Project Development Workshop: Missouri

December 2018

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM

Overview

Funding Programs
- Program administration
- Eligibility
- Available funding
- Years funding available
- Sponsor requirements
- Application resources

STP-S Program
- Project examples
- Review of application types
- Application specific information
- Scoring criteria

CMAQ Program
- Project examples
- New application
- Review of information required for application

2018 Application Round

Where to find STP-S and CMAQ application materials

- www.ewgateway.org
  - Click on STP-S Call for Projects or CMAQ Call for Projects banner on homepage
  - Click on Transportation Planning on top bar – Transportation Improvement Program – Competitive Transportation Programs
    - Link to STP-S Call for Projects or CMAQ Call for Projects webpages found in grey box on right side of Competitive Transportation Programs webpage

Application deadline

- Final application due – Thursday, February 14, 2019 by 4 PM

Administration

Oversight

- East-West Gateway Council of Governments (EWG)
  - Administers application solicitation, evaluation, and programming
  - Monitors selected projects to ensure they remain on schedule
  - Approves changes of scope for project
- Missouri Department of Transportation (MoDOT)
  - Enters into funding agreement with sponsors that receive projects
  - Reviews project plans to ensure they match scope in project application
  - Obligates (set-aside) federal funds for a phase of work when project meets state and federal requirements
  - Coordinates workshops for sponsors after project selection (design, right-of-way, and construction)
- Project Sponsor
  - Delivers project according to scope and schedule in application
  - Does not begin work on federally funded portion of project until MoDOT grants approval

Funding Programs

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM – SUBALLOCATED (STP-S)

Eligible project types

- Road resurfacing/reconstruction
- Bridge rehabilitation/replacement
- Bicycle and pedestrian facilities
- Construction of roadway shoulders
- New road
- Additional capacity
- Intersection improvements
- Transit capital

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

Eligible project types

- Traffic signals
- Intersection improvements
- Bi-directional turn lane
- Traffic signal synchronization
- Intelligent Transportation Systems
- Diesel retrofits
- Transit capital
- Bicycle and pedestrian facilities

Funding Programs

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM – SUBALLOCATED (STP-S)

Eligible phases of work

- Preliminary engineering
- Right-of-way acquisition
- Construction
- Construction engineering

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

Eligible phases of work

- Preliminary engineering
- Right-of-way acquisition
- Construction
- Construction engineering

Phases of Work

Preliminary engineering including:

- Surveys
- Public hearings
- Environmental and historical documentation
- Right-of-way plans
- Utility coordination
- Bid specs, construction estimate

Right-of-way acquisition including:

- Appraisals

Construction/construction engineering including:

- Utility relocation costs for which the agency is responsible

Federal Milestones: MoDOT approvals

Preliminary engineering (PE):

- Approval of PE occurs with approval of engineering services contract

Right-of-way acquisition (ROW):

- Approval of ROW occurs with approval of acquisition authority (A-Date)

Construction (Const.)/construction engineering (CE):

- Const. and CE approved with approval of plans, specifications, and estimate (PSE) and issuance of authority to advertise for bids

PROJECT DEVELOPMENT SCHEDULE

Note: *many stages can occur concurrently.*

Activity Description	Start Date (MM/YYYY)	Finish Date (MM/YYYY)	Time Frame (Months)
Receive notification letter	10/2019	10/2019	1
Execute agreement (project sponsor and DOT)			
Engineering services contract submitted and approved*			
Obtain environmental clearances (106, CE2, T&E, etc.)			
Public meeting/hearing			
Develop and submit preliminary plans			
Preliminary plans approved			
Develop and submit right-of-way plans			
Review and approval of right-of-way plans			
Submit and receive approval for notice to proceed for right-of-way acquisition (A-Date)*			
Right-of-way acquisition			
Utility coordination			
Develop and submit PS&E			
District approval of PS&E/advertise for bids*			
Submit and receive bids for review and approval			
Project implementation/construction			

* Finish date must match fiscal year for each milestone shown in **bold** text.

Funding Programs

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM – SUBALLOCATED (STP-S)

Available funding

- $47.5 million (subject to change)
- FY 2021 – PE/ROW
- FY 2022 – PE/ROW/Const. (<$1 mil. fed)/CE
- FY 2023 – Const./CE
- Federal reimbursement – up to 80%
- Federal request capped at $7.125 million per project
  - Project documented to serve a regional priority may exceed cap
  - Transportation Planning Committee must approve

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

Available funding

- $24.0 million (subject to change)
- FY 2020 – PE/ROW
- FY 2021 – PE/ROW/Const. (<$1 mil. fed)/CE
- FY 2022 – Const./CE
- Federal reimbursement – up to 80%
  - Carpool/vanpool projects up to 100%
  - Public-private partnerships up to 50%

Example: FY 2021 = October 1, 2020-September 30, 2021

Eligible Applicants

Project must be within EWG boundary

- City of St. Louis
- Franklin
- Jefferson
- St. Charles
- St. Louis

Local public agency

- County
- Municipality
- Special road district
- Other transportation related agency with taxing authority

Public transit agency

Great Rivers Greenway

MoDOT (CMAQ only)

Other potential sponsors contact EWG for more information (i.e. public-private partnership)

Sponsor Requirements

Application fee

- Equals ½ of 1% of *federal* funds being requested
- Example - $800,000 request in federal funds = $4,000 application fee
- Counties pay annual contribution to EWG – contribution used as credit against fee
  - Counties invoiced for fee if federal funds programmed exceeds credit
- Fee refunded after August 28, 2019 Board of Directors meeting *if* project not selected

Matching funds

- At least 20% local match is required for each phase of work
- Must certify that matching funds are available on signature pages at end of application
- In-kind match (i.e. donated right-of-way, services) allowed, but contact EWG for assistance

Sponsor Requirements

Operations and Maintenance Form

- Documents resources available for locally maintained federal-aid routes
- Download Operations and Maintenance Form on STP-S or CMAQ Call For Projects webpages
- Only one form needed per sponsor
- Sponsor must provide:
  - Total revenue from most recent budget (Agency-wide)
  - Sources of revenue
  - Lane-miles of roadway maintained
  - Cost to operate and maintain transportation system
    - Only include costs for basic maintenance, salaries, fringe benefits, etc.
    - DO NOT include costs for capital improvements like resurfacing, reconstruction, federally-funded projects

Sponsor Requirements

Title VI & Nondiscrimination

- Federal requirements listed on signature pages at end of each application
- Must certify that it has reviewed federal requirements regarding non-discrimination in federally assisted programs

Person of responsible charge

- Full-time employee of sponsor in charge of project
  - Current roster: https://www.modot.org/media/17570
- May not be a consultant
- Must take Local Public Agency Basic Training Course through MoDOT's website
  - More information at: https://www.modot.org/lpa-basic-training-class-link
- Must certify person of responsible charge for each phase of work – same person may be responsible for all three phases

Sponsor Requirements

Right-of-way acquisition certification

- Right-of-way acquisition must adhere to The Uniform Relocation Assistance Act and Real Property Acquisition Policies Act of 1970 (Uniform Act)
- Applies to:
  - Right-of-way acquisition for project
  - Permanent/temporary easement
  - Temporary slope construction licenses

Sponsor Requirements

Policy on Reasonable Progress

- Ensures that federal funds be utilized by sponsor to complete project
- Based on project schedule provided by the sponsor in the application
- Applies to phases of work that received federal funds
  - Preliminary engineering
  - Right-of-way
  - Construction/construction engineering
- Funds must be obligated in federal fiscal year as indicated in project schedule
- One-time extension available for construction phase only. Requests accepted in May – Due June 1
  - Three-month extension approved by EWG staff
  - Nine-month extension approved by Board of Directors
- Sponsor must read Policy on Reasonable Progress in application and certify they understand it

Sponsor Requirements

Consultants must be paid for project application to qualify to complete federally reimbursed PE or CE for the project

If project is selected for funding, the project sponsor must initiate coordination with:

- Utilities
- Railroad
- Right-of-way acquisition
- Environmental
  - Threatened and endangered
  - Section 106
  - 404
  - 4(f) or 6(f)

In addition, the project schedule should be developed to account for delays due to the above

Sponsor Requirements

Americans with Disabilities Act (ADA)

- Road alteration (i.e. resurfacing, reconstruction) requires ADA compliant curb ramp construction
  - If no curb ramps exist, include them in the project scope
  - If curb ramps currently exist, verify if they are ADA compliant. If not then replace non-compliant ramps
- Sidewalk
  - New sidewalk must be ADA compliant
  - If scope of work includes sidewalk repair, all sidewalk must be made ADA compliant
  - Repair of broken/deficient sidewalk slabs must be completed with local funds separate from federal project
  - Upgrade of entire sidewalk along project limits to ADA standards is federally reimbursable
- ADA transition plan
  - Must be completed for local public agencies with more than 50 employees per ADA
  - Deadline for completion of transition plans was 1992
  - **ADA transition plan is not a requirement to apply for STP-S or CMAQ funds**
  - https://www.fhwa.dot.gov/civilrights/programs/ada/ada_sect504qa.cfm

Sponsor Requirements

Coordination between agencies

- If facility (i.e. road, sidewalk, signals) is not owned by the applicant, a letter of support from the facility owner is required
  - Requests for letter of support from MoDOT must be made no later than January 14, 2019
- If project in multiple jurisdictions
  - One jurisdiction may be the lead sponsor on the application
  - Letter of financial commitment and support for scope of work required from other jurisdiction(s)
- If third-party is providing financial support
  - Letter from third-party is required to show its support of project scope and funding commitment
- If third-party may be requested in the future
  - Letter from third-party is required to show its support of project scope
- If project is on a transit route or Gateway Bike Plan/connects to Great Rivers Greenway facility (STP-S)
  - Letter from transit agency is required with its review and comments on project if bus stop improvements are proposed
  - Letter from Great Rivers Greenway showing their approval if proposed bike path is impacting their facility
  - Contact info is in Frequently Asked Questions listed on bottom of STP-S and CMAQ Call for Projects webpages
  - Requests for letter of support must be made no later than January 14, 2019

Sponsor Requirements

Bicycle and pedestrian facilities

- US Department of Transportation policy requires bicycle/pedestrian facilities to be considered, where appropriate with all new construction and reconstruction of transportation facilities
- Walking and bicycling considered equal with other modes of transportation
- FHWA, AASHTO, and NACTO guidance available

