

Project Development Workbook

FY 2017-2020 Local Program

Surface Transportation Program – Suballocated (STP-S)



EAST-WEST GATEWAY
Council of Governments

Creating Solutions Across Jurisdictional Boundaries

Gateway Tower
One Memorial Drive, Suite 1600
St. Louis, MO 63102-2451

December 2015

Table of Contents

- I. New Project Application Process
 - II. FY 2017-2020 TIP Development Guidelines
 - A. Introduction
 - B. Geographic Scope
 - C. General Policies
 - D. Project Sponsorship
 - E. Project Requirements
 - III. Surface Transportation Program - Suballocated (STP-S)
 - A. Program Summary
 - B. Project Eligibility
 - IV. STP-S Project Development and Selection Process
 - A. Project Identification and Development
 - B. Project Evaluation
 - C. Project Selection
 - D. Policy on Reasonable Progress
 - V. Congestion Management Report
-
- Appendix A Eligible Activities for STP-S program
 - Appendix B Congestion Management Strategies
 - Appendix C Environmental Justice and Project Utilization Index
 - Appendix D Glossary of Terms
 - Appendix E Roadway Safety Audit
 - Appendix F Present Serviceability Rating (PSR) for Sidewalk Evaluation
- Environmental Justice – Project Utilization Index (PUI)

I. New Project Application Process

Project sponsors interested in proposing projects for consideration under the Surface Transportation Program – Suballocated (STP-S) Program should do so by submitting an application by **Thursday, March 3, 2016, 4:00 p.m.** The STP-S New Project Online Application form can be accessed at: <http://www.ewgateway.org/tiponlineapp/stp2016.pdf>

The application is completed on the East-West Gateway (EWG) website. This file stores vital project information that is used to evaluate the projects. It's important that the data entered into our online application matches the completed project application delivered to EWG.

Project sponsors wanting feedback on applications may submit a preliminary copy by February 4, 2016. Simply mark preliminary on the application by that date if you desire comments. Due to volume of applications, each sponsor may receive no more than three preliminary application reviews (for all funding categories). East-West Gateway staff will review the applications submitted and comment by e-mail. Staff will return comments by February 18, 2016. If submitting a preliminary application for feedback, a final application must be submitted by March 3, 2016.

An application fee is required for each project that is submitted for consideration. The application fee is ½ of 1% of the federal funds being requested. For example, a sponsor requesting \$800,000 in federal funding would be required to pay a \$4,000 application fee. If the project is not recommended for funding, the application fee will be refunded. Counties (including the City of St. Louis) and states make annual contributions to East-West Gateway and as such a credit equal to their annual contribution is applied against their application fees.

Sponsors are encouraged to read the guidelines included in this workbook regarding project eligibility, the selection process, and the Policy on Reasonable Progress. Evaluation of individual projects, including air quality conformity, will utilize information provided in all areas of the application. Please provide all information as completely as possible. Additional relevant project data may be attached and is encouraged. If any of the information requested is unclear, incomplete, or missing, or if there are questions of applicability, contact Jason Lange in MO: (314) 421-4220 or IL: (618) 274-2750. Staff will provide assistance upon request.

A completed project application consists of one (1) printed original application, signatures, and supplemental information and one (1) electronic copy in Adobe Acrobat (.pdf) format containing the project application/signatures/supplemental information. Do not send or include multiple files, send one .pdf. Failure to provide supporting documentation for the evaluation areas will result in zero points for that area.

The printed original application must be postmarked by Thursday, March 3, 2016. Hand delivered originals and the electronic copy must be submitted by 4:00 p.m. on Thursday March 3, 2016. Electronic copies may be emailed, burned on a CD/DVD, or stored on a

removable disk drive in Adobe Acrobat file (.pdf). Applications received after the deadline will not be accepted. Early submissions are appreciated. Only use binder clips when submitting the printed project application/signatures/supplemental information. Sponsors may divide sections using tabs. **Please make sure applications are NOT bound or stapled.**

Project applications should be addressed to:

East-West Gateway Council of Governments
Attn: Transportation Planning Dept. - STP-S
Gateway Tower
One Memorial Drive, Suite 1600
St. Louis, MO 63102

Electronic submissions not included with final application should be emailed to: jason.lange@ewgateway.org. The subject should read: <Your City> - <Project Title> Application. For example: Subject: Big City - Main Street Intersection Application.

While sponsors are encouraged to provide as much additional relevant background information as they deem necessary, no project will be evaluated unless the application submitted by March 3, 2016 includes:

- Completed Project Application - Marked 'final'
 - Please note that the application form for new project submittals (STP-S New Project Application form) is available online only. <http://www.ewgateway.org/tiponlineapp/stp2016.pdf>
- Project application fee (½ percent of federal funds requested)
- Project application checklist (with signature)
- Supplemental materials including as necessary: pavement ratings, bridge ratings (from state DOT), accident data (summary of police reports), Level of Service Calculations). Failure to include required data will result in zero points in the associated category
- Location map
- Letter of permission from owner of facility (required if sponsor does not own roadway)
- Congestion Management Study, if required
- Estimate of Project cost* – download excel file from TIP application page
- Crash Summary Form* – download excel file from TIP application page (if necessary)
- ITS project consistency statement* (if necessary) – found on TIP application page
- Letter of project support from third party providing financial support (if necessary)
- Project Schedule
- Financial Certification of Matching Funds Signatures
- Person of Reasonable Charge Certification signatures
- Title VI Certification signatures

- Reasonable Progress and Right-of-Way Certification signatures (Missouri Projects Only)
- Typical section showing current and proposed improvements including bike/ped facility widths, lane widths, shoulder widths, # of lanes, etc. (One cross-section should show current, the second should show proposed)

Other required information includes:

- Operations and Maintenance form

Only one Operations and Maintenance form is required per sponsor regardless of the total number of projects submitted.

*Changes to STP-S application/evaluation since last round. Details follow in workbook.

- Crash Summary Form (.xls) – Sponsor must complete this form to gain points in safety. No form = zero points. Form found on TIP application page
- ITS project consistency statement required if ITS elements in project.
- Estimate of project cost (formerly detailed cost estimate) is required to be submitted as an excel file as well as included in the application.

II. FY 2017-2020 TIP Development Guidelines

A. Introduction

The Fixing America’s Surface Transportation (FAST) as enacted by Congress and signed by the President on December 4, 2015 includes regulations for categorical funding programs for highway projects and provides flexibility in the funding of all transportation projects. Opportunities are provided to fund roadway, transit, and other transportation projects from a number of funding categories.

