

Congestion Mitigation & Air Quality Improvement Program

2021 Call for Projects

For the St. Louis Region

Guidance Document for CMAQ Project Development



EAST-WEST GATEWAY
Council of Governments

Creating Solutions Across Jurisdictional Boundaries

November 6, 2020

TABLE OF CONTENTS

I.	Introduction.....	3
II.	Program Information.....	3
	Background	3
	Policy Framework.....	3
III.	Eligibility Information	3
	MPO Boundary.....	3
	Eligible Project Sponsors	3
	Project Eligibility.....	4
	Available Funding.....	4
	Match Requirements	4
	Funding Type.....	5
	Application Fee	5
	Other Eligibility Requirements	5
IV.	Project Development	6
	Project Types.....	6
	Project Development Schedule.....	7
	Coordination between Agencies.....	7
	Logical Termini Review – Illinois Only	8
	Operations and Maintenance	8
V.	Submittal Process.....	8
	Deadline, Application Document, and Submission Requirements	8
	Preliminary Applications	9
	Frequently Asked Questions	9
VI.	Selection Process.....	9
	Emission Reduction Estimates	9
	Project Evaluation	10
	Project Selection	11
	Approval Process.....	11
	Post-construction Reporting	11
	Public Comment.....	12
VII.	Programming Process.....	12
	Programming Policy	12
	Schedule.....	12
	Project Development Workshop.....	13
	Project Review Workshop	13
VIII.	Resources	14
	EWG Resources	14
	Federal Resources	14
	State Resources.....	14
IX.	Contact Information	14
	Appendix A: CMAQ Eligible Activities	15
	Appendix B: Glossary of Terms.....	17

I. INTRODUCTION

This Workbook is intended to provide information and reference material to project sponsors in completing applications for Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding available through the East-West Gateway Council of Governments (EWG). CMAQ provides flexible funding that may be used to reimburse eligible project sponsors for projects or programs that will contribute to attainment of the National Ambient Air Quality Standards (NAAQS), with a focus on reducing the precursors of ozone formation – volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) – as well as carbon monoxide (CO) and particulate matter (PM). This program is funded through the Federal Highway Administration (FHWA).

II. PROGRAM INFORMATION

BACKGROUND

Originally authorized under the Intermodal Surface Transportation Efficiency Act (ISTEA), which was signed into law on December 18, 1991, CMAQ was most recently authorized by the current federal transportation funding act, the Fixing America’s Surface Transportation (FAST) Act, which was signed into law on December 4, 2015 and extended through a continuing resolution signed into law on October 1, 2020.

POLICY FRAMEWORK

A metropolitan planning organization (MPO) is required to develop a fiscally constrained long-range transportation plan and a Transportation Improvement Program (TIP). EWG, as the designated MPO for the St. Louis region, selects projects in accordance with the principles and performance management framework identified in the long-range transportation plan, *Connected2045* (adopted June 2019). The TIP contains the financial and implementation schedule for all projects receiving federal transportation funding in the St. Louis region, including CMAQ funds.

III. ELIGIBILITY INFORMATION

PROJECT LOCATION

To be eligible to receive CMAQ funds, eligible project sponsors must be located within an area classified as nonattainment or maintenance of the NAAQS within the MPO. The MPO contains areas of nonattainment or maintenance for ozone. This includes the entirety of Madison, Monroe, and St. Clair counties in Illinois, and Franklin, Jefferson, St. Charles, and St. Louis counties and the city of St. Louis in Missouri.

ELIGIBLE PROJECT SPONSORS

Eligible project sponsors to receive CMAQ funds are limited to city, county, state, or transportation-related government agencies, such as Bi-State Development, Madison County Transit District, Great Rivers Greenway (GRG), townships, and special road districts located within EWG’s MPO boundary. School districts and not-for-profit agencies are not eligible project sponsors, but may partner as secondary sponsors with any eligible project sponsor. Public-private partnerships are permitted when a private entity partners as a secondary sponsor with an eligible project sponsor.

Note: if a project has received Missouri Department of Transportation (MoDOT) Cost Share funds, or intends to submit a Cost Share application in the future, the project sponsor for the CMAQ application must be the same as the MoDOT Cost Share application.

PROJECT ELIGIBILITY

Each CMAQ project must meet three basic criteria: it must be a transportation project, it must generate an emissions reduction, and it must be located in or primarily benefit a nonattainment or maintenance area. Projects must comply with the Regional Intelligent Transportation Systems (ITS) Standards as set forth in the *St. Louis Regional ITS Strategic Deployment Plan and Architecture Report* as well as the *Congestion Management Process (CMP)*. The CMP 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 which CMP goals/objectives are being addressed and how they will be achieved.

Bicycle and pedestrian facilities are listed as a standalone category, however, the project sponsor should incorporate or upgrade these facilities, where feasible, as part of a traffic flow project (intersection, traffic signal, roundabout, etc.). Alternative fuel school bus purchases may not exceed 2.5 percent of the amount of federal funds available for each funding round. The selection of alternative fuel school bus projects is not guaranteed. **Appendix A** lists eligible project activities.

AVAILABLE FUNDING

For this project solicitation, EWG anticipates the following funding targets:

Illinois: Approximately \$5.5 million

Missouri: Approximately \$20 million

Please note that these funds are an estimated allotment and are subject to change.

MATCH REQUIREMENTS

A local match is required to pay for at least 20 percent of the total eligible project cost for each phase of work (i.e., preliminary engineering, right-of-way acquisition, and construction, including construction engineering) for most projects. Carpool/vanpool marketing and vanpool acquisition activities may be reimbursed up to 100 percent. A local match of at least 50 percent is required for public-private partnerships.