Detailed cost estimate

- Estimate of Project Costs excel file available on STP-S and CMAQ Call for Projects webpages
- This form is required to be included in application

ITS Architecture Consistency

- ITS Architecture Project Consistency Form available on STP-S and CMAQ Call for Projects webpages
- Required only if project includes new ITS elements or modifies existing ITS

Application Resources

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM – SUBALLOCATED (STP-S)

Navigating the STP-S Application Process informational document

STP-S Project Development Workbook

STP-S Scoring Criteria Guide

STP-S application forms

Supplemental materials

Additional resources

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

CMAQ Project Development Workbook

CMAQ Application

Supplemental materials

Application Submittal Requirements

Final application deadline: Thursday, February 14, 2019 by 4 PM

- Submit one hard copy and an electronic copy – use 2019 project application
- Hard copy
  - Delivered to EWG office by 4 PM on February 14, 2019
  - If mailed, application must be postmarked by February 14, 2019
  - Review project checklist for order of application information
  - Do not staple
- Electronic copy
  - Must be submitted by 4 PM on February 14, 2019
  - Must be adobe acrobat file (.pdf)
  - Must be one pdf file per project application
  - Signature pages may be scanned
  - Deliver by email or submit with hard copy on USB drive or CD
  - If mailing a hard copy the electronic copy is due by 4 PM on February 14, 2019
  - Email: stps@ewgateway.org or cmaq@ewgateway.org

2019 Application Round

Upcoming events/deadlines (all dates 2019)

- January 17: Preliminary applications due (optional)
  - Submit via email: stps@ewgateway.org or cmaq@ewgateway.org
  - Application only; supplemental information not required
  - EWG comments will be returned no later than January 31
- January 18 & 25: Project Review Workshops @ EWG
  - Registration posted on EWG website in mid-December; meeting 30 minutes for up to two projects
- February 14 (4 PM): Final applications due
- May 1: Transportation Planning Committee (TPC) – funding recommendations
- May 29: TPC recommendations presented to EWG Board of Directors
- June 26: Draft FY 2020-2023 Transportation Improvement Program (TIP) including recommended projects presented to EWG Board of Directors prior to release for public comment
- June 28-August 5: Public comment period
  - Open house meetings: Sponsor required to attend one open house
- August 28: TIP presented to EWG Board of Directors for approval

Project Application – General Tips

Don't assume evaluators know project, but be concise in project description

Letters of support must be for the current funding round and for specific project

Project scheduling needs to be realistic
- Contact EWG for assistance if needed

Request meeting with EWG staff to discuss project

Project should be consistent with AASHTO, NACTO, FHWA
- Avoid using contrasting materials like brick to create higher visibility. These materials cost much more to maintain, but are not highly visible particularly at night and in the rain. Over time they lose contrast to the surrounding street. – America Walks
- Overhead cobra lighting provide baseline standards for lighting, but does not enhance pedestrian safety

Each application form contains a checklist specific to the project type
- Submit application and supplemental materials in the order as indicated in the checklist

Frequently Asked Questions available at bottom of Call for Projects web pages
- This will be updated throughout application period

10% Funding Increase

Available to sponsor with project in the FY 2019-2022 TIP

- One-time increase in federal funds if cost increase is documented to be beyond sponsor's control
- Project must have construction programmed in future year
  - Sponsor may not request if construction programmed in FY 2019
- **Letter requesting increase is due Thursday, February 14, 2019**
  - Must justify reasons for increase request in letter

Questions?

Bicycle Planning Guide

Released June 2018

Aggregates information and best practices from FHWA, AASHTO, NACTO, etc.

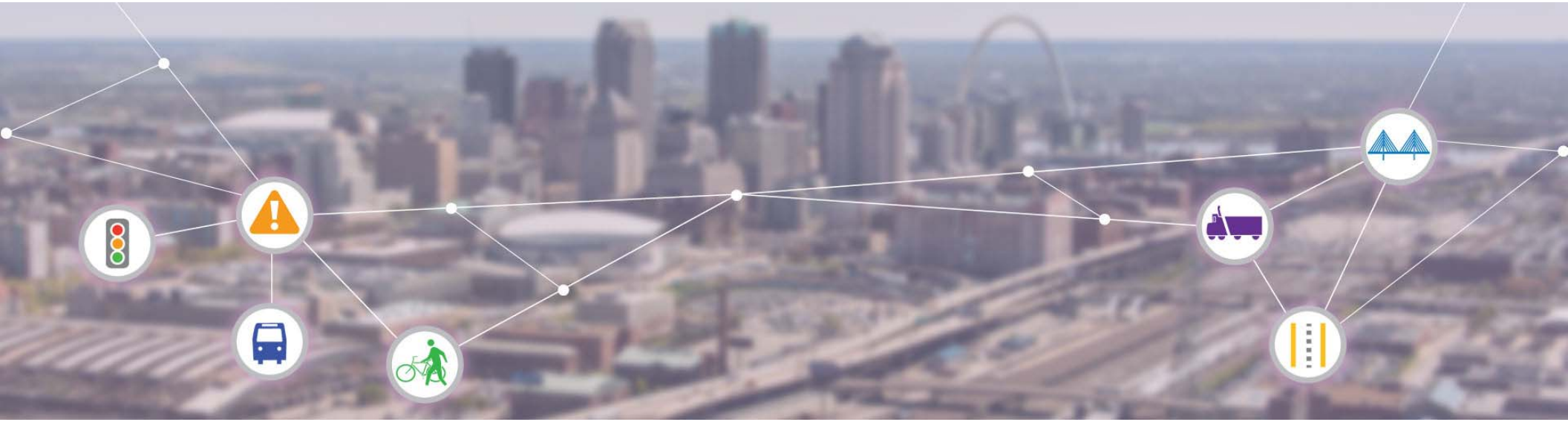
Background on level of stress, connectivity, bicyclist skill level

Types of bicycle facilities

Context-sensitivity and design flexibility

Additional planning & design resources

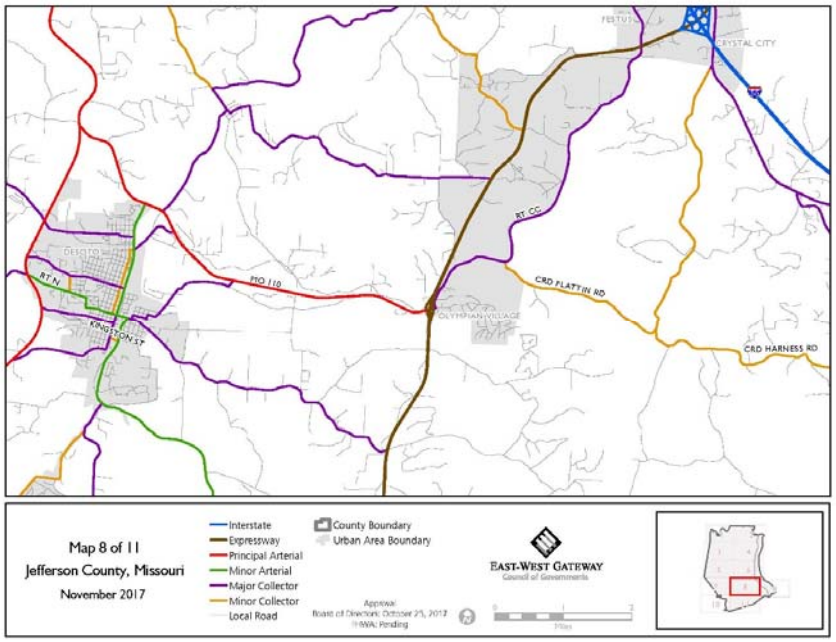
Surface Transportation Block Grant Program – Suballocated



Eligible activities

- Highways (including resurfacing/reconstruction), bridges (including rehab/replacement of deficient bridges) and tunnels
- Transit capital projects
- Intelligent transportation systems capital improvements
- Carpool and corridor parking facilities
- Bicycle and pedestrian facilities
- Planning, design, or construction of boulevards largely in right-of-way of former interstates or other divided highways
- Protection for bridges
- Transportation infrastructure modifications to facilitate access into and out of a port terminal
- More eligible activities listed in Appendix A of STP-S Project Development Workbook

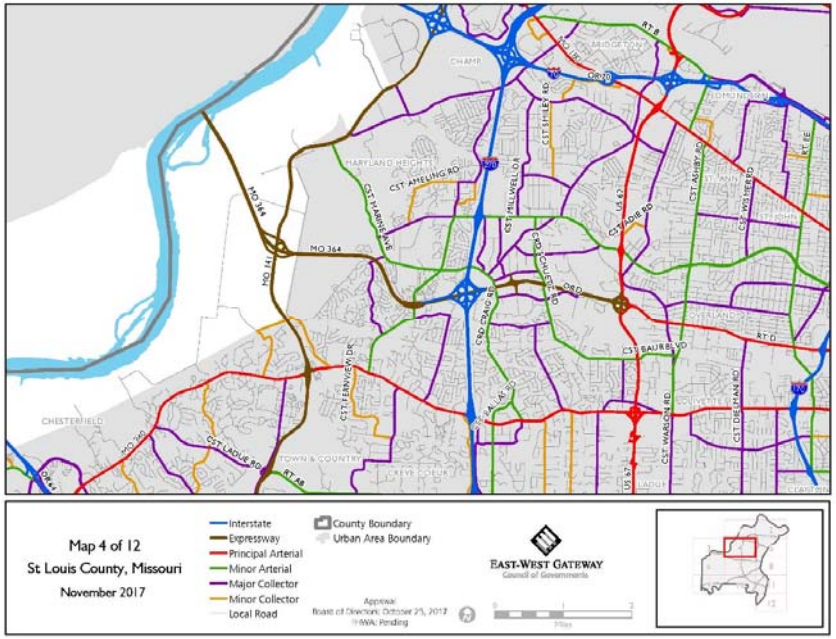
Functional Classification



What is functional classification?

