report the benefits of the project to their governing board and SPC, based on data that SPC provides in a final report.

7. Benefits of Participation

Retiming traffic signals is one of the most cost effective ways to alleviate congestion, eliminate unnecessary delays, improve traveler safety, and reduce customer complaints. Across the U.S., the results prove that signal timing is a very cost effective measure, providing benefit-cost ratios of 40:1 or even higher. Projects in the first three cycles of

SPC's Regional Traffic Signal Program yielded a benefit-cost ratio of 51 :1. Benefits include reductions in travel time, fuel consumption, and mobile source emissions.

The regional program is set up to ease the burden on local government in terms of time and expertise required to optimize traffic signals by providing engineering consultants to perform as much of the work as possible. In addition to basic signal coordination services provided by SINC projects, agencies will also receive all of the new traffic data that was collected. In addition to the above benefits, SINC-UP projects provide the opportunity to upgrade specific signal equipment that will enable retiming of traffic signals in order to achieve optimized operations.

8. <u>Anticipated Schedule for Selecting Projects from Application Requests</u>

Call for Projects	July 25, 2022
Receive all project applications	September 30, 2022
Review/rank applications	
(by SPC Committee)	September 30-October 28, 2022
Select SINC and SINC-UP projects	by November, 2022

9. How To Apply

Electronic filing of the application is preferred. This can be done by pressing the "SUBMIT" button at the end of the application which will allow you to send documents via e-mail. The "CLEAR" button will erase all data that you have entered onto the application, while the "SAVE" button will allow you to save any data that you have entered onto the application. Any electronic attachments should be submitted in .pdf format. Note that a completed application, with all attachments, must be received at SPC offices by <u>3:00 p.m. on Friday</u>, <u>September 30, 2022</u>. If hard copies are submitted, submit five hard copies of each completed application, including all attachments. Applications submitted after the above time and date will not be considered. Applications can be downloaded from SPC's website at:

https://www.spcregion.org/programs-services/transportation/operations-safety/Applications can be submitted electronically to jspano@spcregion.org

Note that the application can be used for SINC projects and SINC-UP projects. Applications and all inquiries should be submitted to the Program Manager at the address shown below. For telephone inquiries, call 412-391-5590, ext. 341 or e-mail <u>ispano@spcregion.org</u>

Josh Spano Manager of Transportation Operations and Safety Southwestern Pennsylvania Commission Two Chatham Center, Suite 500 112 Washington Place Pittsburgh, Pennsylvania 15219-3451

10. Evaluation Factors

SPC staff will conduct an initial screening of all applications received by the above deadline to determine whether the eligibility requirements have been met. Applications that meet eligibility requirements will be reviewed and assessed by a selection committee based on potential to decrease delay, enhance mobility, improve signal system efficiency and improve air quality. Corridor evaluation factors that may be considered in the selection process include existing delay, number of intersections and municipalities being coordinated, average daily traffic, transit ridership, truck traffic, accident rates, and proposed local match funding. Successful applicants will be notified in **November, 2022**

Application Instructions for SINC and SINC-UP Projects

Section 1: Project Name

Provide a name for the project (required).

Section 2: Applicant Contact Information

Provide primary applicant's contact information: contact person's name, position title, agency, address, phone number, fax number, and e-mail address (all required).

Section 3: Other Participating Agencies

Indicate if application is being submitted on behalf of other agencies or local governments by checking "Yes" or "No" (required).

If application is being submitted on behalf of other agencies or local governments, provide the contact person's name, position title, agency, phone number, fax number, and e-mail address for each additional agency or local government.