Project sponsors must have sufficient funds available to pay for the non-federal share of project expenditures. If the sponsor is receiving funding from any other agency to provide part of the local match, the sponsor must include a letter from the other agency committing to financially participate and approving the scope of work. If a sponsor intends to request funding from a third party in the future, a letter from the third party is required to show their support for the project scope in the application. Potential third-party match sources cannot alter the approved scope of work. Federal funds identified in the FAST Act or prior authorizations may not be used as match. Other federal funds such as Community Development Block Grant may be permitted, however, please check with EWG staff prior to including as match.

Use of in-kind donations from third parties in lieu of local funds for match will be considered on a case-by-case basis. Third-party donations could include materials, land, or services that will be incorporated into the project. Federal requirements may restrict the situations in which in-kind donations for match can be used. Project sponsors must notify EWG staff prior to the submission of the application and identify on the application form if use of in-kind donations for match is requested. The respective state department of transportation, on behalf of FHWA, must approve use of in-kind donations in lieu of local funds for match prior to performing reimbursable work. The respective state department of transportation will work with project sponsors to establish the eligibility and value of in-kind donations.

FUNDING TYPE

CMAQ is a federal reimbursement program. Project sponsors must have the capacity to cover project costs from the beginning of the project to implementation. Project sponsors will enter into funding agreements with their respective state department of transportation. These agreements will detail how and when eligible expenses will be reimbursed to the project sponsor.

Keep in mind that the federal funds allocated to a project are fixed. The project sponsor must pay all costs incurred in excess of the federal funding allocated to the project. Therefore, it is important to develop a good estimate and schedule for the project application. Any work begun prior to state department of transportation approval will not be federally reimbursed.

APPLICATION FEE

An application fee is required for each project that is submitted for consideration. The application fee is ½ of one percent of the federal funds being requested. For example, a project sponsor requesting \$800,000 in federal funding would be required to pay a \$4,000 application fee. Counties make annual contributions to EWG and, as such, a credit equal to their annual contribution is applied against their application fee. Counties will be invoiced for any amount above the annual contribution credit. If the project is not recommended for funding, the application fee will be refunded. The refund process takes approximately two months after the Board of Directors acts on final approval of the project list.

OTHER ELIGIBILITY REQUIREMENTS

To sponsor a CMAQ project, an agency must follow the state and federal rules for using federal funds. CMAQ projects must adhere to the following guidelines:

- The project sponsor must maintain all records and receipts as required by procedures established by FHWA, Federal Transit Administration (FTA), and Illinois Department of Transportation (IDOT) or Missouri Department of Transportation (MoDOT).
- All project sponsors must certify that matching funds are available to implement the project.
- All applications must indicate the Person of Responsible Charge for each phase of work.
 - Missouri project sponsors and consultants are required to complete Local Public Agency (LPA) Basic Training to be certified as a Person of Responsible Charge. This training must be completed online prior to federal funds being obligated for the project. Certification is valid for two years.
- All project sponsors are required by law to comply with the Americans with Disabilities Act (ADA) of 1990 and Title VI of the Civil Rights Act of 1964.
- All project sponsors are required by law to comply with Buy America.
- All project sponsors must certify that the project will adhere to the Uniform Relocation and Real Property Acquisition Policies Act of 1970.
- Missouri project sponsors must certify that the project will comply with the Policy on Reasonable Progress.
- Projects that contain ITS components or impact ITS must include the ITS Architecture Project Consistency Statement.
- The project sponsor must demonstrate adequate plans for and commit to ongoing maintenance costs for the expected life of the project.

IV. PROJECT DEVELOPMENT

PROJECT TYPES

Generally, the improvements fall into one of nine general categories, although other related activities may also be eligible. The nine categories are listed below:

1. Projects that improve traffic flow, including efforts to provide signal synchronization, streamline intersections, add turning lanes, construct roundabouts, transportation system management and operations that mitigate congestion and improve air quality, and implement ITS and other CMAQ-eligible projects, including efforts to improve incident and emergency response or improve mobility, such as through real-time traffic, transit, and multimodal traveler information. **Note:** CMAQ funds can be used for traffic flow components, but other work such preservation of existing lanes (i.e. resurfacing or reconstruction) would not be eligible for CMAQ.
2. Acquisition of diesel retrofits, including tailpipe emissions control devices, and the provision of diesel-related outreach activities.
3. Intermodal equipment and facility projects that target diesel freight emissions through direct vehicle exhaust control or indirect emissions reductions through improvements in freight network logistics.
4. Alternative fuel projects including participation in vehicle acquisitions, engine conversions, and refueling facilities. Only publicly-owned vehicles providing a dominant transportation function can be fully funded. When non-transit vehicles are purchased through public-private partnerships, only the cost difference between the alternative fuel vehicles and comparable conventional fuel vehicles is eligible. Establishing publicly-owned fueling facilities and other infrastructure needed to fuel alternative-fuel vehicles is an eligible expense, unless privately-owned fueling stations are in place and reasonably accessible.
5. Establishment or operation of a traffic monitoring, management, and control facility, including the installation of advanced truck stop electrification systems.
6. Projects or programs that shift travel demand to nonpeak hours or other transportation modes, increase vehicle occupancy rates, or otherwise reduce demand through initiatives, such as teleworking, ridesharing, pricing, and others.
7. Transit investments, including transit vehicle acquisitions and construction of new facilities or improvements to facilities that increase transit capacity. Operating assistance is also permitted to help start up viable new transportation services.
8. Non-recreational bicycle transportation and pedestrian improvements that provide a reduction in single-occupant vehicle travel.
9. Vehicle inspection and maintenance programs.