- Grouping of roads based on the type of service provided:
  - Interstate/expressway
  - Principal arterial/minor arterial
  - Major collector (rural or urban)
  - Minor collector (rural or urban)
  - Local road
- Road projects not eligible for STP-S funding located on:
  - Rural minor collector
  - Local road
    - Exception for safety improvements (not preservation)

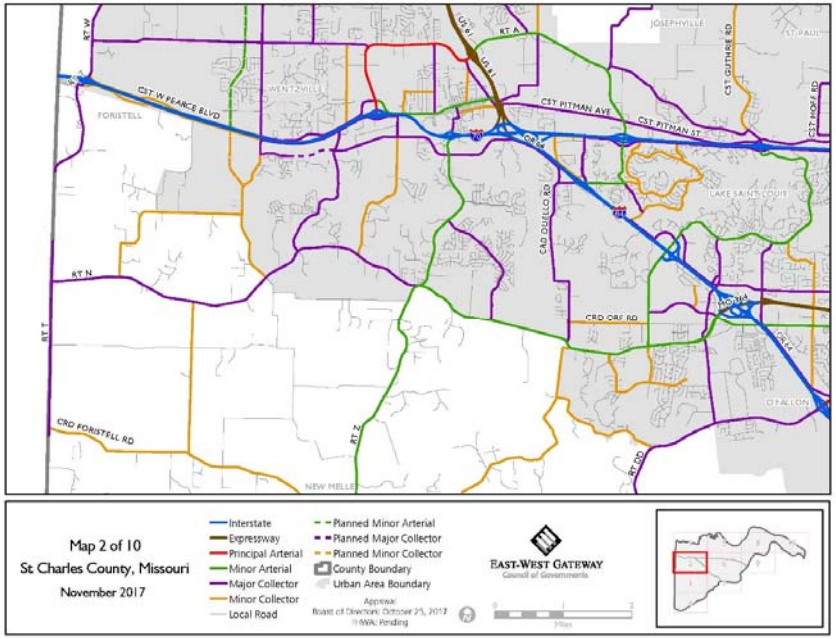
Functional Classification



Items eligible regardless of functional classification:

- Rehabilitation or replacement of deficient bridges
  - Minimal road work allowed on local road or rural minor collector to tie in new bridge with road on existing alignment – local funds must be used for other road work such as road relocation
- Bicycle and pedestrian facilities
- Highway and transit safety improvements
- Carpool projects
- Transportation infrastructure modifications to facilitate access into and out of a port terminal

Functional Classification



Functional classification maps

- Functional classification maps available for each county
  - Link to maps on p. 13 of STP-S Project Development Workbook under EWG Resources
  - Found on EWG website under Transportation Planning
- Functional classification revisions
  - EWG accepts applications for revisions twice a year
    - May
    - November
      - STP-S applications accepted for functional classification applications in-process from May/November 2018
      - Approval of STP-S application contingent on approval of requested functional class change of road

Financial Plan

Federal funds are obligated one time for each phase

Do not program multiple phases in same year

Make sure the date in the schedule is within the federal fiscal year in financial plan

- FY 2021 PE obligation means ESC approval should be listed between 10/2020 and 9/2021

Do not begin work on federally funded phase of project until authorized by MoDOT

EXAMPLE:

FINANCIAL PLAN

Note: *fiscal years are federal fiscal years (October 1 through September 30)*[5]*. Federal participation for a phase of work must not exceed 80% in Missouri and 75% in Illinois.*

Activity	Starting Federal Fiscal Year	Total Phase Cost	STP-S Funds Requested	Sponsor Share	Sponsor Share Percentage
PE / Planning / Environmental Studies	FY 2021	$ 100,000	$ 80,000	$ 20,000	20.00%
Right-of-Way	FY 2022	$ 1,000	$ 800	$ 200	20.00%
Construction Engineering	FY 2023	$ 1,500,000	$ 1,200,000	$ 300,000	20.00%
Construction / Implementation	FY 2023	$ 100,000	$ 80,000	$ 20,000	20.00%
TOTAL PROJECT COST		$ 1,701,000	$ 1,360,800	$ 340,200	20.00%

Identify the source(s) of local matching funds (e.g., state DOT, city, county, county road board, county motor fuel tax, private entity), and the amount for each source:	City general revenue $100,000 County road board $240,200

Project Extents

Contiguous Projects

- If project length is greater than two miles, sponsor may submit two separate applications
  - Example – Project is three miles in length- sponsor may submit an application for two mile segment and application for one mile segment
- If approved sponsor may combine into one project
- Contact EWG staff prior to submitting application

Multiple Roads

- Multiple roads may be included in one application if:
  - Roads have same functional classification
  - Same type of work being done (i.e. resurfacing)
- Contact EWG staff prior to submitting application

Navigating the STP-S Application Process

Steps to completing application

- STP-S Call for Projects webpage: http://www.ewgateway.org/transportation-planning/transportation-improvement-program/competitive-transportation-programs/call-for-projects-stp-s/
- Download and read the following:
  - Informational document
    - Gives step-by-step information about STP-S documents and applications
  - STP-S Project Development Workbook
  - STP-S Scoring Criteria Guide
- Click 'Application Download' button
  - Enter contact information to access STP-S applications
  - Download STP-S application that best reflects primary purpose; save to computer before filling out
    - Road project type example: Road resurfacing with new sidewalks
    - Safety project type example: Road resurfacing with construction of new center turn lane
  - Multiple applications of the same project not allowed

STP-S Scoring Criteria

Fixing America's Surface Transportation (FAST) Act requires transition to performance-driven, outcome based program

STP-S scoring criteria aligns with federal performance-based planning goals and 10 guiding principles in the EWG Long Range Plan, *Connected2045*

Staff in conjunction with Transportation Planning Committee developed criteria

STP-S scoring criteria approved by East-West Gateway Board of Directors – January 2018

Seven project types/applications:

- Road
- Bridge
- Traffic Flow
- Safety
- Active Transportation
- Transit
- Freight/Economic Development

STP-S Scoring Criteria Guide provides greater detail into scoring by project type

Project Type Examples

Road: road resurfacing or reconstruction

Bridge: bridge rehabilitation or replacement, bridge preventive maintenance program – Deficient bridges found under additional resources on STP-S Call for Projects webpage

Traffic Flow: addition of travel lanes, two-way turn lanes, new roads, intersection improvements, Intelligent Transportation Systems (ITS) improvements, signal optimization

Safety: systemic safety improvements (e.g., guardrail or rumble strip installation), sight distance improvements, signage upgrades, shoulders, intersection/ crossing safety improvements

Active Transportation: shared-use paths, on-street bicycle facilities, sidewalks, bicycle and pedestrian bridges and underpasses

Transit:

a. Transit Asset Management & System Upgrades: revenue replacement vehicles, improvements to transit facilities, maintenance facility for revenue vehicles

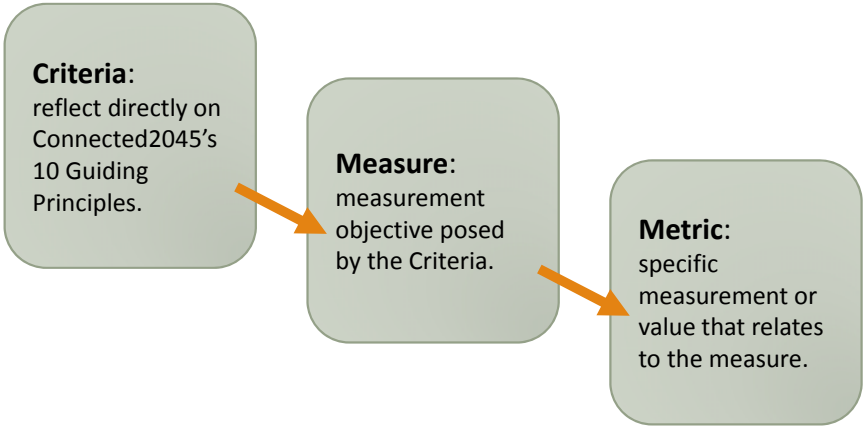
b. Expansion: vehicle fleet expansion, geographic expansion

Freight/Economic Development: road or bridge projects that improve the flow of freight or promote economic development, railway-highway grade separation, traffic signal optimization, truck parking facilities

Project Scoring

Performance points

- Each project type has maximum of 10 criteria and metrics are used to assign performance points
- Certain criteria do not apply to all project types
- Up to 100 points assigned based on performance points



Project Scoring

Cost

- Up to 20 points assigned based on federal funds requested compared to total funds available ($47.5 million)
- Points assigned based on percentage requested
  - For example, a sponsor requesting $1,300,000 in federal funds would received 15.85 points for cost
- Percentage based on estimated funding amount

Federal Project Cost Ranges (Missouri)	Point Range
Project requests 1.9% or less of the funds available	20 – 18.8
Project requests 2.0-2.9% of the funds available	18.7 – 14.8
Project requests 3.0-3.9% of the funds available	14.7 – 10.8
Project requests 4.0-4.9% of the funds available	10.7 – 6.8
Project requests 5.0-9.9% of the funds available	6.7 – 4.1
Project requests 10.0-14.9% of the funds available	4 – 2.8
Project requests 15.0% or more of the funds available	0

Usage

- Up to 5 points assigned based on Person Miles Travel (PMT)
  - PMT=project length*regional occupancy rate*AADT

Usage Ranges – PMT (Missouri)	Points
10,001+	5
5,001-10,000	4
2,001-5,000	3
701-2,000	2
1-700	1

Investment Priority Criteria	STP-S Project Type											
	Road		Bridge		Traffic Flow	Safety	Active Transp.	Transit			Freight / Economic Development	
	Within Community	*Outside Community*	*Within Community*	*Outside Community*				*Asset Management & System Upgrades*	*Expansion - Adding Capacity*	*Expansion - Geographic Expansion*	*Freight*	*Economic Development*
(1) Preserve & Maintain the Existing System	65	72	65	69	5	8	-	45	-	-	5	5
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	12	5	9	5	11	10	30	24	64	69	10	10
(3)Support Neighborhoods & Communities	4	4	4	4	4	4	22	8	8	8	4	4
(4) Foster a Vibrant Downtown & Central Core	-	-	-	-	-	-	10	1	1	1	-	-
(6) Promote Safety	8	8	13	13	10	70	35	7	7	7	10	10
(7) Support a Diverse Economy with a Reliable System	1	1	-	-	50	-	-	5	5	5	10	10
(8) Support Quality Job Development	4	4	4	4	5	-	-	-	5	-	-	60
(9) Strengthen Intermodal Connections	5	5	5	5	5	8	-	-	-	-	60	0
(10) Protect Air Quality & Environmental Assets	1	1	-	-	10	-	3	10	10	10	1	1
Total Performance Points	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Cost	20	20	20	20	20	20	20	20	20	20	20	20
Usage	5	5	5	5	5	5	5	5	5	5	5	5
Total Points Available	**125**	**125**	**125**	**125**	**125**	**125**	**125**	**125**	**125**	**125**	**125**	**125**