Section 4: Project Information

- Section 4a: Check the peak periods proposed for signal coordination. Check all that apply. Checking all scenarios will not adversely affect the applicant's chances of receiving funding.
- Section 4b: For the project's physical limits, either check "One Arterial Corridor in One Jurisdiction" or "One Arterial Corridor in Multiple Jurisdictions". <u>Separate applications must be filed for each corridor being proposed for improvements.</u>
- Section 4c: Provide a general project description for the proposed project.
 - Include information on number of intersections, general scope of work, and goals and objectives of the project.
 - Attach a map of the project, showing project limits, jurisdictional boundaries, location of signalized intersections and any existing signal coordination system.
 - Indicate the county or the counties where the proposed project is located.
 - Indicate the major street's (corridor's) name.
 - Indicate whether or not the major street is a Congestion Management Program (CMP) Corridor. To find out more about CMP corridors, visit

https://spc.maps.arcgis.com/apps/MapSeries/index.html?appid=bab795b02 e654a15a354b60134e3dfd8

• Section 4d: Provide the total number of signalized intersections in the proposed project. In addition, in the first column, provide the minor street that intersects the major corridor for each intersection within the proposed project.

In the second column, provide the following:

- Provide the potential scope items at each intersection using the letter codes shown in the application (Letter code "A" is required for all intersections). In addition, in the space provided at the end of this section, provide a description of any additional construction scope not covered by the letter codes.
- Section 4e: Please check any current data that is available from the applicant(s). Information such as-built traffic signal permit drawings, current timing sheets/coordination plans, any recent traffic studies that recommend retiming and recent traffic counts would be useful. Do not attach the information at this time.
- Section 4f: Please indicate whether or not all of the traffic signals that will be retimed as part of the proposed project have controller clocks that can be automatically synchronized to a common time reference (via interconnect, GPS, radio, etc.). It is suggested that you consult with your signal maintainer.
- Section 4g: Please indicate "Yes" if either of these statements are true:
 - All of the traffic signals that are proposed for retiming are currently running in free operation.
 - All of the traffic signals that are proposed for retiming are coordinated, but it has been at least three (3) years since the last time the coordination plans were updated.

It is suggested that you consult with your signal maintainer.

• Section 4h: Provide a preliminary cost estimate to implement the proposed project on Lines 1 and 2. It is suggested that you consult with your signal maintainer, public works staff, or engineer. If project is selected, this estimate will be reviewed by SPC staff and the selection committee. A preliminary estimate of total costs should be provided for engineering and design (Line 1) and construction (line 2). Any previous dollars spent by the applicant on each of these project costs should be documented in the second column. Other project costs and totals will be automatically calculated on lines 3 through 8 based on figures entered on lines 1-2. For SINC projects (retiming only, no equipment needed), please enter \$0 for Line 2 (Construction Costs).

Section 5: Funding

This program requires a minimum 20% local match of total costs that would be the responsibility of the applicant(s).

• Indicate your anticipated sources of funding in the first column and the proposed funding amounts in the second column. At the end of this section, the proposed local match percentage will be automatically calculated by dividing the total local match funding amount by Total Project Costs. Minimum local match required is 20%.

Section 6: Demonstration of Support, Funding, and Application Signatures

The primary applicant, as well as other applicants documented in Section 3 of the application, should review the statement, and if in agreement, sign and date the application. The primary applicant's typed name will suffice as the electronic signature affirmation. Other applicants can also provide letters of support for the application in lieu of signing. Also attach executed local government resolutions and/or agreements committing local match share of Total Project Costs.

Additional Information (optional)

If you need more space to provide any additional information regarding your proposed project, please utilize and submit as many additional information sheets that you determine are necessary. Additional information should be provided in Microsoft Word or Excel format.

Filing Application

Electronic filing of the application is preferred. This can be done by pressing the "SUBMIT" button at the end of the application which will allow you to send documents via e-mail. The "CLEAR" button will erase all data that you have entered onto the application, while the "SAVE" button will allow you to save any data that you have entered onto the application. Any electronic attachments should be submitted in .pdf format. An original signature page (Section 6) with signatures should be mailed separately to the address below. Note that a completed application, with all attachments, must be received at SPC offices by <u>3:00 PM Friday</u>, <u>April 13, 2018</u>. If hard copies are submitted, submit five (5) hard copies of each completed application, including all attachments and send to:

Southwestern Pennsylvania Commission Two Chatham Center, Suite 500 112 Washington Place Pittsburgh, Pennsylvania 15219-3451 Attention: Domenic A. D'Andrea Manager, Transportation Operations and Safety