Under FAST, a Metropolitan Planning Organization (MPO) is required to develop fiscally constrained long-range transportation plans and Transportation Improvement Programs (TIP). The East-West Gateway Council of Governments, as the MPO for the St. Louis region, selects projects in accordance with principles and framework identified in the long-range transportation plan for the region, *Connected2045*. These projects must be consistent with the region’s goals, objectives, and priorities in consultation with the states. The development of the FY 2017-2020 TIP is guided by metropolitan transportation planning, FAST, Section 1201.

B. Geographic Scope

The entire eight-county metropolitan area will be included in the FY 2017-2020 TIP. The area includes Madison, Monroe, and St. Clair counties in Illinois; the City of St. Louis; and Franklin, Jefferson, St. Charles, and St. Louis counties in Missouri.

C. General Policies

General policies established in FAST are followed in the programming of local transportation projects submitted for the FY 2017-2020 TIP.

- Project funding in the FY 2017-2020 TIP shall not exceed the anticipated available funds.
- The TIP will be limited to a single four-year period and be fiscally constrained.
- Procedures for the evaluation, selection, and programming of new projects in the FY 2017-2020 TIP will be based on policies and criteria approved by the EWGCOG Board of Directors and will be consistent with the provisions, regulatory guidance, and intent of FAST
- Projects will be programmed in specific federal funding categories suballocated through the Surface Transportation Block Grant Program. The funding categories included in this workbook are the Surface Transportation Program (STP-S) for Missouri and Illinois.
- Illinois - STP-S funds are available only for construction (not construction engineering) in FY 2020. Sponsors will be asked to revise the financial plan page and schedule in the application if applicable.
- Missouri - STP-S Funds are available starting in FY 2018 (preliminary engineering only), FY 2019 (except construction), and FY 2020 for three phases of work: preliminary engineering, right of way acquisition, and construction (including construction engineering). Sponsors will be asked to revise the financial plan page and schedule in the application if the financial plan does not match the funding availability.

D. Project Sponsorship

Projects must have an appropriate government sponsor. Sponsors include but are not limited to states, counties, municipalities, and transit districts. Not-for-Profits must seek an appropriate government sponsor to act as sponsor for their project. Sponsors are encouraged to coordinate planning efforts and improvements with other governmental entities, agencies, and organizations. Missouri project sponsorship is defined in the Local Public Agency Manual (136.1.2.2)

E. Project Requirements

Responsibilities associated with project sponsorship through the project development and implementation process include:

- Providing an application fee of ½ of one percent of the total federal funds requested for each project, in compliance with a policy of the EWG Board of Directors. For example, if a sponsor is requesting federal funds in the amount of \$800,000 for a particular project, then the application fee for that project would be \$4,000. The application fee will be refunded if the project is not selected for inclusion in the FY 2017-2020 TIP. The refund occurs after approval of the FY 2017-2020 TIP.
- Ensuring the proper documentation is submitted with the formal application. See checklist at the end of the project application. This includes all relevant data to support measures of facility conditions as well as relevant supporting data from such sources as the US Census.

- Securing at least 20% local matching funds in Missouri and 25% local matching funds in Illinois and providing operations and maintenance information
- Reporting and maintaining all records and receipts as required by the procedures established by the Federal Highway Administration, Federal Transit Administration, and appropriate state transportation agency.
- Sponsor is compliant with laws and regulations including, but not limited to: FAST, Title VI of the Civil Rights Act of 1964, Americans with Disabilities Act of 1990, and The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
- Sponsors must document a 'Person of Responsible Charge'. Missouri sponsors must have at least one staff person that has completed Local Public Agency Basic Training. Information on classes is available here: http://www.modot.org/business/lpa/cert_train.htm
- Sponsor of selected project required to attend one public open house meeting (Missouri local public agency sponsors)
- Sponsor commits to ongoing maintenance of facility following end of federal-aid work

Where applicable, projects must comply with the Regional ITS Standards as set forth in the document titled Bi-State St. Louis Regional ITS Architecture, July 2015 (found at: bit.ly/EWGITS) as well as the Congestion Management Process (CMP). The CMP (found at: bit.ly/EWGCMP) is an objectives-driven and performance based approach to defining and managing congestion that makes the transportation system performance and congestion management a core activity, as opposed to an isolated standalone process and function. The project application should identify what CMP goals/objectives the project addresses and how they will be achieved. Projects with ITS components are required to complete the ITS project consistency statement.

It is the policy of EWGCOG to encourage involvement by the public sector and citizens in the transportation decision making process for the St. Louis region.

The same project application is used for Missouri and Illinois projects.

III. Surface Transportation Program - Suballocated (STP-S)

A. Program Summary

FAST has authorized funding through the Surface Transportation Block Grant Program (STBGP). FAST prescribes minimum levels of STPBGP funds that must be spent in the metropolitan area, called Suballocated or STP-S funds. The Missouri portion of the region receives funds based on the state of Missouri's federal funding allocation. The Illinois portion of the region receives funds based on the state of Illinois's federal funding allocation.

Projects in the STP-S category will be selected by East-West Gateway in consultation with the states. This funding category has the widest array of eligible projects. Some of

the projects that can be funded in this category include road resurfacing and reconstruction, bridge improvements, traffic flow improvements, capital improvements to intelligent transportation systems (ITS), public transit projects, carpool projects, and bicycle and pedestrian projects. Utility relocations associated with a project may utilize federal funds as well. See **Appendix A** for a listing of eligible activities for STP-S funds.

B. Project Eligibility

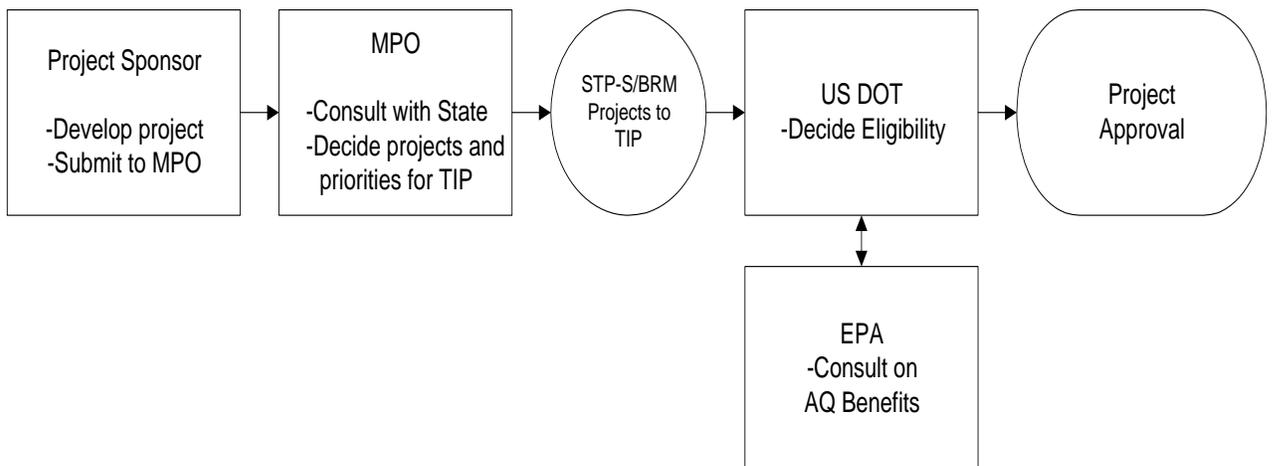
Two criteria determine project eligibility.