Activities not eligible for CMAQ funding include, but are not limited to:

- Roadway projects that add new capacity for single occupant vehicles.
- Projects that do not meet the specific eligibility requirements of Titles 23 and 49, United States Code. This includes routine maintenance and rehabilitation activities such as rehabilitation or reconstruction of bridges as well as resurfacing, reconstructing, or repairing roads. Other funding sources such as STP-S are available for these activities.
- Administrative costs of the CMAQ program may not be defrayed with program funds.

PROJECT DEVELOPMENT SCHEDULE

Below details the funding availability by fiscal year and phase of work:

Illinois:	FY 2022 -	Preliminary engineering or right-of-way acquisition
	FY 2023 -	Right-of-way acquisition or construction (including construction engineering)
	FY 2024 -	Construction (including construction engineering)
Missouri:	FY 2022 -	Preliminary engineering or right-of-way acquisition
	FY 2023 -	Right-of-way acquisition or construction (including construction engineering) (Construction/construction engineering has to be \$1 million federal or less)
	FY 2024 -	Construction (including construction engineering)

No more than one federally reimbursable phase of work (i.e., preliminary engineering, right-of-way acquisition, or construction) can be scheduled in the same fiscal year.

COORDINATION BETWEEN AGENCIES

Project sponsors need to coordinate with other affected agencies in the project limits, for instance:

- The project sponsor must include a letter from the agency with jurisdiction over the facility stating its approval of and cooperation on the project.
- If the project is impacting signals owned by a different jurisdiction, a letter of coordination is required.
- Requests for letters of support for projects that impact MoDOT facilities should be submitted to the Area Engineer by **January 14, 2021**. A checklist outlining the minimum project information to be submitted with the support letter request is available from MoDOT's Area Engineer. MoDOT may withhold letters of support if the project sponsor fails to adequately address impacts to MoDOT's facilities.
- Requests for letters of support that impact IDOT facilities should be submitted to the Local Roads Field Engineer by **January 14, 2021**. IDOT may withhold letters of support if the project sponsor fails to adequately address impacts to IDOT's facilities.
- If the project is on a transit route and the project impacts transit stops along the corridor, provide a letter from the transit agency (i.e., Bi-State Development, Madison County Transit District, St. Clair County Transit District) with their review and comments on the project. Requests for letters of support should be submitted to the appropriate agency by **January 14, 2021**. Please contact EWG staff for contacts at these agencies.
- **New!** For traffic flow/intersection CMAQ projects, traffic volumes must be based on present conditions/land use. If a sponsor anticipates a large development to open prior to the year of construction, it must provide its methodology to EWG staff no later than **January 14, 2021** for approval to use proposed traffic volumes based on the anticipated development. Exceptions will not be granted to sponsors who miss this deadline and the project application will not be considered further.
- **New!** Project sponsors that are submitting project applications for bike/ped, rideshare, marine engines, park and ride, and education may submit their proposed methodologies for review no later than **January 14, 2021**. EWG staff will determine if the methodology is acceptable for estimating emission reductions.
- If the sponsor is submitting a joint application with an adjoining jurisdiction, one agency may submit the application as the primary sponsor. A letter of support (both project and financial) to document participation is required from the adjoining jurisdiction.
- Project sponsors must have sufficient funds available to pay for the non-federal share of project expenditures. If the sponsor has funding from a third party, a letter is required from the third party

which shows their support for the project scope in the application and that they are providing funding.

- If a sponsor intends to request funding from a third party in the future, a letter from the third party is required to show their support for the project scope in the application. Potential third-party match sources cannot alter the approved scope of work.
- Public-private partnership projects require a letter from each participating private entity that documents the availability of funding to cover local match.

LOGICAL TERMINI REVIEW – ILLINOIS ONLY

Illinois project sponsors are required to have defined logical termini before a final application may be submitted. This means a project must have rational end points and have independent utility when completed. For example, a project may be one phase in a multi-phase project, but each phase must have immediate benefit and use to the public in case additional phases are never funded.

Illinois project sponsors may submit a Logical Termini Review Form to EWG staff between **November 6, 2020** and **January 14, 2021**. The Logical Termini Review Form is available on the EWG [CMAQ Call for Projects](#) web page. EWG, FHWA, and IDOT staff will review the form to determine if a logical termini meeting is needed or if logical termini may be established based on the form.

In lieu of completing the Logical Termini Review Registration Form, sponsors may register for a meeting. Registration for meetings will be available in early-December on the EWG [CMAQ Call for Projects](#) web page. The logical termini reviews will be held virtually in December and January. The review consists of a 20-minute time slot for the project sponsor to discuss the project scope. EWG, FHWA, and IDOT staff will be in attendance to determine logical termini for each project. The specific dates will be communicated once they have been finalized. **Note:** if logical termini were established for a project application in a prior year and scope/limits have not changed, submit the approved Logical Termini Form from the prior year in the application (**new!**).

OPERATIONS AND MAINTENANCE

Project sponsors are required to document that funding is available to operate and maintain roadways that are eligible for federal-aid funding. The Operations and Maintenance Form is an excel file that can be downloaded from the EWG [CMAQ Call for Projects](#) web page. Each sponsor must provide the total agency-wide revenue from the most recent budget, sources of revenue, costs to operate and maintain the transportation system, and lane-miles maintained. For operations and maintenance costs, sponsors should include how much is budgeted for salaries, fringe benefits, and materials and equipment needed to deliver the roadway and bridge maintenance programs. This includes basic maintenance activities like minor surface treatments such as sealing, small concrete repairs, and pothole patching; mowing right-of-way; snow removal; replacing signs; striping; repairing guardrail; and repairing traffic signals. Sponsors should not include costs for capital improvements (e.g., resurfacing, reconstruction, and overlay), TIP projects, and other major road or sidewalk projects. One form is required per sponsor.