Geographic Scale

Road and bridge projects

- Evaluated using two geographic scales
  - Within community: emphasizes safe, multimodal connections and access to community resources
  - Outside community: emphasizes mobility to ensure the region is well connected

- Population and employment index (PEI)
  - Measures population and employment densities
  - Used to estimate potential multimodal demand
  - Within community PEI 1.45+
  - Outside community PEI <1.45

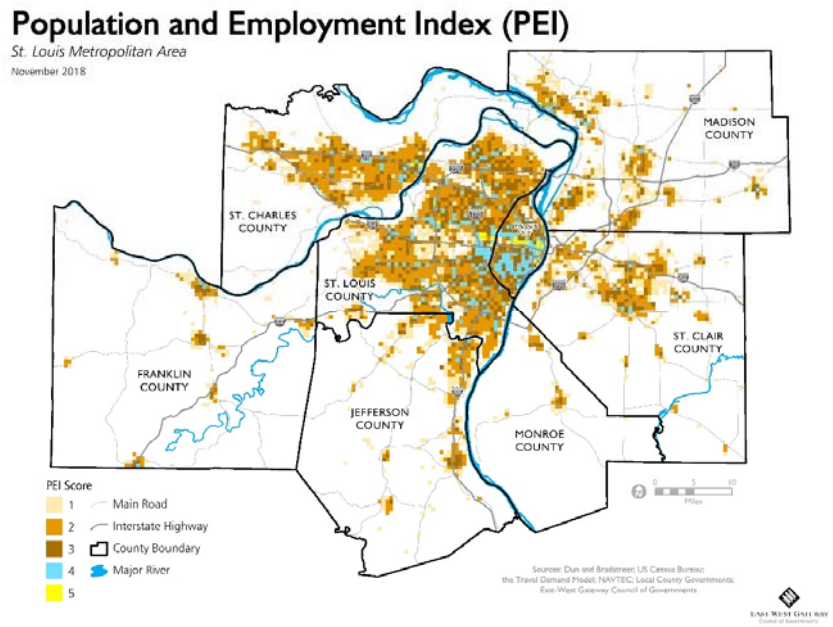
Geographic Scale

PEI Designation

- Sponsor may request PEI designation by submitting PEI Determination Request Form
- Form must be submitted by January 24
- EWG will respond within one week

PEI Change

- Sponsor may submit PEI Change Request Form
- Justification must be provided
- Form must be submitted by January 31
- EWG will respond within one week



***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**		**Points**
(1) Preserve & Maintain the Existing System	Road condition	PASER rating		60
	Significance	Within community: Outside community:	Functional classification	5 12
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Multimodal accommodation	Within community: Outside community:	Elements of other modes being implemented as part of the project	12 5
(3) Support Neighborhoods & Communities	Addressing social equity	Project falls in or partially located in an Environmental Justice area		4
(4) Foster a Vibrant Downtown & Central Core	n/a	n/a		n/a
(6) Promote Safety	Safety countermeasures	1. Total crash rate		4
		2. Fatal & serious injury crash rate		4
(7) Support a Diverse Economy with a Reliable System	Improved facility efficiency	Management and operations elements		1
(8) Support Quality Job Development	Access to jobs	Job density		4
(9) Strengthen Intermodal Connections	Regional freight significance	1. Commercial vehicle countermeasure		3
		2. Freight proximity		2
(10) Protect Air Quality & Environmental Assets	Impact to the environment	Environmental infrastructure elements		1

Road Checklist

- Location map: detail showing project's overall location; 8 ½ x 11
- Project location used to determine geographic scale, and calculate scores for Environmental Justice, employment density, and intermodal connections
- Detailed cost estimate
  - Use Estimate of Project Costs excel file
- Detailed map showing:
  - Locations of proposed safety countermeasures
  - Transit routes along project limits
  - Activity centers along project limits
  - Schools located within ½ mile of project limits
  - Freight facilities along project limits
- Typical section – before and after improvements
- Road condition – PASER
  - Use Road Condition Evaluation Form
- Crash rate – 2012-2016
  - Crash reports required only if project includes safety countermeasure
    - If safety countermeasure included then attach crash reports for:
      - Fatal and serious injury crashes
      - Up 10 minor injury or PDO crashes that coincide with safety countermeasure
- ITS Architecture Project Consistency Statement Form
  - Only needed if ITS components included or modified

Note: see checklist in Application Form to review ALL required attachments.

***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**		**Points**
(1) Preserve & Maintain the Existing System	Bridge condition	Bridge sufficiency rating		60
	Significance	Within community: Outside community:	Functional classification	5 9
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Multimodal accommodation	Within community: Outside community:	Elements of other modes being implemented as part of the project	9 5
(3) Support Neighborhoods & Communities	Addressing social equity	Project falls in or partially located in an Environmental Justice area		4
(4) Foster a Vibrant Downtown & Central Core	n/a	n/a		n/a
(6) Promote Safety	Improved safety	1. Structurally deficient		8
		2. Functionally obsolete		5
(7) Support a Diverse Economy with a Reliable System	n/a	n/a		n/a
(8) Support Quality Job Development	Access to jobs	Job density		4
(9) Strengthen Intermodal Connections	Regional freight significance	Bridge weight limits		5
(10) Protect Air Quality & Environmental Assets	n/a	n/a		n/a

Bridge Checklist

- Location map: detail showing project's overall location; 8 ½ x 11
- Project location used to determine geographic scale, and calculate scores for Environmental Justice and employment density
- Detailed cost estimate
  - Use Estimate of Project Costs excel file
- Detailed map showing:
  - Activity centers within ½ mile of project limits
  - Schools within ½ mile of project limits
- State-issued inspection report
- Roadway realignment diagram (if changes to horizontal or vertical alignment of connecting roadway)
- Typical bridge section – before and after improvements
- Bridge rehab/replacement projects
  - Include state issued inspection report documenting condition
- Preventive maintenance projects
  - Provide approval of preventive maintenance plan from FHWA
  - List of bridges that are part of the program
- ITS Architecture Project Consistency Statement Form
  - Only needed if ITS components included or modified

Note: see checklist in Application Form to review ALL required attachments.

***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**		**Points**
(1) Preserve & Maintain the Existing System	Road or bridge condition	PASER rating or bridge sufficiency rating		5 (avg)
	ITS condition	Preserving ITS components		
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Multimodal accommodation	Elements of other modes being implemented as part of the project		11
(3) Support Neighborhoods & Communities	Addressing social equity	Project falls in or partially located in an Environmental Justice area		4
(4) Foster a Vibrant Downtown & Central Core	n/a	n/a		n/a
(6) Promote Safety	Safety countermeasures	1. Total crash rate		5
		2. Fatal & serious injury crash rate		5
(7) Support a Diverse Economy with a Reliable System	Improved mobility and congestion	Road segment:	Reduction in total travel time	50
		Intersection:	Reduction in total vehicle delay	50
(8) Support Quality Job Development	Access to jobs	Job density		5
(9) Strengthen Intermodal Connections	Regional freight significance	1. Commercial vehicle countermeasure		3
		2. Freight proximity		2
(10) Protect Air Quality & Environmental Assets	Impact to the environment	1. Environmental infrastructure elements		1
		2. Reduction in VOC & NO_x		9

Traffic Flow Checklist

- Location map: detail showing project's overall location; 8 ½ x 11
- Project location used to calculate score for Environmental Justice, employment density, and intermodal connections
- Detailed cost estimate
  - Use Estimate of Project Costs excel file
- Detailed map showing:
  - Locations of proposed safety countermeasures
  - Transit routes along project limits
  - Activity centers along project limits
  - Schools located within ½ mile of project limits
  - Freight facilities along project limits
- Typical section – before and after improvements
- Road or bridge condition – PASER rating (use Road Condition Evaluation Form) or state issued bridge inspection report
- Traffic flow Supplement excel file
  - Used to document current and proposed traffic conditions
  - Traffic engineering analysis required
- Congestion Management Study
  - If project is adding capacity (new road, new through lanes)
- Crash rate – 2012-2016
  - Crash reports required only if project includes safety countermeasure
    - If safety countermeasure included then attach crash reports for:
      - Fatal and serious injury crashes
      - Up 10 minor injury or PDO crashes that coincide with safety countermeasure
- ITS Architecture Project Consistency Statement Form
  - Only needed if ITS components included or modified

Note: see checklist in Application Form to review ALL required attachments.

***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**	**Points**
(1) Preserve & Maintain the Existing System	Road or bridge condition	PASER rating or bridge sufficiency rating	8 (avg)
	ITS condition	Preserving ITS components	
	Safety hardware condition	Preserving safety hardware	
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Multimodal accommodation	Elements of other modes being implemented as part of the project	10
(3) Support Neighborhoods & Communities	Addressing social equity	Project falls in or partially located in an Environmental Justice area	4
(4) Foster a Vibrant Downtown & Central Core	n/a	n/a	n/a
(6) Promote Safety	Safety countermeasures and benefit cost	1. Total crash rate	10
		2. Fatal & serious injury crash rate	10
		3. Benefit/cost analysis	50
(7) Support a Diverse Economy with a Reliable System	n/a	n/a	n/a
(8) Support Quality Job Development	n/a	n/a	n/a
(9) Strengthen Intermodal Connections	Regional freight significance	1. Commercial vehicle countermeasure	3
		2. Freight proximity	2
		3. Regional transportation significance	3
(10) Protect Air Quality & Environmental Assets	n/a	n/a	n/a

Safety Checklist

- Location map: detail showing project's overall location; 8 ½ x 11
- Project location used to calculate scores for Environmental Justice and intermodal connections
- Detailed cost estimate
  - Use Estimate of Project Costs excel file
- Detailed map showing:
  - Locations of proposed safety countermeasures
  - Transit routes along project limits
  - Activity centers along project limits
  - Schools located within ½ mile of project limits
  - Freight facilities along project limits
- Roadway realignment diagram
- Typical section – before and after improvements
- Road or bridge condition – PASER rating (use Road Condition Evaluation Form) or state issued bridge inspection report
- Crash rate – 2012-2016
  - Download Safety Supplement excel file
    - Calculate crash rate, fatality & serious injury crash rate, AND benefit/cost ratio
      - Lifespan of safety countermeasures found in the Lifespan-Safety Countermeasures tab
    - Provide crash reports for:
      - All fatal and serious injury crashes
      - Up to 10 minor injury or PDO crashes that coincide with safety countermeasure
- Safety plan/study
- ITS Architecture Project Consistency Statement Form
  - Only needed if ITS components included or modified

Note: see checklist in Application Form to review ALL required attachments.