1. The improvement or service must be consistent with the regional priorities outlined in *Connected2045*, the long-range transportation plan for the St. Louis region.
2. Road improvements must be on a public road (existing or planned) that is federally functionally classified as an urban collector (minor or major), a rural major collector, an arterial, or an expressway. Funding for bridge replacements or rehabilitations is limited to deficient bridges. The list of bridges eligible for STP-S funding can be found at: bit.ly/STPbridge2015 or bit.ly/BRMbridge2015. Bridge projects using STP-S funds are not restricted to the roadway classification requirement and can be on any public road. Bridge projects on routes classified as local roads or rural minor collectors may include reasonable approach roadway necessary to connect to the existing road and to return the new grade to normal ground. Also projects listed in paragraphs (4) through (11) in **Appendix A** are exempt from functional class requirements. More information on roadway functional class is available at: www.ewgateway.org/trans/funcclass/funcclass.htm

IV. STP-S Project Development and Selection Process

A. Project Identification and Development

Figure 1



The development, selection, and implementation of STP-S projects is a process involving agencies at the local, state, and federal levels. Interaction, coordination, and consultation are required for a project to go from development to implementation. **Figure 1** illustrates the process projects must go through and the agencies involved in funding a project through the STP-S program.

Project sponsors are responsible for developing the potential STP-S projects and submitting the projects to the East-West Gateway Council of Governments for review and evaluation. Project submissions should be completed according to the guidelines described in this workbook.

Once EWGCOG staff, in consultation with the states and citizens of the region, has reviewed, evaluated, and ranked the STP-S candidate projects, projects recommended for funding are presented to the Board of Directors for approval. Approved projects are then included in the Transportation Improvement Program (TIP). The TIP is reviewed by the Federal Highway Administration and the Federal Transit Administration in consultation with the Environmental Protection Agency to determine project eligibility and compliance with air quality requirements. After the approval of the TIP by these federal agencies, projects included therein are eligible to receive federal funds. Project sponsors then work directly with the state department of transportation or federal agency to arrange for reimbursement of project expenses.

B. Project Evaluation

Working together through the MPO and in consultation with the states, committees of local government representatives are responsible for selecting projects in the local STP-S program.

For both the Illinois and Missouri portions of the region, EWGCOG staff evaluates local projects relative to how well they address the ten principles and strategies outlined in *Connected2045*. In addition, each project is evaluated based on utilization, cost effectiveness, and need, with consideration given to equity among the many jurisdictions within the region. Then projects are ranked based on these criteria.

Following is a detailed description of the evaluation and ranking process that EWGCOG staff uses to determine the best investment of federal transportation funds to locally sponsored projects:

- (a) Projects undergo a screening process to determine project and sponsor eligibility, availability of local matching funds and a feasible financial plan, and financial need.
- (b) Council staff evaluates local projects submitted for inclusion in the TIP with respect to how well they would meet each of the six project priority areas and be consistent with the ten principles that make up the framework of *Connected2045*. These six priority areas constitute an inclusive and strategic framework to ensure that the needs of transportation system users constitute the principle reference

points for regional decision-making. The six project priority areas (in order of regional significance) and the goals of each are:

- i. **Preservation of the Existing Infrastructure** - Achieved by managing and maintaining current roadway, bridge, transit, and intermodal assets.
- ii. **Safety and Security in Travel** - Achieved by decreasing the risk of personal injury and property damage on, in, and around transportation facilities.
- iii. **Congestion Management** - Achieved by ensuring that congestion of the region's roadways does not reach levels that compromise economic competitiveness.
- iv. **Access to Opportunity** - Achieved by addressing the complex mobility needs of persons living in low-income communities and persons with disabilities.
- v. **Sustainable Development** - Achieved by accommodating all users and modes of travel
- vi. **Efficient Movement of Goods** - Achieved by improving the movement of freight within and through the region by rail, water, air, and surface transportation modes

Only one priority area may be selected as a primary priority area and the primary priority cannot be changed. Council staff has refined these performance measures and incorporated them into the evaluation process for local transportation projects submitted for TIP consideration. The performance measures are intended to be indicators of the magnitude of need of a submitted improvement.

To receive points in each area, the sponsor is required to provide supporting documentation along with the project application submittal. This information includes:

Preservation

-Pavement – Pavement condition rating number must be listed in the system condition box on page 9 of the application. Documentation must be provided to show how the pavement condition was reached. LPAs with a pavement management system may include a printout of the pavement management database showing the rating of the facility and in. If a pavement management system is used, the LPA must reference the software used in the application. LPAs without a pavement management system must use a visual rating system (for example, PASER). If a visual rating system is used, this system must be referenced in the application. If a visual rating system is used then the pavement must be rated at locations at a uniform distance. Photographs of the pavement at the rating locations are required as well as a map showing the rating locations.

-Bridge – Bridge rating must be listed in the system condition box on page 9 of the application. A printout of the state’s bridge inspection report is required. If a bridge inspection report is not available, contact EWG staff for assistance.

-Signal/Transit/Port/Freight – Provide supporting documentation to document the condition

-Bike/Ped – Average PSR rating must be listed in the system condition box on page 9 of the application. If project is on a local road or minor collector the maximum points a project can receive in preservation is one unless project is located within ½ mile of a PUI grid of 3. See appendix F of the workbook for information on evaluation of sidewalks.

Safety

-Road/Intersection – Crash Summary Form – Sponsor must complete this form to gain points in safety. No points will be awarded if the documentation is not provided. This form must be downloaded from TIP application page

-Bridge – LPA must include state inspection report

-Transit/Other – Provide supporting documentation to document the condition

-Bike/Ped – Proposed facility must meet criteria to gain points. Points gained based on minimum widths

Congestion

- Road/bridge/intersection - To gain points, the LPA must show calculations showing peak hour level of service and document that the parts of the project that would include the level of service (i.e center turn lane). ITS Project Consistency Statement must be completed if project impacts ITS. Statement can be downloaded from TIP application page.