V. SUBMITTAL PROCESS

DEADLINE, APPLICATION DOCUMENT, AND SUBMISSION INSTRUCTIONS

The call for projects begins **November 6, 2020** and ends on **February 11, 2021** at 4:00 pm. Applications received after the deadline will not be accepted.

The CMAQ Project Development Workbook, CMAQ application form, and supplemental materials are available on the EWG [CMAQ Call for Projects](#) web page:

<https://www.ewgateway.org/transportation-planning/transportation-improvement-program/competitive-transportation-programs/call-for-projects-cmaq/>.

The application forms are provided in PDF format and allow project sponsors to fill-in the necessary information. Viewing and utilizing the applications will require the installation of Adobe Reader. A free download of the software can be obtained here: <http://get.adobe.com/reader/>. **Please save the application to your computer before filling out the necessary information.** Rename the PDF file using the following format: 2021CMAQ_[Sponsor]_[Project Name].pdf. Additional pages may be attached to the application if necessary to address questions in the application.

New! Sponsors must email the completed application and necessary attachments as a single .pdf document to EWG at cmaq@ewgateway.org. The electronic submission must include scanned signatures and attachments. The CMAQdata spreadsheet is also required. Failure to include the required data in the CMAQdata spreadsheet for the type of project will result in the rejection of the project application. Please submit one application per email. You will receive an email confirmation within one business day of submittal. If you do not receive confirmation or have questions about the application, contact EWG staff. Note that hard copies cannot be accepted as EWG's offices are currently closed. The information provided in this application is public record.

Application fees may be submitted by check via mail or through electronic funds transfer (EFT). Mailed application fees must be postmarked by February 11, 2021 and sent to:

East-West Gateway Council of Governments
Attention: Transportation Planning Department – CMAQ
Gateway Tower
One Memorial Drive, Suite 1600
St. Louis, MO 63102-2451

New! Applicants that prefer to submit EFT payments must email the EWG Director of Administration at staci.alvarez@ewgateway.org. Please put "TIP Application Fees" in the subject line. EFTs must be received by February 18, 2021.

PRELIMINARY APPLICATIONS

Project sponsors wanting feedback on applications may submit a preliminary copy by **January 7, 2021** to EWG at cmaq@ewgateway.org. EWG staff will review the applications submitted and will return comments by email by **January 21, 2021**. If a preliminary application is submitted for feedback, a final application must still be submitted by **February 11, 2021**. Preliminary applications are not required. Sponsors may only submit three preliminary applications for review.

FREQUENTLY ASKED QUESTIONS

If you have questions about the CMAQ application process, scoring criteria, or anything else related to the CMAQ call for projects, please check the Frequently Asked Questions (FAQ) to see if it has already been asked. The FAQ can be found on the EWG [CMAQ Call for Projects](#) web page.

VI. SELECTION PROCESS

EMISSION REDUCTION ESTIMATES

All CMAQ funded projects and programs require assessment and documentation of air quality benefits. The project sponsor is required to include the CMAQdata spreadsheet along with the final project application. The emission reduction estimates are generated using the Environmental Protection Agency's (EPA) Motor Vehicle Emission Simulator (MOVES) model. With respect to air quality analysis, every effort will be made to ensure

that determinations of air quality benefits are credible and based on a consistent and logical analytical procedure that will yield quantitative estimates of emission reductions. The MOVES model generates emission reductions for VOCs, NO_x, and fine particulate matter (PM_{2.5}).

Although quantitative analysis of air quality impacts is required whenever possible, some projects may not lend themselves to such analysis because of the size or scope of the project or because practical experience is lacking to adequately analyze the project. In these cases, a qualitative assessment based on a reasoned and logical examination of how the project or program will decrease emissions and contribute to attainment of NAAQS will be used.

Specific data inputs have been identified which are needed to evaluate estimated emission benefits for the project categories eligible under the CMAQ program. The data needs/inputs for projects being submitted for consideration under the CMAQ program are indicated on the CMAQdata spreadsheet. A traffic engineering analysis is required for all roadway projects. Additional data may be requested of the project sponsors to estimate emission reductions. The spreadsheet is available for various project types such as traffic flow improvement, intersection, transit vehicle acquisitions, shared ride/demand management, bike/ped, park & ride, and engine replacements. Questions on which spreadsheet applies to the project type should be made to EWG staff. Contact EWG staff by **January 14, 2021** if the CMAQdata spreadsheet does not include the proposed project type.

Emission reduction is calculated based on the present conditions (before) and conditions following construction (after). The after data should reflect conditions in the year of construction. For example, if a project is expected to be built and open to the public in 2024, then the after data must be no later than 2024.

PROJECT EVALUATION

EWG staff will review and evaluate all completed applications received by the application deadline. A project's suitability for regional funding may be compromised if the application is found to have omissions or inaccuracies. EWG staff evaluates local projects relative to how effectively they would reduce emissions for ozone precursors. In addition, each project is evaluated based on cost-effectiveness and need. Then projects are ranked based on these criteria.

The evaluation of CMAQ projects is a screening of the projects to ensure they meet the minimum eligibility requirements of the CMAQ program. The evaluation process first considers four tests:

1. Project and sponsor eligibility
2. Emission reductions
3. Available local matching funds and realistic financial plan
4. Financial need

If a project does not meet all four of the tests, it will not be selected for funding.

The first step in project evaluation is determining the eligibility of the project and sponsor. The project must address the issues of congestion and/or air quality to be considered eligible. Additionally, projects must have an appropriate government sponsor. Private-sector involvement in project development/sponsorship is encouraged, but the principal sponsor must be an eligible sponsor. Both requirements must be met for project evaluation to continue.