***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**	**Points**
(1) Preserve & Maintain the Existing System	n/a	n/a	n/a
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Improved transit connections	1. Transit proximity	1
		2. Physical improvements to transit	2
	System connectivity	Multimodal linkages to existing facilities	27
(3) Support Neighborhoods & Communities	Connecting communities to opportunities	1. Project falls in or partially located in an Environmental Justice area	4
		2. Access to schools	6
		3. Access to community resources	5
		4. Access to cultural resources	2
		5. Planning efforts	5
(4) Foster a Vibrant Downtown & Central Core	Multimodal needs of residents and access to employment	Population and employment density	10
(6) Promote Safety	Bicycle & pedestrian level of stress/comfort	1. Pedestrian/bicycle crashes	2
		2. Pedestrian/bicycle facility type	24
		3. Safety and design improvements	5
		4. Crossing treatments	4
(7) Support a Diverse Economy with a Reliable System	n/a	n/a	n/a
(8) Support Quality Job Development	n/a	n/a	n/a
(9) Strengthen Intermodal Connections	n/a	n/a	n/a
(10) Protect Air Quality & Environmental Assets	Impact to the environment	Environmental infrastructure elements	3

Active Transportation Checklist

- Location map: detail showing project's overall location; 8 ½ x 11
- Project location used to calculate scores for Environmental Justice and population and employment index
- Detailed map showing:
  - Transit routes within:
    - ½ mile radius of pedestrian project
    - 3 mile radius of bike project
  - Community resources within ½ mile of project limits
  - Cultural destinations in relationship to project
  - Schools within ½ mile of project limits
  - Existing bike and/or pedestrian facilities with ¼ mile of limits
- Detailed cost estimate
  - Use Estimate of Project Costs excel file
- Typical section – before and after improvements
- Crash reports – 2012-2016
  - Bike and pedestrian crashes along limits
- Documentation of:
  - Approved or adopted plan
  - Ordinance
  - Policy
  - Public involvement process

Note: see checklist in Application Form to review ALL required attachments.

***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**		**Points**
(1) Preserve & Maintain the Existing System	State of good repair	Vehicle replacements:	Average mileage of replacement vehicles	45
		System upgrades:	1. Asset condition	20
			2. Transit system connections	25
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Impact to service levels	Increase, expansion, or continuation of service		20
	First- and last-mile trip impacts	Multimodal options		4
(3) Support Neighborhoods & Communities	Addressing social equity	Project serves or located within Environmental Justice community		8
(4) Foster a Vibrant Downtown & Central Core	Multimodal needs of residents and access to employment	Access improvements in central core		1
(6) Promote Safety	Improved safety	Safety and/or security elements at facilities or on transit vehicles		7
(7) Support a Diverse Economy with a Reliable System	Service and customer improvements	ITS elements or other service enhancing technologies		5
(8) Support Quality Job Development	n/a	n/a		n/a
(9) Strengthen Intermodal Connections	n/a	n/a		n/a
(10) Protect Air Quality & Environmental Assets	Impact to the environment	Zero- or low-emission bus replacements or environmental infrastructure elements		10

***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**		**Points**
(1) Preserve & Maintain the Existing System	n/a	n/a		n/a
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Project impact to system	Adding capacity:	Ridership	60
		Geographic expansion:	1. Population and employment density	30
			2. Transit service frequency	35
	First- and last-mile trip impacts	Multimodal options		4
(3) Support Neighborhoods & Communities	Addressing social equity	Project serves or located within Environmental Justice community		8
(4) Foster a Vibrant Downtown & Central Core	Multimodal needs of residents and access to employment	Access improvements in central core		1
(6) Promote Safety	Improved safety	Safety and/or security elements at facilities or on transit vehicles		7
(7) Support a Diverse Economy with a Reliable System	Service and customer improvements	ITS elements or other service enhancing technologies		5
(8) Support Quality Job Development	Access to jobs	Adding capacity:	Job density	5
		Geographic expansion:	n/a	n/a
(9) Strengthen Intermodal Connections	n/a	n/a		n/a
(10) Protect Air Quality & Environmental Assets	Impact to the environment	Zero- or low-emission bus replacements or environmental infrastructure elements		10

Transit Checklist

- Location map: detail showing project's overall location; 8 ½ x 11
  - Transit expansion – geographic expansion
    - Project location used to calculate scores for population and employment index and Environmental Justice
  - Transit expansion – adding capacity
    - Project location used to calculate scores **for** employment density and Environmental Justice
- Detailed cost estimate
  - Use Estimate of Project Costs excel file
- Vehicle replacement information
  - Vehicle type, mileage, year, condition, and year of planned replacement

Note: see checklist in Application Form to review ALL required attachments.

***Connected2045* Guiding Principles (Criteria)**	**Measure**	**Metric**		**Points**
(1) Preserve & Maintain the Existing System	Road or bridge condition	PASER rating or bridge sufficiency rating		5 (avg)
	ITS condition	Preserving ITS components		
Multimodal: (2) Support Public Transportation / (5) Provide More Transportation Choices	Multimodal accommodation	Elements of other modes being implemented as part of the project		10
(3) Support Neighborhoods & Communities	Addressing social equity	Project falls in or partially located in an Environmental Justice area		4
(4) Foster a Vibrant Downtown & Central Core	n/a	n/a		n/a
(6) Promote Safety	Safety countermeasures	1. Total crash rate		5
		2. Fatal & serious injury crash rate		5
(7) Support a Diverse Economy with a Reliable System	Travel time reliability	Planning Time Index and Travel Time Index (avg) or volume/capacity		10 (avg)
		Strategy		
(8) Support Quality Job Development	Access to jobs	Freight:	n/a	n/a
		Economic development:	1. Average income of industry supported	30
			2. Number of jobs created	20
			3. Cost per job created	10
(9) Strengthen Intermodal Connections	Intermodal significance	Freight:	1. Project located within an industrial site area	25
			2. Provides connection to intermodal facility and commercial vehicle countermeasure	35
		Economic development:	n/a	n/a
(10) Protect Air Quality & Environmental Assets	Impact to the environment	Environmental infrastructure elements		1

Freight/Economic Development Checklist

- Location map: detail showing project's overall location; 8 ½ x 11
- Project location used to calculate scores for Environmental Justice, travel time reliability, and intermodal connections
- Detailed cost estimate
  - Use Estimate of Project Costs excel file
- Detailed map showing:
  - Locations of proposed safety countermeasures
  - Transit routes along project limits
  - Activity centers along project limits
  - Schools located within ½ mile of project limits
  - Location of proposed economic development (Ec. Dev. only)
  - Freight facilities along project limits (Freight only)
- Typical section – before and after improvements
- Road or bridge condition – PASER rating (use Road Condition Evaluation Form) or state issued bridge inspection report
- Crash rate – 2012-2016
  - Crash reports required only if project includes safety countermeasure
    - If safety countermeasure included then attach crash reports for:
      - Fatal and serious injury crashes
      - Up 10 minor injury or PDO crashes that coincide with safety countermeasure
- ITS Architecture Project Consistency Statement Form
  - Only needed if ITS components included or modified

Note: see checklist in Application Form to review ALL required attachments.

Pavement Documentation – Road Condition Evaluation Form

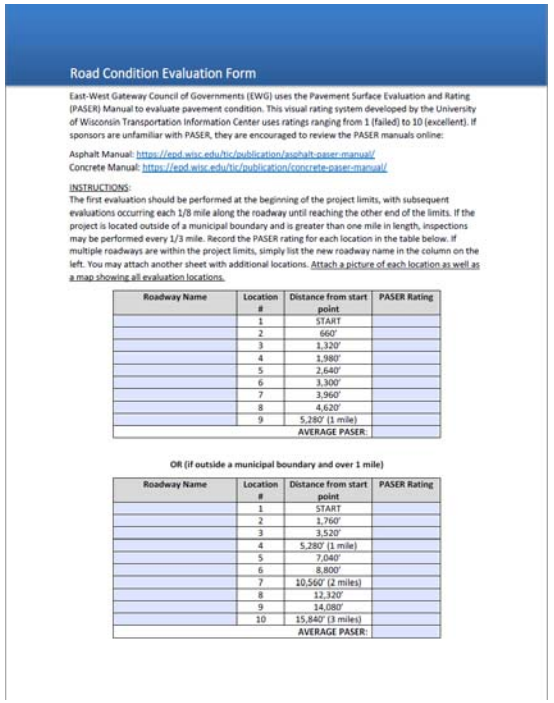
Used for Road, Traffic Flow, Safety, and Freight/Economic Development applications

Sponsor must include Road Condition Evaluation Form along with application

- PASER rating should be taken at uniform distance every ⅛ mile
- If project outside municipal boundary and greater than 1 mile in length then rating should be taken every ⅓ mile

Provide photos from each rating location

Provide a map that shows where pavement was evaluated



Road Condition Evaluation Form

East-West Gateway Council of Governments (EWG) uses the Pavement Surface Evaluation and Rating (PASER) Manual to evaluate pavement condition. This visual rating system developed by the University of Wisconsin Transportation Information Center uses ratings ranging from 1 (failed) to 10 (excellent). If sponsors are unfamiliar with PASER, they are encouraged to review the PASER manuals online:

Asphalt Manual: https://epd.wisc.edu/tic/publication/asphalt-paser-manual/
Concrete Manual: https://epd.wisc.edu/tic/publication/concrete-paser-manual/

INSTRUCTIONS:
The first evaluation should be performed at the beginning of the project limits, with subsequent evaluations occurring each 1/8 mile along the roadway until reaching the other end of the limits. If the project is located outside of a municipal boundary and is greater than one mile in length, inspections may be performed every 1/3 mile. Record the PASER rating for each location in the table below. If multiple roadways are within the project limits, simply list the new roadway name in the column on the left. You may attach another sheet with additional locations. Attach a picture of each location as well as a map showing all evaluation locations.