- Transit/Education/etc. – Provide supporting documentation to document the condition

Access to Opportunity

- LPA must indicate on Page 12 of the application what transit route is within ½ mile of project. A map showing this route must be attached. EWG Staff determines what areas are within environmental justice area. This information is in Appendix F

Sustainable Development.

- To gain 3 or 5 points, the LPA must indicate the project is within ½ mile of a PUI of 3 or higher. The LPA must include a reference from an approved plan to the project or type of project. The LPA must not include the entire plan. If the reference in the plan is not readily found then the LPA will get zero points.

Goods Movement

-Improvement must be freight specific

(c) Facility utilization is part of the criteria for determining a project’s benefits. To cut across modes (roads, transit, etc.), the unit of measure used for utilization is Person Miles of Travel (PMT). PMT is a function of vehicle occupancy, number of vehicles, and project length. Points are added to the project’s score depending on where the PMT falls within a specified range.

(d) Cost effectiveness is determined for each project by dividing the annualized amount of total federal funds requested for project implementation by the total project score.

(e) Finally, all projects are ordered by cost effectiveness. Projects that are identically ranked are arranged by cost, from lowest to highest. If two projects have an identical cost effectiveness measure, the project requesting a lesser amount of federal funds will be determined to have higher priority.

In Illinois, locally sponsored projects receive significant review from committees of elected officials established in each of the three counties. These committees in turn make recommendations to the Illinois Transportation Planning Committee, which then ranks projects using the established project evaluation criteria as a tool. The Missouri Transportation Planning Committee follows a similar process in reviewing the project rankings developed by the EWGCOG staff.

The following set of principles assists EWGCOG staff and the planning committees in each state in reaching consensus on the program of local projects:

1. All projects must be consistent with clean air requirements and conform to the state's implementation plans for air quality.
2. All projects must have a financial plan that demonstrates how the sponsor will pay for the project.
3. Projects must have a reasonable, demonstrated degree of political and community support.
4. Provisions are made to encourage reasonable program equity among the counties.
5. Efforts are made to obtain maximum advantage of flexibility in the use of financial resources and ensure full use of federal, state, and local funds available to the region.
6. Each county (including the City of St. Louis) should have at least one project.

Funds anticipated for local projects are committed to the highest ranking projects. Adjustments are made to ensure each county has at least one project.

C. Project Selection

Project selection involves setting the priority list of eligible projects for funding through the STP-S program. These priorities are established locally and are based in large part on the project's consistency with *Connected2045*. Decisions regarding project selection are accomplished through the regional transportation planning process involving the East-West Gateway Council of Governments, Missouri Department of Transportation, Illinois Department of Transportation, local transit providers, and the citizens of the region.

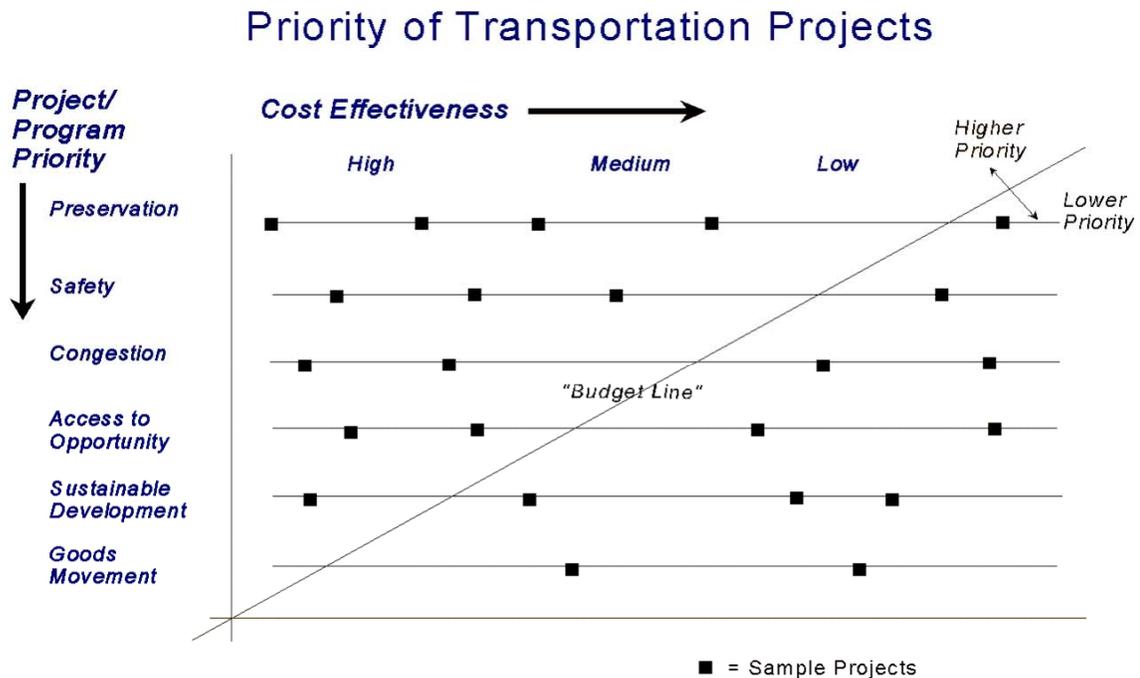
Two significant factors play a role in setting priorities for projects:

- Cost Effectiveness
- Project/Program Priority in the long range transportation plan

Cost effectiveness is used in the project selection process as a primary measure to establish priority. Projects that are highly cost effective have a higher priority than ones with a low cost effectiveness. This measure is used as a means of comparing various types of projects in a common way: cost per unit of benefit. Once projects are evaluated, they are ranked relative to cost effectiveness.

As illustrated in **Figure 2**, each of the evaluation areas are based on performance measures set in *Connected2045*. Projects above the “Budget Line” on the priority scale are considered “high priority” projects and will be included in the list of projects recommended for inclusion in the TIP. Projects recommended for inclusion in the TIP through the STP-S project selection process are presented to the Transportation Planning Committees (TPCs), the Interagency Consultation Group (IACG), the Executive Advisory Committee (EAC), and the Board of Directors of the EWGCOG. Additionally, public participation requirements will apply to the projects recommended for inclusion in the TIP.