Applications submitted after the above time and date will not be considered. (SAMPLE) AGREEMENT FOR MUNICIPALITIES X AND Y SINC-UP PROJECT REGIONAL TRAFFIC SIGNAL PROGRAM SOUTHWESTERN PENNSYLVANIA CORPORATION

THIS AGREEMENT is made by and between the Southwestern Pennsylvania Corporation ("SPC"),

And

The Municipalities of X and Y, political subdivisions in Allegheny County, of the Commonwealth of Pennsylvania, acting through its proper officials ("MUNICIPALITIES")

RECITALS:

WHEREAS, the SPC has initiated the Regional Traffic Signal Program consistent with the goals and objectives of the Region's Long Range Plan "*Mapping the Future*" and the 2015 Regional Operations Plan; and

WHEREAS, the goals and objectives of the Regional Traffic Signal Program are to facilitate optimized traffic signal operations along key corridors in the region that will result in reduced congestion, improved safety, improved mobility, reduced vehicle stops, reduced fuel and energy consumption, reduced vehicle emissions, and reduced impacts to our environment; and

WHEREAS, SPC will enter into agreements and coordinate with local governments to implement signal retiming projects (Signals In Coordination or "SINC" projects-no construction) and signal equipment upgrade projects with retiming ('SINC-UP" projects-includes construction) in order to achieve the above goals and objectives; and

WHEREAS, SPC will be utilizing federal-aid Congestion Management Air Quality funding from the Federal Highway Administration ("FHWA") for the above named project; and

WHEREAS, SPC and the MUNICIPALITIES has signified its willingness to participate in the Program by undertaking the improvements described in Paragraph 2(a) in accordance with the terms, conditions and provisions contained in this Agreement and the terms, conditions and provisions of the Reimbursement Agreement between the Pennsylvania Department of Transportation ("PENNDOT") and SPC attached as Exhibit "A".

NOW, THEREFORE, the parties, intending to be legally bound, agree to the following:

1. INCORPORATION BY REFERENCE

The recitals set forth above are incorporated by reference as a material part of this Agreement.

2. GENERAL CONDITIONS

SPC and MUNICIPALITIES shall participate in the preliminary engineering, final design, and construction of improvements (collectively, "Project") at the following locations in accordance with policies, procedures and specifications prepared or approved by the PENNDOT and the FHWA, where applicable.

(a) Municipality X and Y SINC-UP Project ("Project")

Project Limits and Description of upgrades and retiming (final scope to be determined in final design):

- Retiming study and new timing implementation at up to 4 signalized intersections along Main Road. A maximum of three (3) new time of day plans would be produced from the study (Weekday AM, PM and Off-peak). These intersections include:
 - 1. Main Road and Minor Road 1
 - 2. Main Road and Minor Road 2
 - 3. Main Road and Minor Road 3
 - 4. Main Road and Minor Road 4
- Design and construction of anticipated signal equipment upgrades that will facilitate coordinated operation including the following (final scope of work to be determined in final design):
 - New NEMA pole mounted controller assemblies at intersections 2,3, and 4 (listed above)
 - New LED vehicular signal heads at intersections 2,3,and 4;
 - New LED pedestrian countdown signal heads at intersections 2,3 and 4
 - New pedestrian push buttons at intersections 2,3, and 4;
 - New GPS units for time based coordination at all intersections
 - New electrical disconnect box at intersection 3;
 - Some new stop bar and crosswalk pavement markings at intersections 2,3, and 4;
 - New cabinet elbows at intersections 2,3,and 4; and
 - New electrical wiring and signage as needed
- (b) SPC and MUNICIPALITIES shall participate in the administration of the Project in accordance with the provisions of this Agreement and more specifically with the most current version of PENNDOT Publication No. 740, *Local Project Delivery Manual* incorporated into this Agreement as though physically attached to it.
- (c) The Project Cost Estimate, attached to and made a part of this Agreement as Exhibit "B," sets forth the total cost for the Project which are **<u>\$192,156</u>**.