Roadway Name	Location #	Distance from start point	PASER Rating
	1	START	
	2	660'	
	3	1,320'	
	4	1,980'	
	5	2,640'	
	6	3,300'	
	7	3,960'	
	8	4,620'	
	9	5,280' (1 mile)	
		AVERAGE PASER:	

OR (if outside a municipal boundary and over 1 mile)

Roadway Name	Location #	Distance from start point	PASER Rating
	1	START	
	2	1,760'	
	3	3,520'	
	4	5,280' (1 mile)	
	5	7,040'	
	6	8,800'	
	7	10,560' (2 miles)	
	8	12,320'	
	9	14,080'	
	10	15,840' (3 miles)	
		AVERAGE PASER:	

Safety Documentation – Crash Reports

Used for Road, Traffic Flow, Safety, Freight/Economic Development applications

If safety countermeasure is proposed:

- Provide crash reports (2012-2016) for ALL fatal and serious injury crashes
- Provide crash reports for up to 10 minor injury and property damage only crashes that coincide with countermeasure in project

If project has zero crashes:

- A project can still potentially receive partial points if it does not have crashes, but includes a preventive safety countermeasure

In general, resurfacing not a safety countermeasure

Safety Documentation – Safety Calculator sheet – Crash Rate

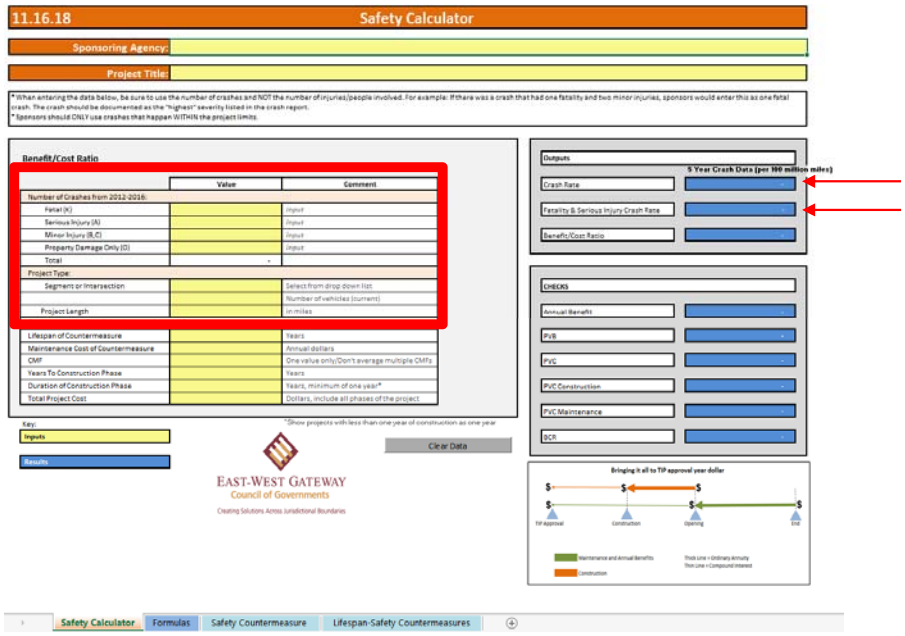
Located in Safety Supplement excel file

Used for Safety application only

Crash data required 2012-2016

Enter the number of crashes for fatal, serious injury, minor injury, and property damage only

- DO NOT list the number of injuries from each crash
- Example: A crash with one fatal, three serious, and two minor injuries would be listed as one fatal crash
- List only the crashes within the project limits
  - Select from dropdown under project type
    - Segment
      - Enter project length
    - Intersection
      - Enter AADT for traffic entering intersection



Safety Documentation – Safety Calculator sheet – Benefit/Cost

Located in Safety Supplement excel file

Used only for Safety application

Enter lifespan of countermeasure
- Find the lifespan of countermeasures in the Lifespan-Safety Countermeasures tab of excel file

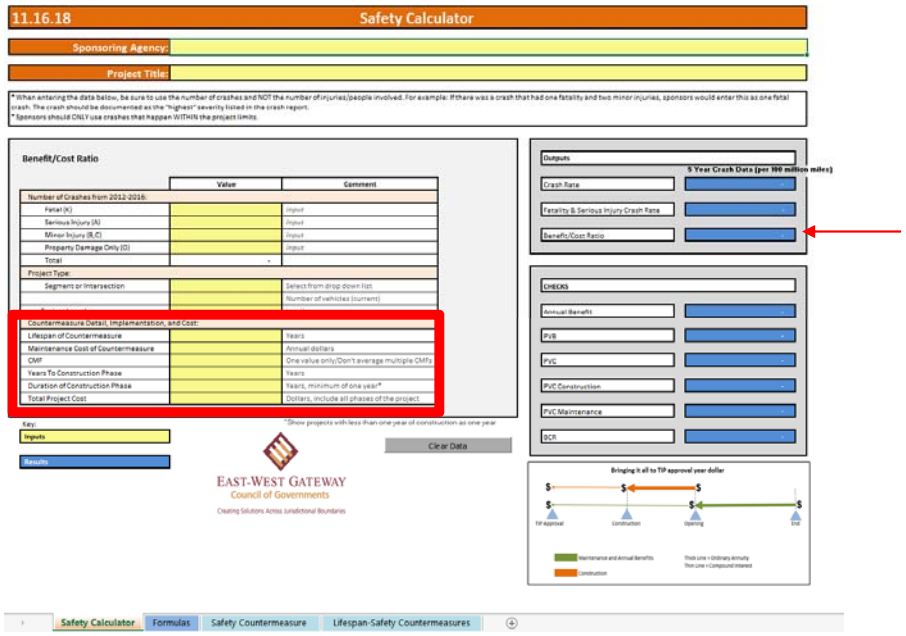
Enter CMF
- Only input the CMF of one safety countermeasure that best describes the project purpose
- CMFs found in Safety Countermeasure tab of the excel file, Appendix B of STP-S Scoring Criteria Guide, or www.cmfclearinghouse.org.

Enter maintenance cost of countermeasure

Enter years to construction

Enter duration of construction phase

Enter total project cost (all phases)



Traffic Flow Documentation

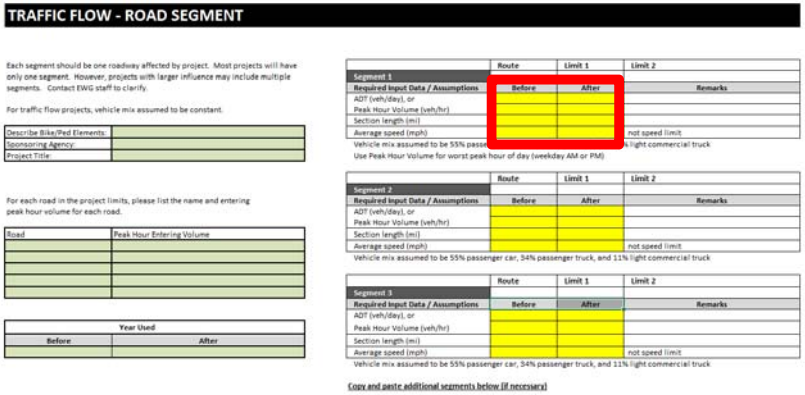
Used only for Traffic Flow application

Located in Traffic Flow Supplement excel file

Two sheets in form used for calculation

- Road Segment – Before/after average speed
  - For each segment:
    - Enter ADT or peak hour volume (use worst peak hour)
    - Enter section length
    - Enter average speed during peak hour
- Intersection – Before/after delay
  - Enter average vehicle delay (worst peak hour)
  - Enter daily intersection volume or peak hour intersection volume (use worst peak hour)

Traffic Flow projects must include a traffic engineering analysis to support data included in Traffic Flow Supplement excel file


TRAFFIC FLOW - ROAD SEGMENT

Each segment should be one roadway affected by project. Most projects will have only one segment. However, projects with larger influence may include multiple segments. Contact EWG staff to clarify.

For traffic flow projects, vehicle mix assumed to be constant.

Describe Bike/Ped Elements:	
Sponsoring Agency:	
Project Title:	

For each road in the project limits, please list the name and entering peak hour volume for each road.

Road	Peak Hour Entering Volume

Year Used	
Before	After

	Route	Limit 1	Limit 2
Segment 1			
Required Input Data / Assumptions	Before	After	Remarks
ADT (veh/day), or			
Peak Hour Volume (veh/hr)			
Section length (mi)			
Average speed (mph)			not speed limit

Vehicle mix assumed to be 55% passe … s light commercial truck

Use Peak Hour Volume for worst peak hour of day (weekday AM or PM)

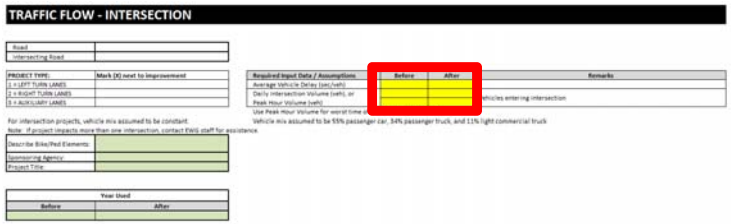
	Route	Limit 1	Limit 2
Segment 2			
Required Input Data / Assumptions	Before	After	Remarks
ADT (veh/day), or			
Peak Hour Volume (veh/hr)			
Section length (mi)			
Average speed (mph)			not speed limit

Vehicle mix assumed to be 55% passenger car, 34% passenger truck, and 11% light commercial truck

	Route	Limit 1	Limit 2
Segment 3			
Required Input Data / Assumptions	Before	After	Remarks
ADT (veh/day), or			
Peak Hour Volume (veh/hr)			
Section length (mi)			
Average speed (mph)			not speed limit

Vehicle mix assumed to be 55% passenger car, 34% passenger truck, and 11% light commercial truck

Copy and paste additional segments below (if necessary)


TRAFFIC FLOW - INTERSECTION

Road	
Intersecting Road	

PROJECT TYPE:	Mark (X) next to improvement
1 = LEFT TURN LANES	
2 = RIGHT TURN LANES	
3 = AUXILIARY LANES	

For intersection projects, vehicle mix assumed to be constant.