Figure 2



D. Policy on Reasonable Progress

There has been increased concern in recent years regarding the implementation of projects programmed in the TIP. For various reasons, some projects have not progressed toward implementation several years after being programmed. The policy on Reasonable Progress has helped increase the number of programmed projects that are implemented in a timely manner. The implementation status of projects in this and previous TIPs is accounted for and reported through the Project Monitoring and Tracking Process.

For projects or programs included in the TIP, “reasonable progress” will have been made if the project has advanced to the point of obligating all federal funds programmed for that project in the current fiscal year, regardless of the phase of work (i.e., Preliminary Engineering (PE), Right of Way Acquisition (ROW), or Plans Specifications and Estimates (PSE)/Construction). If a project fails to obligate the programmed federal funds by September 30 of the current year, the funding for that year will be forfeited and returned to the regional funding pot. Actual progress toward implementation is measured against the schedule submitted by the project sponsor in the project application.

Reasonable Progress Policy Enforcement

Projects that do not obligate all federal funds for use by the September 30 suspense date will be removed from the TIP, and the federal funds associated with those projects will be returned to the regional funding pool for redistribution. The removal of projects from the TIP will require no further Board action and the sponsor would have to repay any federal funds already spent if the funding is forfeited.

If a project is realizing delays that will put the federal funding at risk of forfeiture (i.e., not meet a September 30 deadline), the project sponsor will have the opportunity to ask for consideration of a “one-time extension” in their project schedule. The one-time extension can only be requested for the implementation/construction phase of the project. The extension request will only be considered once a year, and has to be made before June 1 of the current fiscal year of the TIP.

To be considered for this extension the sponsor has to demonstrate on all counts: a.) The delay is beyond their control and the sponsor has done diligence in progressing the project; b.) Federal funds have already been obligated on the project or in cases that no federal funds are used for PE and/or ROW acquisition, there has been significant progress toward final plan preparation; c.) There is a realistic strategy in place to obligate all funds.

One-time extensions of up to three (3) months may be granted by East-West Gateway staff and one-time extensions greater than three (3) months, but not more than nine (9) months, will go to the Board of Directors for their consideration and approval. Projects requesting schedule advancements will be handled on a case-by-case basis (subject to available funding) and are subject to the Board adopted rules for TIP modifications.

Reasonable Progress Project Monitoring

An extensive monitoring program has been developed to help track programmed projects and ensure that funding commitments and plans are met. Monthly tracking reports are developed and posted on the East-West Gateway website, utilizing project information provided by the project sponsor, IDOT and MoDOT District offices. Additionally, project sponsors are contacted, at least every six months, by EWGCOG staff for project status interviews.

VI. Congestion Management Report and Regional ITS Architecture

Additional analysis is required by all project sponsors proposing a project to increase the carrying capacity for single occupant vehicles by adding through lanes or constructing a new road where the road is or will be classified on the Federal Roadway Functional Classification as an Arterial or above and extends for more than one mile or the whole distance between major route intersections. A major route intersection is where both of the intersecting roads are classified as an arterial or above.

This documentation must be submitted by the sponsoring agency and show that proper consideration of demand management strategies to address the congestion problems have been given.

To meet this requirement, an evaluation of the impact to SOV capacity of reasonable demand management strategies that fit in the corridor must be completed. The evaluation should estimate the ADT that can be reduced by the demand management strategies. If the remaining future ADT, after taking into account the reduction of SOVs as a result of reasonable demand management strategies, is sufficient to justify the increased capacity, the project is eligible to be added to the TIP.

The analysis must follow the framework of the *St. Louis Region Congestion Management Process Mitigation Handbook* and be included with the project application. The Congestion Mitigation Handbook provides a systematic approach and guidance for considering alternative strategies to address congestion. The handbook is available through EWGCOG and can be obtained by contacting Jason Lange in MO: (314) 421-4220 or IL: (618) 274-2750. The report should state whether or not the sponsor has considered all reasonable available strategies to manage the facility before choosing the proposed improvement. If the strategies are not being included, the report should state why. The strategies are included in **Appendix B**.

Projects with ITS elements must complete the ITS Project Consistency Statement. The statement is found on the TIP application web page.

APPENDIX A – Eligible Activities for STP-S program

(1) Construction of—

- (A) highways, bridges, tunnels, including designated routes of the Appalachian development highway system and local access roads under section 14501 of title 40;
- (B) ferry boats and terminal facilities eligible for funding under section 129(c);
- (C) transit capital projects eligible for assistance under chapter 53 of title 49;
- (D) infrastructure-based intelligent transportation systems capital improvements;
- (E) truck parking facilities eligible for funding under section 1401 of MAP-21 (23 U.S.C. 137 note); and
- (F) border infrastructure projects eligible for funding under section 1303 of SAFETEA-LU (23 U.S.C. 101 note).

(2) Operational improvements and capital and operating costs for traffic monitoring, management, and control facilities and programs.

(3) Environmental measures eligible under sections 119(g), 328, and 329 and transportation control measures listed in section 108(f)(1)(A) (other than clause (xvi) of that section) of the Clean Air Act (42 U.S.C. 7408(f)(1)(A)).

(4) Highway and transit safety infrastructure improvements and programs, including railway-highway grade crossings.

(5) Fringe and corridor parking facilities and programs in accordance with section 137 and carpool projects in accordance with section 146.

(6) Recreational trails projects eligible for funding under section 206, pedestrian and bicycle projects in accordance with section 217 (including modifications to comply with accessibility requirements under the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.)), and the safe routes to school program under section 1404 of SAFETEA-LU (23 U.S.C. 402 note).

(7) Planning, design, or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

(8) Development and implementation of a State asset management plan for the National Highway System and a performance-based management program for other public roads.

(9) Protection (including painting, scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events) for bridges (including approaches to bridges and other elevated structures)

and tunnels on public roads, and inspection and evaluation of bridges and tunnels and other highway assets.

(10) Surface transportation planning programs, highway and transit research and development and technology transfer programs, and workforce development, training, and education under chapter 5 of this title.

H. R. 22—29

(11) Surface transportation infrastructure modifications to facilitate direct intermodal interchange, transfer, and access into and out of a port terminal.

(12) Projects and strategies designed to support congestion pricing, including electronic toll collection and travel demand management strategies and programs.

(13) At the request of a State, and upon Secretarial approval of credit assistance under chapter 6, subsidy and administrative costs necessary to provide an eligible entity Federal credit assistance under chapter 6 with respect to a project eligible for assistance under this section.