3. OBLIGATIONS

- (a) The SPC, by contract with engineering consultant, shall complete the signal retiming study, design, and contract development, including preparation of all plans, specifications, estimates and bid proposal documents required to bid the Project. The signal retiming study and design shall be in accordance with policies, procedures and specifications prepared or approved by PENNDOT and the FHWA.
- (b) The SPC, by contract with engineering consultant, shall secure all necessary approvals, permits and licenses from all other governmental agencies as may be required to complete the Project. Unless otherwise determined by PENNDOT or FHWA, it is anticipated that all projects would be classified "Categorical Exclusion 1A, no Evaluation required". In addition, it is anticipated that only a revised traffic signal permit will be required to be issued for SINC-UP projects. This permit shall be signed by the MUNICIPALITIES without delay and issued by PENNDOT after design approval.
- (c) The SPC, upon completion of design phase, shall submit all required bid documents to PENNDOT and the MUNICPALITIES for review and approval. By Agreement with SPC, PENNDOT shall prepare the bid proposal documents required to bid the Project and issue an authorization to advertise for bid. All bid documents shall require that the contractor be prequalified by the PENNDOT pursuant to 67 Pa. Code Chapter 457, *Prequalification of Bidders*.
- (d) PENNDOT shall inspect and supervise adequately all construction work in accordance with the approved plans and specifications, including, but not limited to, the most current version of PENNDOT Publication No. 408, and its supplements and amendments. Periodic progress meetings will be held as necessary between SPC, PENNDOT, its contractors, and MUNICIPAL representatives to discuss project progress, schedule, and budget and resolve any field issues.
- (e) MUNICIPALITIES shall provide 20% of total Project costs as Project Local Match which equals <u>\$38,432</u>. MUNICIPALITIES shall provide a cash amount of <u>\$38,432</u> as local match funding upon execution of this agreement. This amount shall be provided to SPC by each municipality as follows:

Municipality X: \$14,887; Municipality Y: \$23,545

(f) MUNICIPALITIES agree to provide SPC, PENNDOT, and its contractors unlimited access to the existing traffic signals and related equipment listed in Paragraph 2(a) during the duration of the Project. This access is required to perform the described signal improvements. MUNICIPALITIES shall grant this access upon SPC's request, without delay.

- (g) The Projects under the Regional Traffic Signal Program involve only signal retiming and minor traffic signal equipment upgrades. Projects involving known utility considerations will not be accepted into this Program. It is anticipated that the Project will not require relocation or adjustment of any existing utility facilities. In addition, Projects involving known right-of-way considerations will not be accepted into this Program. It is anticipated that the Project will not require new right-of-way acquisition. MUNICIPALITIES shall also be responsible for any and all costs incurred in excess of those eligible for federal-aid participation including, but not limited to, the following:
 - (i) Time delays and extensions of time or termination of construction work caused by MUNICIPALITIES;
 - Unforeseen right-of-way and other property damages and costs resulting from the acquisition or condemnation, or both, of lands for the Project or the construction of the improvements;
 - (iii) Unforeseen utility relocations costs;
 - (iv) Unforeseen costs for environmental litigation and reports; and
 - (v) All other unforeseen costs and expenses not included in the estimates of preliminary engineering, final design, utility relocation, right-of-way acquisition and construction costs, but which are directly related to or caused by the planning, design or construction of the Project.
- (h) SPC will determine when the Project is completed and provide written Notification of Project Completion to MUNICIPALITIES. Upon receiving the Notification of Project Completion from SPC, the MUNICIPALITIES, at their sole cost and expense, shall own, operate and maintain all of the completed improvements financed under this Agreement that fall under its jurisdiction. The MUNICIPALITIES shall certify that it shall make available sufficient funds to provide for the described maintenance program. Exhibit "C," attached to and made a part of this Agreement, lists the minimum maintenance requirements that MUNICIPALITIES must perform. This agreement does not supersede any existing maintenance agreements between PENNDOT and MUNICIPALITIES. Also see Paragraph 4 below.
- (i) The Project will include new signal timings per Paragraph 2(a) that will be implemented by project's contractor. Adjustments in signal timings may be made by project's contractor prior to completion of the Project to facilitate optimized operations. The MUNICIPALITIES agree that no further adjustments in signal timing will occur within one year after receipt of the Notification of Project Completion unless agreed to by SPC.