Note: If project impacts more than one intersection, contact EWG staff for assistance.

Describe Bike/Ped Elements:	
Sponsoring Agency:	
Project Title:	

Year Used	
Before	After

Required Input Data / Assumptions	Before	After	Remarks
Average Vehicle Delay (sec/veh)			
Daily Intersection Volume (veh), or			…hicles entering intersection
Peak Hour Volume (veh)			

Use Peak Hour Volume for worst time …

Vehicle mix assumed to be 55% passenger car, 34% passenger truck, and 11% light commercial truck

Congestion Management Study

Congestion Management Study (CMS) provides analysis of alternatives for projects that add single occupant vehicle capacity such as:

- New road
- Additional through lanes to existing road

CMS includes strategies such as:

- Travel demand management
- Traffic operational improvements
- Bicycle and pedestrian improvements
- Access management
- Appendix B of Project Development Workbook identifies potential strategies

CMS not required if project entails

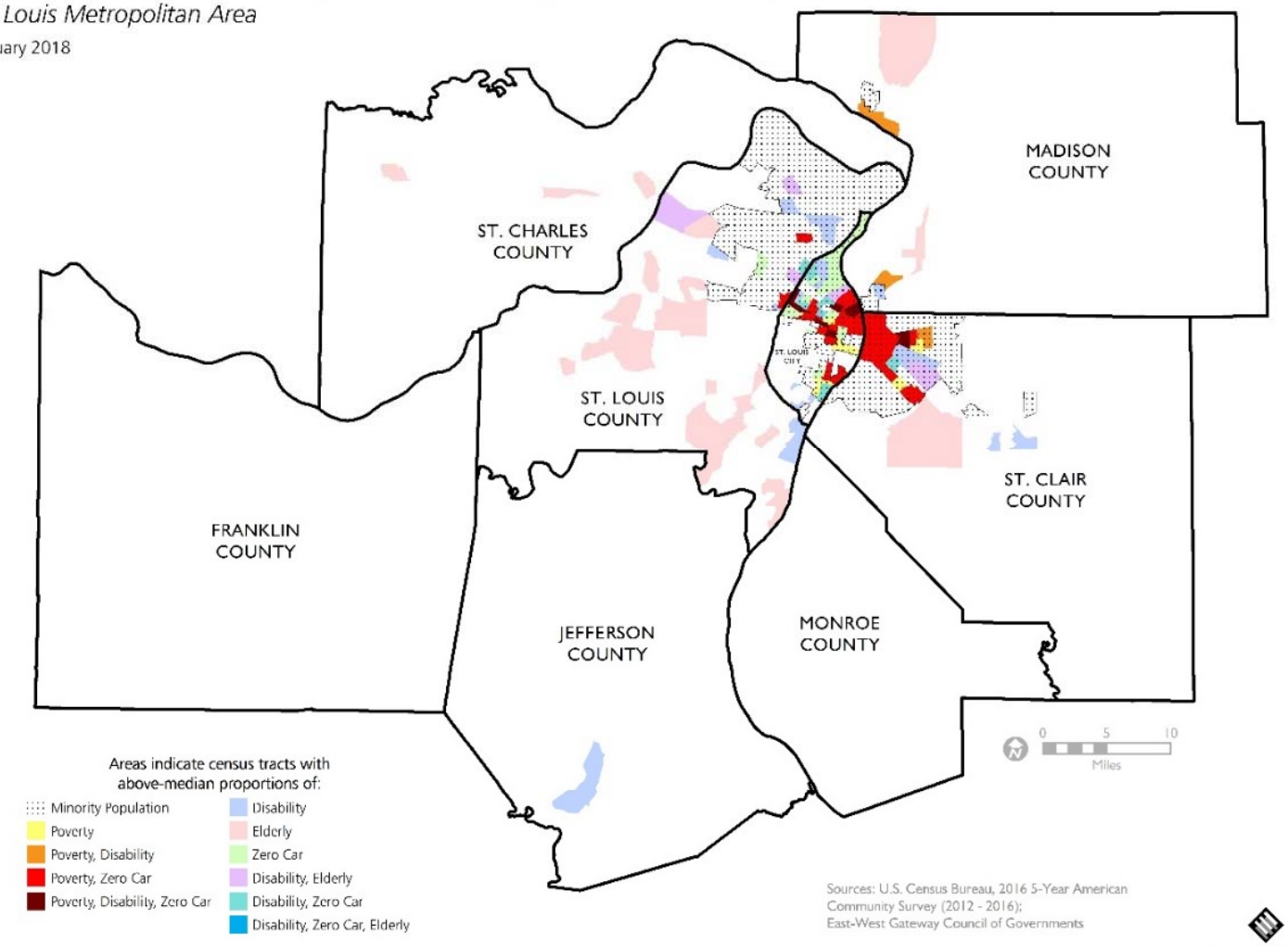
- Adding turn lanes to intersection
- Adding two-way turn lane

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)

Environmental Justice Population by Census Tract

St. Louis Metropolitan Area

January 2018

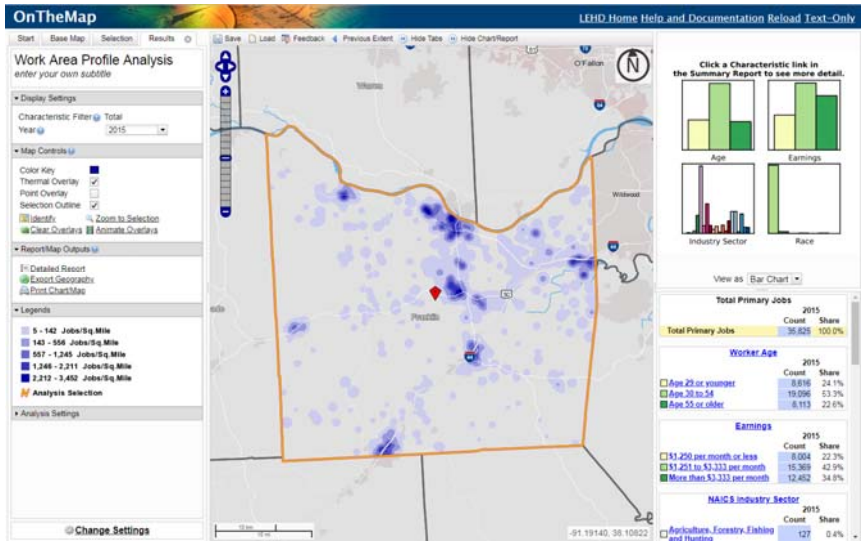


Sources: U.S. Census Bureau, 2016 5-Year American Community Survey (2012 - 2016); East-West Gateway Council of Governments

EAST-WEST GATEWAY
Council of Governments

Employment Density

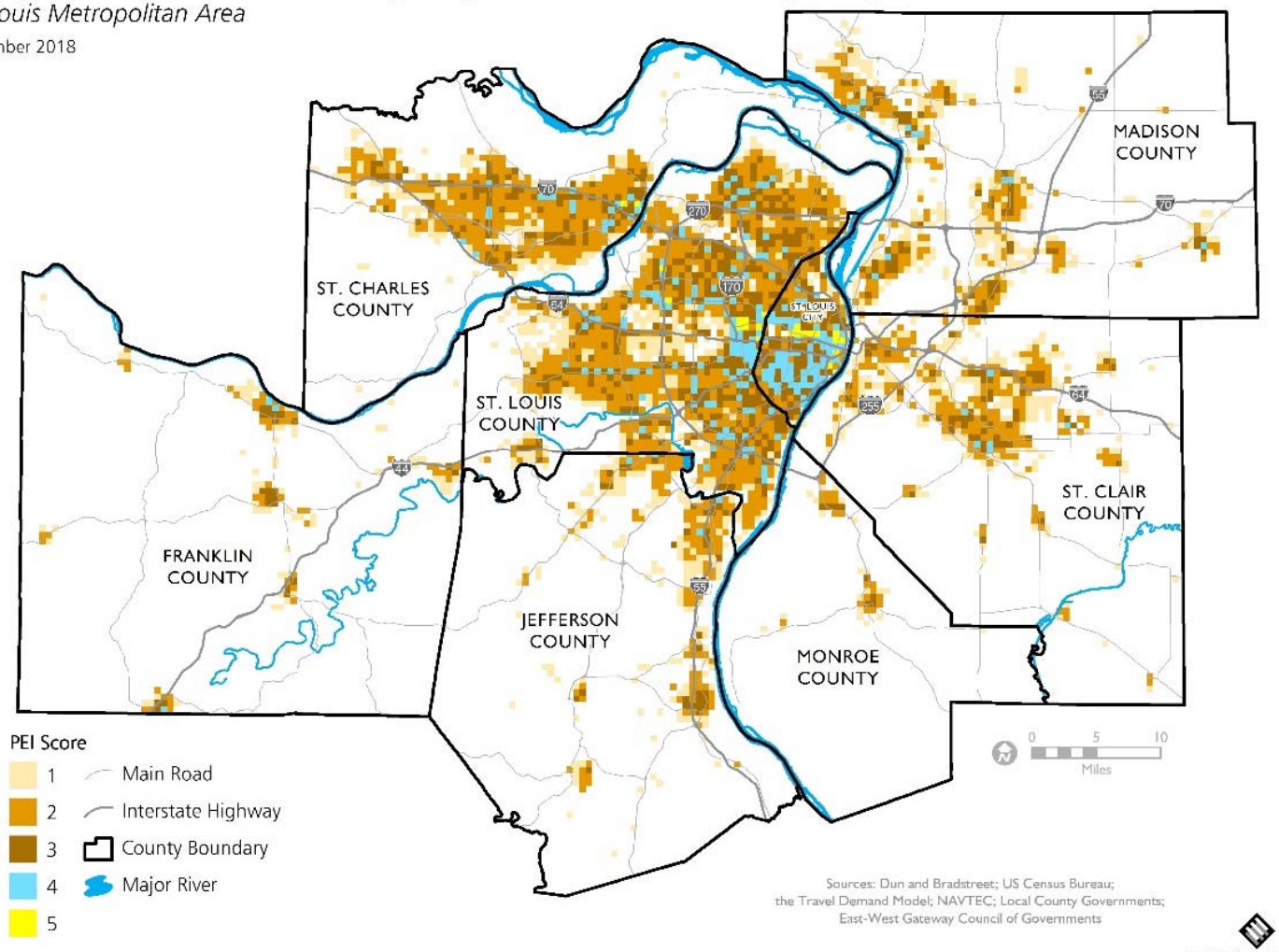
- US Census *OnTheMap*
- https://onthemap.ces.census.gov
- Density score is for each county (primary jobs - 2015)
  - Project in Union would compare to job density in Franklin County, not entire region