Next, each project is subject to an analysis of emission reductions of ozone precursors. If there is no demonstrated reduction in emissions or the project contributes to higher emissions, the project will not be considered further.

The third step relates to funding of the project. The federal share for most CMAQ projects is 80 percent. For those projects eligible for 80 percent funding, there is a minimum 20 percent local match required. Those matching funds must be identified in the project application along with the source of those funds. If matching funds are not identified or secured, the project will not be selected for funding.

The fourth measure, financial need, addresses the availability of financial resources other than CMAQ funds. Preference will be given to those projects which would not be accomplished but for CMAQ funding. Shifting project funding to the CMAQ program simply to make other monies available for other projects which might contribute to air pollution is strongly discouraged. The priority of the CMAQ program is to target the unique opportunities that could not be carried out without the use of CMAQ funds.

Finally, cost-effectiveness for each project is measured relative to air quality benefits and other associated benefits. This is a measure developed by comparing the estimated emission reductions of ozone precursors and CMAQ funds requested.

PROJECT SELECTION

The project selection process involves setting the priority list of projects for funding through the CMAQ program. Priorities for eligible CMAQ projects are established locally and are based in large part on the project's consistency with *Connected2045* and the CMP. Decisions regarding project selection are accomplished through the regional transportation planning process involving EWG, MoDOT, IDOT, local transit providers, and the citizens of the region.

Establishing project priorities and selecting projects for funding in the CMAQ program is a direct result of:

- A project's cost-effectiveness
- Consistency with program/project priority in *Connected2045* and the CMP
- The availability of local, federal, and other funding

Cost-effectiveness is used in the project selection process as a primary measure to establish priority based on the amount of CMAQ funds requested. 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 (i.e., metric tons of VOCs and NO_x reduced).

APPROVAL PROCESS

Once EWG staff has reviewed, evaluated, and ranked the CMAQ projects, project scores are presented to the Illinois and Missouri TPCs for funding recommendations. Following the TPC meetings, the recommended projects are incorporated in the TIP. After a public comment period, the TIP is presented to the EWG Board of Directors for approval. The TIP is reviewed by FHWA and FTA, in consultation with the Environmental Protection Agency (EPA), 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 their respective state department of transportation to begin project implementation. Any deviations from scope of work as proposed in the application require approval from EWG staff. CMAQ scope of work cannot be altered due to stipulations of third-party match source.

POST CONSTRUCTION REPORTING

A goal of the CMP is to measure the effects of the construction of CMAQ projects. As such, post-construction reporting is required for projects that are funded through CMAQ. Sponsors must provide a CMAQ data spreadsheet no more than one year after the project is open to the public and prior to project closeout. The data must reflect the conditions after construction is complete. This is required for CMAQ projects funded in 2020 or later. EWG staff will work with sponsors to make sure the correct data is provided.

PUBLIC COMMENT

It is the policy of EWG to encourage involvement by the public in the transportation decision-making process. Following the application deadline, EWG will release a list of submitted applications for public comment on the EWG website from March 2 to March 18, 2021. The comments will be summarized and submitted to the TPC prior to its May meeting to make recommendations for funding. The recommended projects will be included in the draft FY 2022-2025 TIP, which will be released for public comment from July 2 to August 4, 2021. EWG will host an open house meeting during the public comment period.

VII. PROGRAMMING PROCESS

PROGRAMMING POLICY

The following set of policies assist EWG staff and the TPCs in reaching consensus on the program of local projects:

- All projects must be consistent with clean air requirements and conform to the state's implementation plan for air quality.
- All projects must have a financial plan that demonstrates how the sponsor will pay for the project.
- Projects must have a reasonable, demonstrated degree of political and community support.
- Provisions are made to encourage reasonable program equity among the counties.
- Efforts are made to obtain the maximum advantage of flexibility in the use of financial resources and ensure full use of federal, state, and local funds available to the region.

SCHEDULE

The schedule for the EWG process to solicit and review applications and select projects for funding is provided below. The submission deadline will not change, but the dates of other steps in the process may be subject to change. EWG staff is available to assist project sponsors as needed during the application period.

DATE	ACTIVITY
November 6, 2020	Call for projects – CMAQ application form posted online
November 17, 2020	Project Development Workshop (<i>optional to attend</i>)
December 2020 – February 2021	Logical Termini Review meetings (<i>Illinois sponsors, if required</i>)
January 7, 2021	Preliminary applications due (<i>optional to submit</i>)
January 13, 2021	Illinois Project Review Workshop (<i>optional to attend</i>)
January 14, 2021	Deadline to submit a Logical Termini Review Form (<i>Illinois sponsors</i>)
January 14, 2021	Deadline to request CMAQ data spreadsheet to match project type (<i>if needed</i>)
January 14, 2021	Deadline to submit data methodology (<i>for future development and project types other than road & transit</i>)
January 15 & 22, 2021	Missouri Project Review Workshop (<i>optional to attend</i>)
February 11, 2021	Deadline for receipt of complete applications – application fee postmarked
February 18, 2021	EFT must be received (<i>if electronic payment of application fee utilized</i>)
May 5, 2021	Missouri TPC meeting – project recommendations for inclusion in TIP
Early May 2021	Illinois TPC meeting – project recommendations for inclusion in TIP
May 26, 2021	Present TPC recommendations to EWG Board of Directors
June 30, 2021	Present draft TIP to EWG Board of Directors
July 2 – August 4, 2021	Public comment period
August 25, 2021	TIP presented to EWG Board of Directors for final approval

PROJECT DEVELOPMENT WORKSHOP

EWG is hosting a *virtual* project development workshop to provide information on CMAQ, including program eligibility and requirements, project applications, scoring criteria, and available funding. This workshop will be presented virtually using the GoToMeeting platform on November 17, 2020 from 9:30 AM to 11:30 AM. Attendance is not required for project sponsors to participate in this funding opportunity, but is strongly encouraged. Registration is available on the EWG [CMAQ Call for Projects](#) web page. Upon registration, participants will be emailed a link to access the workshop. A recording of the workshop will be available on the EWG [CMAQ Call for Projects](#) web page after the workshop.