4. MAINTENANCE AND OPERATION OF THE FACILITY

(a) This agreement does not supersede any existing maintenance agreements between PENNDOT and MUNICIPALITIES. Any and all existing maintenance agreements between

PENNDOT and MUNICIPALITIES shall remain in effect. This agreement does not supersede any existing multi-municipal maintenance agreements. PENNDOT, in concurrence with the FHWA, when applicable, shall determine the existence of acceptable methods of operation and maintenance. These operation and maintenance services shall include, but not be limited to, the following:

- (i) Periodic inspections;
- (ii) Functional review of traffic operations;
- (iii) Appropriate preventative maintenance, which shall include cleaning, lubrication and refurbishing of all electrical equipment;
- (iv) A systematic record-keeping system; and
- (v) A means to handle the notification and implementation of emergency repairs.
- (b) The existence of functioning maintenance and operation services shall not exempt the MUNICIPALITIES from complying with the provisions of the Vehicle Code (75 Pa. C.S. § 101 *et seq.),* as amended, pertaining to traffic control devices, or with applicable provisions of the State Highway Law (36 P.S. § 670-101 *et seq.*), as amended.
- (c) The MUNICIPALITIES agree that each party shall administer, enforce and maintain any statutes, regulations or ordinances within its jurisdiction necessary for the operation of the improvements. The parties further agree that the enforcement obligations relating to the regulations are governed by the statutes of the Commonwealth of Pennsylvania, and more particularly by those statutes relating to municipalities; the Vehicle Code, as amended; and the State Highway Law, as amended; as well as those ordinances, rules and regulations issued by appropriate governmental agencies in implementation of these statutes.
- (d) The MUNICIPALITIES acknowledge that the traffic controls and parking regulations necessary to be maintained on these improvements are shown on Exhibit "D," attached to and made a part of this Agreement.
- (e) MUNICIPALITIES acknowledge that PENNDOT may disqualify the MUNICIPALITIES from future federal-aid or state participation on MUNICIPAL maintained projects if the MUNICIPALITIES fail to:
 - (i) Provide for the proper maintenance and operation of the completed improvements; or
 - (ii) Maintain and enforce compliance with any statutes, regulations or ordinances under its jurisdiction necessary for the operation of the improvements.
- (f) The MUNICIPALITIES agree that PENNDOT shall withhold federal-aid or state funds, or both, until one or both of the following (as applicable) have taken place:
 - (i) The MUNICIPALITIES have corrected the operation and maintenance services.
 - (ii) The MUNICIPALITIES has brought traffic operations on the improvements, including enforcement of statutes, regulations or ordinances, up to a level satisfactory to the PENNDOT.

5. ABANDONMENT OR POSTPONEMENT OF PROJECT

- (a) If MUNICIPALITIES abandon or indefinitely postpone the Project for any reason whatsoever, MUNICIPALITIES may terminate this Agreement by sending to SPC a thirty-(30) day written notice of termination. By sending the written notice of termination, MUNICIPALITIES acknowledges that the SPC, PENNDOT, and FHWA will not participate in any costs of a project that is not completed and that the MUNICIPALITIES must reimburse the SPC for all costs incurred by SPC, PENNDOT, and FHWA for the Project. The MUNICIPALITIES shall reimburse SPC, within forty-five (45) days of receipt of a statement from the SPC, in an amount equal to the sum of all PENNDOT and FHWA funds received by SPC for return to PENNDOT and FHWA. Statement shall include information on any balance remaining after utilizing funds already received from MUNICIPALITIES.
- (b) If MUNICIPALITIES fail to reimburse SPC within the time period set forth in subparagraph (a) above, MUNICIPALITIES shall be in default pursuant to Paragraph 7 of this Agreement.