Population and Employment Index (PEI)

St. Louis Metropolitan Area

November 2018



Sources: Dun and Bradstreet; US Census Bureau; the Travel Demand Model; NAVTEC; Local County Governments; East-West Gateway Council of Governments

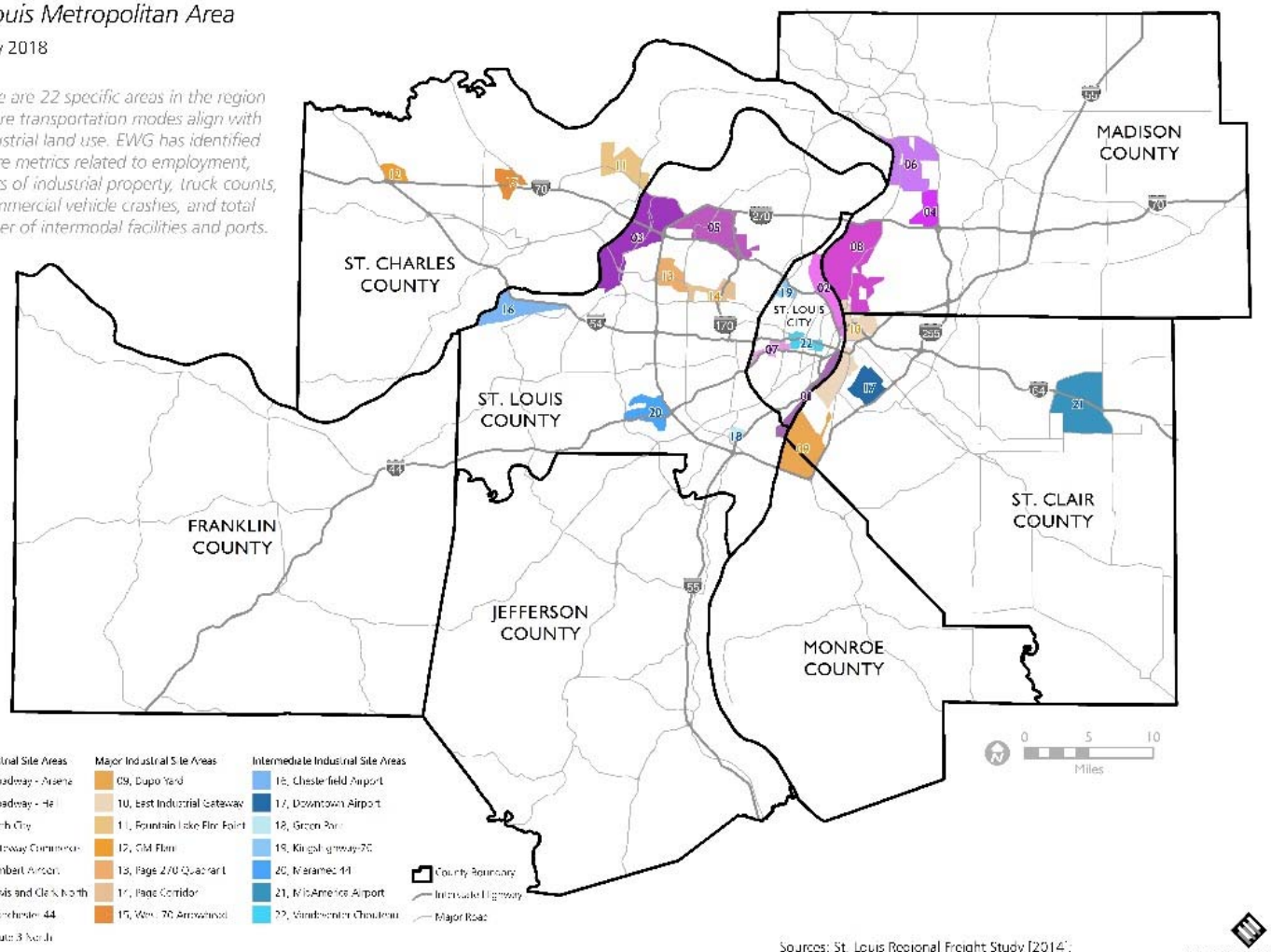
EAST WEST GATEWAY
Council of Governments

Industrial Site Areas

St. Louis Metropolitan Area

January 2018

There are 22 specific areas in the region where transportation modes align with industrial land use. EWG has identified core metrics related to employment, clusters of industrial property, truck counts, commercial vehicle crashes, and total number of intermodal facilities and ports.



Sources: St. Louis Regional Freight Study [2014]; East-West Gateway Council of Governments

EAST-WEST GATEWAY Council of Governments

STP-S Questions?

Congestion Mitigation and Air Quality Improvement Program

Program Purpose

CMAQ goals

- Fund transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards for:
  - Ozone
  - Carbon monoxide
  - Particulate matter
- St. Louis Region in maintenance or non-attainment for:
  - Ozone
  - Fine particulate matter (PM 2.5)
- At least 25% funds used to reduce PM 2.5

Eligible Activities

- Congestion reduction and traffic flow improvements
- Freight/intermodal
- Transit improvements
- Carpooling and vanpooling
- Public education and outreach activities
- Travel demand management
- Diesel engine retrofits
- Idle reduction
- Bicycle and pedestrian facilities and programs
- Alternative fuels and vehicles
  - CMAQ funds cannot be used for acquisition of police and fire vehicles
  - Public fleet alternative fuel vehicles with dominant transportation function receive full CMAQ participation (i.e. transit buses, incident management patrol)
  - For others, CMAQ funds eligible to pay for difference between acquisition of conventionally fueled vehicle and alternative fueled vehicle
- More eligible activities listed in Appendix A of CMAQ Project Development Workbook

Ineligible Activities

Projects not eligible for CMAQ include:

- Added single occupant vehicle capacity
  - New road
  - Added through lanes to existing road
  - Expansion of road capacity by adding additional traffic lane
- Routine maintenance and rehabilitation projects

Public-Private Partnership

Private funds supplements state and local funds

An eligible agency must be the lead sponsor; private agency must be co-sponsor

- Local match of at least 50% required

Project must have benefit for the general public – emission reductions

Private sector involvement examples include:

- Freight
- Diesel retrofits

Project Type Examples

Examples of CMAQ projects include:

- Intersection improvements
- Two-way turn lane
- Roundabout
- Traffic signal
- Traffic signal synchronization/optimization
- Transit capital
- Bicycle and pedestrian facilities
- Diesel engine retrofit
- Alternative fuel vehicles
- Ride Share promotion
- Projects or programs that shift travel demand to nonpeak hours or other transportation modes

Navigating the CMAQ Application Process

Steps to completing application

- CMAQ Call for Projects webpage: http://www.ewgateway.org/transportation-planning/transportation-improvement-program/competitive-transportation-programs/call-for-projects-cmaq/
- Download and read the following:
  - CMAQ Project Development Workbook
- Click 'Application Download' button
  - Enter contact information to access CMAQ application
  - Download CMAQ application; save to computer before filling out
  - May not submit application for CMAQ and STP-S for same project

Navigating the CMAQ Application Process

Steps to completing application

- Download CMAQ Data spreadsheet – This is required for EWG analysis of project
  - Sheets in spreadsheet reflect common CMAQ project types including:
    - Traffic flow
    - Intersection
    - Transit bus replacement
    - Rideshare
    - BikePed
    - Marine engines
  - Enter data in tab best reflects project type (i.e. roundabout uses intersection tab)
  - If sheet not available for project, contact EWG staff by January 24 for assistance

Financial Plan

Federal funds are obligated one time for each phase

Do not program multiple phases in same year

Make sure the date in the schedule is within the federal fiscal year in financial plan

- FY 2021 ROW obligation means ROW approval should be listed between 10/2020 and 9/2021

Do not begin work on federally funded phase of project until authorized by MoDOT

EXAMPLE:

FINANCIAL PLAN

Note: *Fiscal years are federal fiscal years (October 1 through September 30)[3]. Federal participation for a phase of work must not exceed 80% for most projects. Carpool/vanpool marketing and vanpool acquisition activities may be reimbursed up to 100%. Sponsor share of at least 50% is required for public-private partnerships.*

Activity	Starting Federal Fiscal Year	Total Phase Cost	CMAQ Funds Requested	Sponsor Share	Sponsor Share Percentage
PE / Planning / Environmental Studies	FY 2020	$ 100,000	$ 80,000	$ 20,000	20.00%
Right-of-Way	FY 2021	$ 10,000	$ 8,000	$ 2,000	20.00%
Construction Engineering	FY 2022	$ 2,000,000	$ 1,600,000	$ 400,000	20.00%
Construction / Implementation	FY 2022	$ 100,000	$ 80,000	$ 20,000	20.00%
TOTAL PROJECT COST		$ 2,210,000	$ 1,768,000	$ 442,000	20.00%

Identify the source(s) of local matching funds (e.g., state DOT, city, county, county road board, county motor fuel tax, private entity), and the amount for each source:	City general revenue - $100,000 County road board - $342,000

Evaluation

Emission reductions – precursors of ground-level ozone formation

- Volatile organic compounds
- Oxides of nitrogen

CMAQ data spreadsheet

- Current conditions
- Future conditions (after construction)
  - Future data should reflect no more than five years after construction completed

Traffic engineering analysis required for road projects to support data in spreadsheet

EWG uses CMAQ data to estimate emission reductions for project

Cost-effectiveness analysis – emission reductions vs. federal funds requested

CMAQ Questions?

Upcoming Events/Deadlines

- January 17: Preliminary applications due – optional
  - Submit via email: stps@ewgateway.org or cmaq@ewgateway.org
  - Application only – supplemental information not required
  - EWG comments will be returned no later than January 31
- January 18 & 25: Project Review Workshops
  - Registration posted on EWG website in mid-December – meeting 30 minutes for up to two projects
- February 14: (4 PM) – Final applications due

EWG is available to assist project sponsors throughout the application period

Questions?

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