(14) The creation and operation by a State of an office to assist in the design, implementation, and oversight of publicprivate partnerships eligible to receive funding under this title and chapter 53 of title 49, and the payment of a stipend to unsuccessful private bidders to offset their proposal development costs, if necessary to encourage robust competition in public-private partnership procurements.

(15) Any type of project eligible under this section as in effect on the day before the date of enactment of the FAST Act, including projects described under section 101(a)(29) as in effect on such day.

Appendix B - Congestion Management Strategies

Potential Congestion Management Strategies	
Strategy Class	Representative Strategies/Measures
Transportation Demand Management (TDM) Measures	Ridesharing (carpool/vanpool) Alternative Work Arrangements (telecommuting, flex-time, compressed work week) Transit and/or Shared Ride Subsidies Parking Management Guaranteed Ride Home Programs
Traffic Operational Improvements	Traffic Signal Improvements (timing improvements, demand-responsive signals, coordinated systems, computerized systems) Roadway geometric Improvements (turn lanes, acceleration/deceleration lanes, channelization) Time-of-Day Restrictions (turn restrictions, truck restrictions) Ramp Metering Commercial Vehicle Improvements Construction Management
High Occupancy Vehicle (HOV) Measures	HOV Lane Priority HOV Signal Priority HOV Access Priority (ramp by-pass) Support Facilities and Services (park-and-ride facilities)
Public Transit Capital Improvements	Exclusive Right-of-Way (rail, busways, bus lanes) Bus By-Pass Ramps Fleet Expansion Vehicle Replacement/Upgrades Transit Vehicle Management Systems Park-and-Ride Facilities Mode Change facilities (transit centers, transit rail stations)
Public Transit Operational Improvements	Transit Service Improvements (frequency, stop frequency, vehicle type, operating hours) Transit Routing Changes (modifications, expansion) Transit Coordination/Marketing Transit Information Systems Fare Reductions or Packages Traffic Operations (signal preemption, turnouts, rail crossing coordination)
Bicycle and Pedestrian Improvements	Infrastructure Improvements (bike lanes, paths, sidewalks) Support Services (bike racks and lockers, bike route maps)
Congestion Pricing	Road User Fees Parking Fees
Growth Management Strategies	Land Use Policies/Regulation Design Standards
Access Management	Driveway Control Median Control Frontage Roads
Incident Management	Detections Response Clearance Information/Routing
Intelligent Transportation Systems (ITS)	Advanced Traffic Management Systems (ATMS) Advanced Traveler Information Systems (ATIS) Advanced Public Transportation Systems (APTS) Commercial Vehicle Operations (CVO)
General Purpose Lanes	Freeway Lanes Arterial Lanes

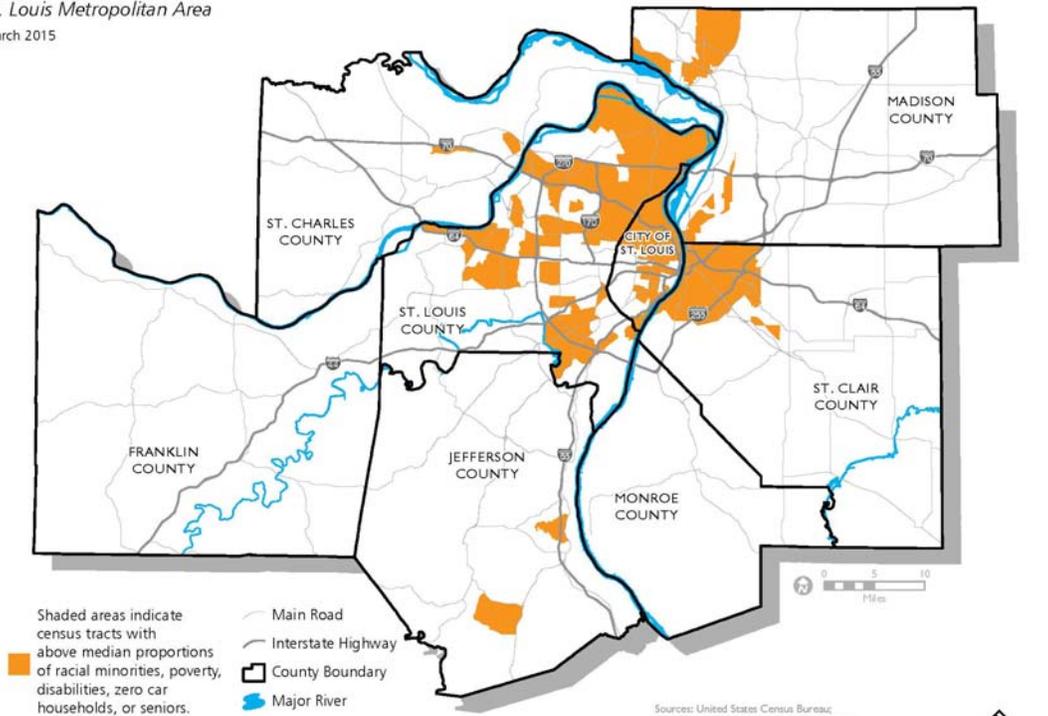
APPENDIX C – Environmental Justice and Project Utilization Index

Environmental Justice (EJ)

To gain five points in the Access to Opportunity priority condition in the project application, the project must be located within a census tract or block group with above median proportions of racial minorities, poverty, disabilities, zero car households, or seniors. The map below shows EJ areas.