6. SAVE HARMLESS

The MUNICIPALITIES shall indemnify, save harmless and defend (if requested) the SPC, FHWA (if applicable), the Commonwealth of Pennsylvania, PENNDOT, and all of their officers, agents and employees, from all suits, actions or claims of any character, name or description, relating to personal injury, including death, or property damage, arising out of the preliminary engineering, final design, right-of-way acquisition, utility relocation, construction, or operation of the Project improvements, by the SPC, its consultant(s) or contractor(s), their officers, agents and employees, whether the same be due to the use of defective materials, defective workmanship, neglect in safeguarding the work, or by or on account of any act, omission, neglect or misconduct of the SPC, its consultant(s) or contractor(s), their officers, agents and employees, during the performance of said work or thereafter, or to any other cause whatever.

7. DEFAULT CLAUSE

If the MUNICIPALITIES fail to perform any of the terms, conditions or provisions of this Agreement, including, but not limited to, any default of payment for a period of forty-five (45) days, the MUNICIPALITY authorizes PENNDOT to withhold so much of the MUNICIPALITYS' Liquid Fuels Tax Fund allocations as may be necessary to complete the Project or reimburse the SPC, PENNDOT and FHWA, in full for all costs due under this Agreement; and MUNICIPALITIES authorize the DEPARTMENT to withhold such amount and to apply such funds, or portion thereof, to remedy such default.

8. DISPUTE RESOLUTION

The parties agree to abide by the dispute resolution processes described in Exhibit "E".

9. FHWA APPROVAL

The parties agree that their responsibilities under this Agreement shall be made contingent upon the approval, prior to commencement of work, of the Project's eligibility for participation in federal funds to the extent of the proportionate share detailed in Exhibit "A," limited to the maximum dollar amount shown there; and, if this approval is not obtained, neither of the parties shall be further obligated by the terms of this Agreement.

10. REQUIRED CONTRACT PROVISION

The parties agree, and the SPC shall also provide in its contracts for the Project, that all designs, plans, specifications, estimates of cost, construction, utility relocation work, right-of-way acquisition procedures, acceptance of the work and procedures in general shall at all times conform to all applicable federal and state laws, rules, regulations, orders and approvals, including specifically the procedures and requirements relating to labor standards, equal employment opportunity, non-discrimination, anti-solicitation, information, auditing and reporting provisions. The SPC shall comply, and shall cause its consultant(s) and contractor(s) to comply, with the conditions set forth in the most current version of the *Federal Nondiscrimination and Equal Employment Opportunity Clause* which is attached as Exhibits "F" and made a part of this Agreement. As used in this clause, the term "Contractor" means SPC.

11. CONTRACTOR INTEGRITY PROVISIONS

The SPC shall comply, and shall cause its consultant(s) and contractor(s) to comply, with the latest version of the Commonwealth of Pennsylvania's *Contractor Integrity Provisions*, which are attached as Exhibit "G" and made a part of this Agreement. As used in these provisions, the term "Contractor" means the SPC.

12. TERMINATION OF AGREEMENT FOR LACK OF FUNDS

The SPC may terminate this Agreement if the SPC does not receive the necessary federal or state funds allocated for the purpose stated in this Agreement. Termination shall become effective as of the termination date specified in PENNDOT's written notice of termination to the SPC specifying the reason for termination. To the extent that SPC is reimbursed by PENNDOT, SPC shall reimburse MUNICIPALITIES the unexpended cash portion of the local share amount shown in paragraph 3(e) within sixty (60) days of PENNDOT's written notice of termination.

13. EFFECTIVE DATE

This Agreement will not be effective until it has been executed by all necessary SPC officials as required by law. This Agreement shall remain in effect until the Project is abandoned or completed, whichever occurs first.

IN WITNESS WHEREOF, the parties have executed this Agreement the date first above written.

ATTEST:	MUNICIPALITY X*	
	BY	
Title:	Date Title	Date
ATTEST:	MUNICIPALITY Y*	
	BY	
Title:	Date Title	Date
ATTEST:	Southwestern Pennsylvania Co	rporation
	BY	
Title:	Date Title	Date

*MUNICIPALITYS' resolutions authorizing execution and attestation must accompany this Agreement; please indicate the signers' titles in the blanks provided and date all signatures.