PROJECT REVIEW WORKSHOP

EWG is hosting virtual project review workshops for project sponsors that plan on submitting a CMAQ application. These workshops will be presented virtually using the Zoom platform. The Illinois workshop will be on January 13, 2021. The Missouri workshops will be on January 15 and 22, 2021. At the workshop, sponsors receive feedback from a panel of experts with regard to their proposed project application. Panelists include IDOT, MoDOT, and EWG staff, as well as experts in transit accessibility and bicycle and pedestrian accommodations, who can review project concepts, offer guidance, and answer questions related to the proposed project.

This workshop is intended for project sponsors that have at the very least a specific project concept to present for review. Sponsors are required to submit a Project Review Workshop Information Form or preliminary application before the workshop so the panelists can gain some knowledge of the projects they will be reviewing. Each sponsor may bring no more than two projects to discuss in a half-hour time slot. Attendance at this workshop is encouraged, but not required to submit a project application. Registration for the workshop and the Project Review Workshop Information Form will be available in early-December on the EWG [CMAQ Call for Projects](#) web page.

VIII. RESOURCES

EWG RESOURCES

Connected2045 – Long-Range Transportation Plan

<http://www.ewgateway.org/transportation-planning/long-range-planning/>

Transportation Improvement Program

<http://www.ewgateway.org/transportation-planning/transportation-improvement-program/>

Congestion Mitigation and Air Quality Improvement Program

<http://www.ewgateway.org/transportation-planning/transportation-improvement-program/competitive-transportation-programs/cmaq/>

Bicycle Planning Guide

https://www.ewgateway.org/wp-content/uploads/2018/07/BicyclePlanningGuide_June2018.pdf

Congestion Management Process

<http://www.ewgateway.org/transportation-planning/transportation-systems-management-operations/congestion-management-process/>

St. Louis Regional ITS Architecture

<http://www.ewgateway.org/transportation-planning/transportation-systems-management-operations/intelligent-transportation-system/>

St. Louis Regional Freight Study

<http://www.ewgateway.org/transportation-planning/freight/>

FEDERAL RESOURCES

Congestion Mitigation and Air Quality Improvement Program Fact Sheet

<https://www.fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm>

Congestion Mitigation and Air Quality Improvement Program Guidance

https://www.fhwa.dot.gov/environment/air_quality/cmaq/policy_and_guidance/2013_guidance/index.cfm

Buy America

<https://www.fhwa.dot.gov/construction/cqit/buyam.cfm>

Federal-Aid Essentials for Local Public Agencies

<https://www.fhwa.dot.gov/federal-aidessentials/>

STATE RESOURCES

IDOT Bureau of Local Roads and Streets Manual

<http://www.idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Guides-&-Handbooks/Highways/Local-Roads-and-Streets/Local%20Roads%20and%20Streets%20Manual.pdf>

MoDOT Local Public Agency Policy

http://epg.modot.org/index.php?title=Category:136_Local_Public_Agency_%28LPA%29_Policy

MoDOT Local Public Agency Basic Training Program

<https://www.modot.org/training-opportunities>

IX. CONTACT INFORMATION

Jason Lange, TIP Coordinator
East-West Gateway Council of Governments
One Memorial Drive, Suite 1600
St. Louis, MO 63102-2451
E-mail: cmaq@ewgateway.org

APPENDIX A. CMAQ ELIGIBLE ACTIVITIES

The following list details example CMAQ projects for the nine general categories. Final project eligibility and amount of federal participation is determined by the Federal Highway Administration. The Interim CMAQ Guidance can be found at: <http://bit.ly/2BnNlKs>. Eligible CMAQ projects are not limited to the project examples listed below.

1. Acquisition of diesel retrofits, including tailpipe emissions control devices, and the provision of diesel-related outreach activities.
 - i. Diesel engine or full vehicle replacement
 - ii. Full engine rebuilding or reconditioning
 - iii. Purchase and installation of after-treatment hardware including particulate matter traps and oxidation catalysts
2. Intermodal equipment and facility projects that target diesel freight emissions through direct exhaust control from vehicles or indirect emissions reductions through improvements in freight network logistics.
3. Alternative fuel projects including participation in vehicle acquisitions, engine conversions, and refueling facilities.
 - i. Transit vehicles
 - ii. Paratransit vehicles
 - iii. Diesel engine replacement
4. Establishment or operation of a traffic monitoring, management, and control facility, including the installation of advanced truck stop electrification systems.
5. Projects that improve traffic flow, including efforts to provide signal systemization, construct HOV lanes, streamline intersections, add turning lanes, improve transportation systems management and operations that mitigate congestion and improve air quality, and implement ITS and other CMAQ-eligible projects, including efforts to improve incident and emergency response or improve mobility, such as through real time traffic, transit and multimodal traveler information.
 - i. Intersection improvements
 - i. Turn lanes
 - ii. Traffic signal at intersection
 - iii. Roundabout
 - ii. Corridor improvements
 - i. Traffic signal interconnection
 - ii. Traffic signal optimization plans
 - iii. Ramp metering
 - iv. ITS improvements (cameras, dynamic messaging signs, speed detection, including efforts to improve incident and emergency response or improve mobility, such as through real time traffic, transit and multimodal traveler information, etc.)
 - v. Multiple signal improvements (flashing yellow arrow, detection, upgrade of deficient equipment to modern standards, software upgrades)
6. Projects or programs that shift travel demand to nonpeak hours or other transportation modes, increase vehicle occupancy rates, or otherwise reduce demand through initiatives, such as teleworking, ridesharing, pricing, and others.
 - i. RideFinders
 - ii. Bikesharing
 - iii. Park and ride lots
 - iv. Trip reduction programs
 - v. Travel management plans