Environmental Justice Populations by Census Tract

St. Louis Metropolitan Area
March 2015



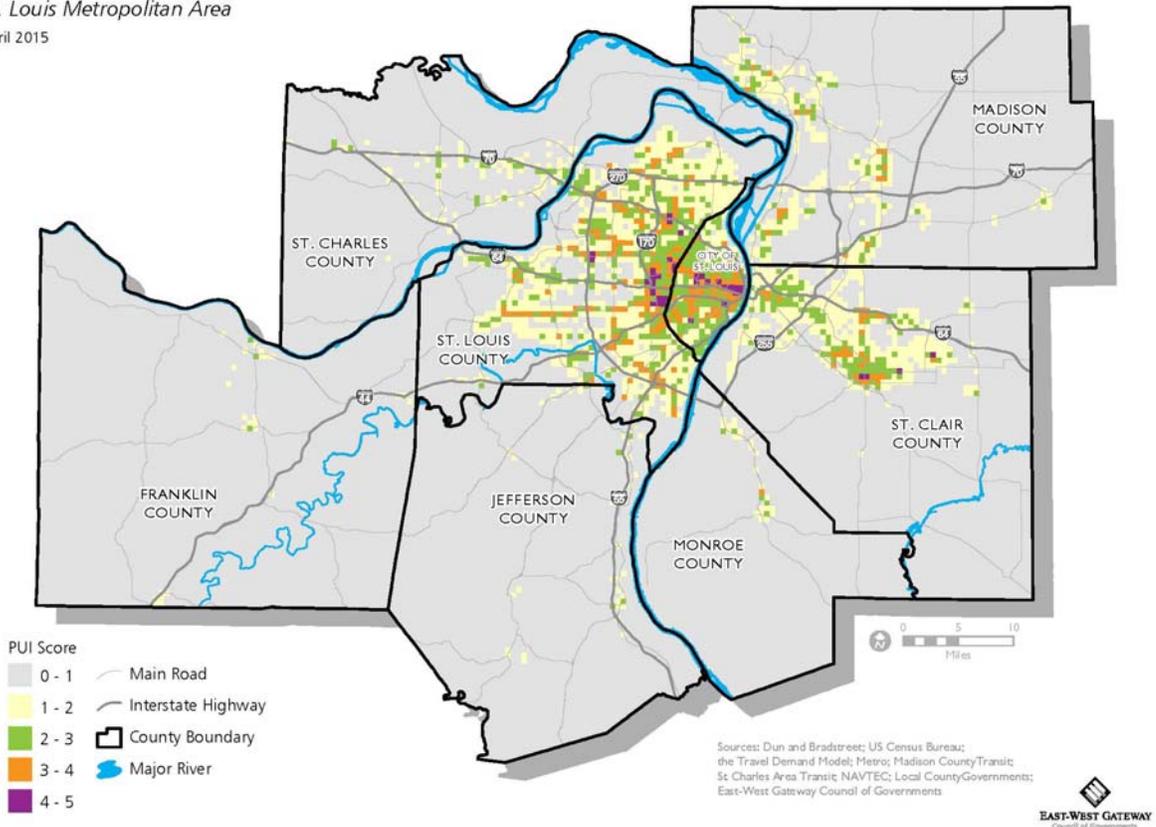
Project Utilization Index

Using current or forecast data, the GIS tool allows us to develop project utilization index (PUI) within EWG region that meet or exceed threshold levels of land use (i.e., population, employment, and retails) and transit (i.e., LRT stations, bus stops, METRO and MTC transit centers). All datasets and their output are classified by manual breaks based on the combination of our best knowledge and judgment. Then, each range is assigned to the scores (0-5).

Project Utilization Index (PUI)

St. Louis Metropolitan Area

April 2015



APPENDIX D – Glossary of Terms

Average Daily Traffic (ADT): The average number of vehicles passing a fixed point in a 24-hour time frame.

Bridge Sufficiency Rating: A rating of the structural soundness of a bridge conducted by the state department of transportation.

Carbon Monoxide (CO): A gas without color and odor which is toxic because too much of it can dangerously reduce oxygen in the bloodstream.

Congestion Management Process (CMP): Replaced the Congestion Management System (CMS) concept. SAFETEA-LU requires that each Transportation Management Area (see definition of TMA) address congestion management through a *process* that provides for effective management and operation of new and existing transportation facilities through the use of travel demand reduction and operational management strategies. Unless they are part of a CMP, future highway projects that significantly increase capacity for single occupant vehicles (SOVs) generally are ineligible for federal funds.

East-West Gateway Council of Governments (EWGCOG): The council of governments, regional planning commission, and federally designated Metropolitan Planning Organization (MPO) for the St. Louis region. As MPO, East-West Gateway is responsible for the planning and coordination of federally-funded transportation programs in the region, and related short and long-range planning.

Environmental Protection Agency (EPA): EPA is the source agency of air quality control regulations affecting transportation.

Fixing America’s Surface Transportation (FAST): Enacted by Congress and signed by the President in December 2015

Federal Highway Administration (FHWA): Division of the U.S. Department of Transportation which funds highway planning and programs.

Federal Transit Administration (FTA): Division of the U.S. Department of Transportation which funds transit planning and programs.

Fiscal Year (FY): Federal fiscal year that begins October 1 and ends September 30 of the next calendar year.

Functional Class: Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Examples include: interstate, expressway, principal arterial, minor

arterial, collector, rural minor collector, and local street. Usage of federal funds can be limited by the roadway functional class.

Highway: Term applies to roads, streets, and parkways, and also includes rights-of-way, bridges, railroad crossings, tunnels, drainage structures, signs, guard rails, and protective structures in connection with highways.

Highway Safety Improvement Program (HSIP): New SAFETEA-LU program structured and funded to make significant progress in reducing highway fatalities. Replaces the 10% set-aside for safety in the Surface Transportation Program (STP-F) under TEA-21. Increases funding for infrastructure safety and requires strategic highway safety planning.

Illinois Department of Transportation (IDOT): The department charged by Illinois state law with the responsibility of highway construction.

Illinois Environmental Protection Agency (IEPA): IEPA is the state environmental protection agency that monitors and enforces the regulations pertaining to air quality control and transportation.

Intelligent Transportation Systems (ITS): Uses state of the art technology to improve travel on a region's major roadways

Level of Service: Measure of the quality of flow of a transportation facility. Level of service definitions generally describe traffic conditions in terms of speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience. It is characterized by a letter from A to F, with LOS A being the best operating conditions and LOS F being the worst.

Madison County Transit (MCT): MCT is the transit service operating agency of the Madison County, Illinois Transit District. The District funds MCT as well as Metro bus services and ACT paratransit through a 1/4-cent sales tax.

Major Transportation Investment Analysis (MTIA): A study, required by ISTEA, to evaluate alternative transportation solutions to a corridor or subarea transportation problem.

Metro (formerly Bi-State Development Agency): The federally designated mass transit operator for the St. Louis region.

Metropolitan Planning Organization (MPO): The organizational designated by law with lead responsibility for developing transportation plans and programs in urbanized areas of 50,000 or more in population. The East-West Gateway Council of Governments was incorporated in 1965 as the metropolitan planning organization for the City of St. Louis; Franklin, Jefferson, St. Charles, and St. Louis counties in Missouri; and Madison, Monroe, and St. Clair counties in Illinois.

Missouri Department of Transportation (MoDOT): The department charged by Missouri state law with the responsibility of highway construction.

Missouri Department of Natural Resources (MoDNR): MoDNR is the state agency with the responsibility to monitor and enforce the regulations pertaining to air quality control and transportation.

Moving Ahead for Progress in the 21st Century (MAP-21): By transforming the policy and programmatic framework for investments to guide the system's growth and development, MAP-21 creates a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.

Off-System Bridge Funds (BRO): An annual allocation of Bridge funds available to Missouri counties for bridge replacement or rehabilitation projects on off system roadways. These funds are distributed to counties by the state.

On-System Bridge Funds (BRM): A allocation of Bridge funds available to Missouri counties to replace or rehabilitate a bridge on a roadway functionally classified as a collector or above. These funds are programmed by the EWGCOG.

Project Utilization Index (PUI): A measure of landuse (i.e population, employment, and retail) and transit (i.e. MetroLink stations, bus stops, transit centers).

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU): Legislative initiative by the U.S. Congress reauthorizing and restructuring funding and planning for highway and transit programs. SAFETEA-LU authorizes increased levels of highway and transportation funding beyond ISTEA and TEA-21.

Single Occupant Vehicle (SOV): A SOV is a vehicle used to get just one person to a destination.

State Implementation Plan (SIP): A required planning document prepared by states and submitted to EPA for approval. SIPs identify state actions and programs to implement designated responsibilities under the Clean Air Act.

Surface Transportation Program (STP): A categorical funding program that can be used for a wide variety of purposes, including: roadway construction, reconstruction, resurfacing, restoration, and rehabilitation; roadway operational improvements; capital costs for transit projects; highway and transit safety improvements; bicycle and pedestrian facilities; scenic and historical transportation facilities; preservation of abandoned transportation corridors; advanced truck stop electrification systems; projects relating to intersections that have disproportionately high accident rates and have high congestion; environmental restoration and pollution abatement; and control of terrestrial and aquatic noxious weeds and establishment of native species. Funds are distributed to

states based on each state's lane miles of Federal-aid highways, total vehicle miles traveled on those highways, and estimated contributions to the Highway Trust Fund.

Surface Transportation Program - Enhancement (STP-E): A 10% set aside of the statewide STP apportionment that must be used for non-traditional transportation projects.

Surface Transportation Program - Suballocated (STP-S): A minimum amount of the statewide STP apportionment available to metropolitan areas over 200,000 population. These funds are programmed by the EWGCOG.

Transportation Improvement Program (TIP): The official list of projects that are programmed for implementation over the next four years.

Transportation Management Area (TMA): All urbanized areas over 200,000 in population. Within a TMA, all transportation plans and programs must be based on a continuing and comprehensive planning process carried out by the Metropolitan Planning Organization in cooperation with states and transit operators. The TMA boundary affects the responsibility for the selection of transportation projects that receive federal funds.

Vehicle Miles of Travel (VMT): A standard area-wide measure of travel activity. Most conventional VMT calculation is to multiply average length of trip by the total number of trips.

Vehicle Occupancy Rate (VOC): Persons per passenger vehicle. Average Daily Traffic (ADT): The average number of vehicles passing a fixed point in a 24-hour time frame.

APPENDIX E - Roadway Safety Audit

A Road Safety Audit (RSA) is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. The FHWA works with State and local jurisdictions to integrate RSAs into the project development process for new roads and intersections, and also encourages RSAs on existing roads and intersections.

The aim of an RSA is to answer the following questions:

- What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
- What opportunities exist to eliminate or mitigate identified safety concerns?

Public agencies with a desire to improve the overall safety performance of roadways under their jurisdiction should be excited about the concept of RSAs. Road safety audits can be used in any phase of project development from planning and preliminary engineering, design and construction. RSAs can also be used on any sized project from minor intersection and roadway retrofits to mega-projects.

Most State DOTs have established traditional safety review processes. However, a road safety audit and a traditional safety review are different processes. It is important to understand the difference between the road safety reviews that are commonly performed and newer road safety audits. The main differences between the two are shown below:

What is the difference between RSA and a Traditional Safety Review?

Road Safety Audit	Traditional Safety Review
Performed by a team independent of the project	The safety review team is usually not completely independent of the design team.
Performed by a multi-disciplinary team	Typically performed by a team with only design and/or safety expertise.
Considers all potential road users	Often concentrates on motorized traffic.
Accounting for road user capabilities and limitations is an essential element of an RSA	Safety Reviews do not normally consider human factor issues.
Always generates a formal RSA report	Often does not generate a formal report.
A formal response report is an essential element of an RSA	Often does not generate a formal response report.

Please refer to the Federal Highway Administration's RSA section at <http://safety.fhwa.dot.gov/rsa/>

APPENDIX F – Present Serviceability Rating (PSR) for Sidewalk Evaluation -

Present Serviceability Rating (PSR) for Sidewalk Evaluation

For projects that are replacing existing sidewalks, the sponsor is required to evaluate the current sidewalk conditions. Replacement sidewalks would be evaluated with preservation as the main priority, while new sidewalks would be evaluated with safety as the main priority. If project is a hybrid (new sidewalk where none exist and sidewalk replacement) please contact Gateway staff for additional guidance.

The PSR provides a visual rating system for sidewalks. Due to the subjective nature of condition assessment, it is recommended that a team independently rates each sidewalk, and then reveals and explains their rating to each other. After negotiating a rating, the PSR rating is assigned and recorded. It is recommended that the team independently assigns a priority level to each block section. Each side of the block should be evaluated and then combined for a final score.

Condition, not related to curb and sidewalk distresses, should be surveyed for each block segment. An example of a PSR sidewalk evaluation is below:

Street	Cross Street 1	Cross Street 2	Side	Rating	Length	Notes
River St	Creek Rd	Brook Ave	North	2	200 feet	School
River St	Creek Rd	Brook Ave	South	n/a	n/a	
River St	Brook Ave	Culvert Way	North	1	200 feet	
River St	Brook Ave	Culvert Way	South	2	200 feet	
River St (all)	Creek Rd	Culvert Way	Both	1.7	600 feet	

Location Notes. Location notes should be made to provide insight into the surroundings of each block segment. These notes should include reference to residential, retail/business, churches, schools, and vacant buildings or properties. These notes will supplement the assessments given.

Pictures. Pictures should be taken to document each block’s condition. The primary focus should be placed on blocks with one or more distresses present, or blocks with a priority level of one or two. These photographs will supplement the assessments by providing visual support for the recommendations.

Map. A map showing the evaluation locations shall be included with application. The evaluation locations must be made at a uniform distance.

The following pages may be used to guide in the sidewalk evaluation.

Table 7: Present Serviceability Rating (PSR) Description and Example

PSR Rating	Description	Example
0	Totally deteriorated	
1	Poor condition	

PSR Rating	Description	Example
2	Below average to average condition. 2.5 is considered average	
3	Good to above average condition	

PSR Rating	Description	Example
4	Very good condition	
5	Brand new or excellent condition	