7. Transit investments, including transit vehicle acquisitions and construction of new facilities or improvements to facilities that increase transit capacity. Operating assistance is also permitted to help start up viable new transportation services.
 - i. Vehicle replacement
 - i. Operating assistance (see <http://bit.ly/oaguidance> for more info)
 - ii. Vehicle acquisition
 - iii. Transit facilities (lines, stations, terminals, transfer facilities)
8. Non-recreational bicycle transportation and pedestrian improvements that provide a reduction in single-occupant vehicle (SOV) vehicle travel.
 - i. Constructing bicycle and pedestrian facilities (paths, bike racks, support facilities, sidewalks, bike lanes, cycle tracks, bike lockers, etc.) that can demonstrate a reduction of vehicle trips
 - ii. Non-construction outreach related to safe bicycle use
9. Vehicle inspection and maintenance programs.

APPENDIX B. GLOSSARY OF TERMS

Adjustment Factor – A multiplicative factor that adjusts a capacity or service flow rate from one representing an ideal or base condition to one representing a prevailing condition.

Annual Average Daily Traffic (AADT) – The total volume passing a point or segment of a highway facility in both directions for one year divided by the number of days in the year.

Approach – A set of lanes accommodating all left-turn, through, and right-turn movements arriving at an intersection from a given direction.

Arterial – Signalized streets that serve primarily through traffic and provide access to abutting properties as a secondary function, having signal spacings of 2 mi. or less and turn movements at intersections that usually do not exceed 20 percent of total traffic.

Auto Access Trip Length – The mean distance for users of the proposed facility from their initial origin to the proposed facility.

Auto Trips/Rate Eliminated – The actual number (or rate per unit) of auto trips which are eliminated entirely from using the auto mode—e.g., a MetroLink park & ride patron using a bike or feeder bus mode.

Auto Trips/Rate Diverted – The actual number (or rate per unit) of auto trips diverted from making the major portion of their trip using auto—e.g., a former auto trip to the CBD diverted to a MetroLink station.

Average Total Delay – The total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility divided by the volume departing from the corresponding cross section of the facility.

Average Travel Speed – The average speed of a traffic stream computed as the length of a highway segment divided by the average travel time of vehicles traversing the segment, in miles per hour.

Average Travel Time – The average time spent by vehicles traversing a highway segment of given length, including all stopped-time delay, in seconds per vehicle or minutes per vehicle.

Berth – A position for a bus to pick up and discharge passengers, including curb bus stops and other types of boarding and discharge facilities.

Bike Lane – A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles.

Bike Path – A bikeway physically separated from motorized traffic by an open space or barrier, either within the highway right-of-way or within an independent right-of-way.

Bikeway – Any road, path, or way that in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicyclists or are to be shared with other vehicles.

Bus – A heavy vehicle involved in the transport of passengers on a for-hire, charter, or franchised transit basis.

Bus Lane – A lane restricted to bus usage by special regulations and markings.

Busway – A right-of-way restricted to bus usage by physical separation from other traffic lanes.

Capacity – The maximum rate of flow at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions, usually expressed as vehicles per hour or persons per hour.

CMAQ – The Congestion Mitigation and Air Quality Improvement Program is a funding program established by federal transportation law to assist areas with substandard air quality in meeting the requirements of the 1990 Clean Air Act Amendments (CAAA).

CO – Carbon monoxide is a chemical compound containing carbon and oxygen. The CAAA requires non-attainment areas to reduce their output of CO.

Collector Street – Surface street providing land access and traffic circulation within residential, commercial, and industrial areas.

Conflicting Approach – The approach at approximately 90 degrees to the subject approach at an all-way STOP-Controlled (AWSC) intersection.

Conflicting Traffic Volume – The volume of traffic that conflicts with a specific movement at an unsignalized intersection.

Congestion Management Process (CMP) – Replaced the Congestion Management System (CMS) concept. The FAST Act 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.

Current and Future AADT – The average annual daily traffic. For facilities covering more than one measurable highway segment, a distance-based weighted average should be used, with the exception that intersection improvements report current and future AADT for all legs of the intersection.

Crosswalk – The marked crossing area for pedestrians crossing the street at an intersection or designated midblock location.

Cycle – Any complete sequence of signal indications.

Cycle Length – The total time for a signal to complete one cycle.

Delay – Additional travel time experienced by a driver, passenger, or pedestrian beyond what would reasonably be desired for a given trip.

Density – The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane.

Downstream – The direction toward which traffic is flowing.

Dwell Time – The time that a transit vehicle is stopped in a berth for the purposes of boarding or discharging passengers.

Effective Green Time – The time allocated for a given traffic movement (green plus yellow) at a signalized intersection less the start-up and clearance lost times for the movement.

Effective Red Time – The time during which a given traffic movement or set of movements is directed to stop; cycle length minus effective green time.

Fixing America's Surface Transportation (FAST) – On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94) into law—the first federal law in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act authorizes \$305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.

FHWA – Federal Highway Administration.

Free-flow Speed – (a) The theoretical speed of traffic when density is zero, that is, when no vehicles are present; (b) The average speed of vehicles over an arterial segment not close to signalized intersections under conditions of low volume.

Freeway – A multilane divided highway having a minimum of two lanes for exclusive use of traffic in each direction and full control of access and egress.

FTA – Federal Transit Administration.

Fully Actuated Control – Signal control of an intersection in which the occurrence and length of every phase are controlled by actuations of vehicle detectors placed on each approach to the intersection.

FY Cost and Total Cost – The amount requested for the fiscal year for which the project is submitted, along with the total cost of the project if it is a multi-year project.

High-Occupancy Vehicle Lane – A lane of a freeway reserved for the use of vehicles with more than a preset number of occupants; such vehicles often include buses, taxis, and carpools.

I/M Programs – The purpose of inspection and maintenance (I/M) programs are to reduce emissions by installing control devices on motor vehicles.

Ideal Conditions – Characteristics for a given type of facility that are assumed to be the best possible from the point of view of capacity, that is, characteristics that if further improved would not result in increased capacity.

Interrupted Flow – A category of traffic facilities having traffic signals, STOP signs, or other fixed causes of periodic delay or interruption to the traffic stream; examples include intersections and arterials.

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

Interval – A period of time in a signal cycle during which all signal indications remain constant.

Lane 1 – The highway lane adjacent to the shoulder.

Level of Service – A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Line-Haul Trip Length – The length of the portion of the trip served by the proposed facility.

Load Factor – The number of passengers occupying a transit vehicle divided by the number of seats on the vehicle.

Maximum Load Point – The section of a transit line that has the highest passenger demand during a specified time interval.

Motor Vehicle Emission Simulator (MOVES) – This emission modeling system estimates emissions for mobile sources covering a broad range of pollutants and allows multiple scale analysis. MOVES currently estimates emissions from cars, trucks & motorcycles.

NO_x – Nitrous oxide is a chemical compound composed of nitrogen and oxygen. Reductions in NO_x are required by the CAAA for areas to meet attainment.

Ozone (O₃) – A highly reactive bluish-colored haze formed in the atmosphere by a series of photochemical reactions. Ozone is made up of three atoms of oxygen.

Particulate Matter (PM) – PM is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope. Particle pollution includes: PM₁₀ and PM_{2.5}.

Peak-Hour Factor – The hourly volume during the maximum volume hour of the day divided by the peak 15-min rate of flow within the peak hour; a measure of traffic demand fluctuation within the peak hour.

Pedestrian Flow Rate – The number of persons passing a point per unit time, usually expressed as pedestrians per 15 min or pedestrians per minute.

Person Capacity – The maximum number of persons who can be carried past a given point on a highway or transit right-of-way during a given time period under specified operating conditions without unreasonable delay, hazard, or restriction, in persons per hour.

Person Level of Service – The quality of service offered the passenger within a transit vehicle, as determined by the available space per passenger.

Phase – The part of the signal cycle allocated to any combination of traffic movements receiving the right-of-way simultaneously during one or more intervals.

Project Length/Number – The length of the project or the number of units (parking spaces, buses, etc.) of the project. This would include all legs and approaches for intersection improvements.

Queue – A line of vehicles or persons waiting to be served by the system in which the rate of flow from the front of the queue determines the average speed within the queue. Slowly moving vehicles or people joining the rear of the queue are usually considered a part of the queue. The internal queue dynamics may involve a series of starts and stops. A faster-moving line of vehicles is often referred to as a moving queue or a platoon.

Roadway Conditions – Geometric characteristics of a street or highway, including the type of facility, number and width of lanes (by direction), shoulder widths and lateral clearances, design speed, and horizontal and vertical alignments.

Seat Capacity – The number of seats on a transit vehicle.

Service Flow Rate – The maximum hourly rate at which persons or vehicles can be reasonably expected to traverse a point of uniform section of a lane or roadway during a given time period (usually 15 min) under prevailing roadway, traffic, and control conditions while maintaining a designated level of service, expressed as vehicles per hour or vehicles per hour per lane.

SIP – The State Implementation Plan is a required planning document submitted by a non-attainment area which establishes an emissions budget and shows how milestones and actual attainment will be reached.

SOV – Single Occupant Vehicle.

Speed – A rate of motion expressed as distance per unit time.

Speed (Present) – The mean speed of auto vehicles which will be diverted due to the facility or the mean speed of auto vehicles using the present location of the proposed improvement.

Speed (After) – The mean speed of auto vehicles using the improved facility.

Standees – The number of passengers standing in a transit vehicle.

TDMs – Transportation Demand Measures focus on shifting the demand on the transportation system.

TMA – Transportation Management Association is a public-private partnership created to address site or corridor specific transportation related problems and issues.

TIP – The Transportation Improvement Program is an official list of projects that are programmed for implementation over the next four years.

Transit Trips Diverted – The number of feeder bus trips which will be removed from transit modes due to the implementation of the project.

Trip Diversion – The estimate of traffic volumes (highest peak hour) diverted from parallel freeways, arterials, and local streets. This factor is based on travel time differentials.

Turnout – A short section of a lane added to a two-lane, two-way highway for the purpose of allowing slow-moving vehicles to leave the main roadway and stop to allow faster vehicles to pass.

V/C Ratio – The ratio of demand flow rate to capacity for a traffic facility.

Volatile Organic Compounds (VOCs) –VOCs come from vehicle exhaust, paint thinners, solvents, and other petroleum-based products. A number of exhaust VOCs are toxic, with the potential to cause cancer. VOCs are a precursor to ground-level ozone formation.

Volume – The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be one hour, expressed in vehicles.

Walkway – A facility provided for pedestrian movement and segregated from vehicular traffic by a curb or provided on a separate right-of-way.

Weaving Area – A length of highway over which traffic streams cross each other's path without the aid of traffic signals over a length of highway, doing so through lane-changing maneuvers; formed between merge and diverge points, as well as between on-ramps and off-ramps on limited access facilities.