

AMATS
2021 CMAQ Program
Guidance

The Congestion Mitigation and Air Quality Improvement (CMAQ) program was established by the Intermodal Surface Transportation Act (ISTEA) of 1991. The CMAQ program provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for areas that were out of compliance but have now met the standards (maintenance areas).

Program Purpose

The purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide (CO), and particulate matter (both PM₁₀ and PM_{2.5}).

The CMAQ program supports two important goals of the U.S. Department of Transportation: *improving air quality and relieving congestion*. The CMAQ program provides funding for a broad array of tools to accomplish these goals. By choosing to fund or sponsor a CMAQ project, a State or local government, transit agency, or other eligible project sponsor can improve air quality and make progress toward achieving attainment status and ensuring compliance with the transportation conformity provisions of the Clean Air Act (CAA).

Eligible Applicants

Qualified government entities, including local governments, regional transit agencies, port authorities, and state agencies, with projects or programs located in the AMATS region of Summit and Portage Counties.

Eligible Projects

The CMAQ funds may be used to establish new or expanded transportation projects or programs that reduce emissions, including capital investments in transportation infrastructure, congestion relief efforts, vehicle acquisitions, diesel engine retrofits, or other capital projects.

Operating projects or programs are also eligible, but are limited to new transit, commuter and intercity passenger rail services, intermodal facilities, travel demand management strategies, including traffic operation centers, inspection and maintenance programs, and the incremental cost of expanding these services. A list of typical eligible project types can be found in the application guidance below.

Projects Ineligible for CMAQ Funding

The following projects are ineligible for CMAQ funding:

1. Projects that add new capacity for single occupancy vehicles (SOVs) are ineligible for CMAQ funding unless construction is limited to high-occupancy vehicle (HOV) lanes.

2. Routine maintenance and rehabilitation projects (e.g., replacement-in-kind of track or other equipment, reconstruction of bridges, stations, and other facilities, and repaving or repairing roads) are ineligible for CMAQ funding as they only maintain existing levels of highway and transit service, and therefore do not reduce emissions.

What the Program Provides

The CMAQ program provides 80% of total eligible project costs associated with preliminary development, detailed design, right of way acquisition, and construction costs for infrastructure type projects and activities and operating costs for non-infrastructure. The minimum local share is 20% and must be provided from local, state, or other non-federal sources. Costs associated with a non-CMAQ funded phase are not considered as part of the local share.

Application Items Description and Maximum Points

1. Project Type (10)
2. Cost Effectiveness (20)
3. Other Benefits (10)
4. Existing Modal Quality of Service (QOS) (15)
5. Positive Impact on QOS (15)
6. Status of Project (10)
7. Non-CMAQ Funding of the Phase Cost (10)
8. Regional Priority (10)
9. Beginning in FY 2015 or Later; History of Project Delivery (-10)

1. **Project Type (10 points)** – CMAQ funds can be used on a variety of project types designed to address congestion mitigation and/or emissions reductions. A project will be awarded 2-10 points based on the type of project. The score will be based on the primary project type for those projects that contribute to more than one type.

Regional Rideshare/Vanpool Programs (10): Programs operated by an MPO or another regional agency in coordination with the MPO to advance ridesharing and vanpooling. This includes ridematching and vanpool organization, vanpool capital costs, marketing, oversight and funding.

Congestion Reduction, Traffic Flow Improvements & ITS (10): Access management, freeway management, traveler information improvements, variable message signs, roundabouts, signal upgrades /optimization/interconnectivity, new turn lanes and/or intersection geometry improvements that have demonstrated emission benefits.

Transit Vehicle Replacement (8): New public transit vehicles to replace existing vehicles.

Freight/Intermodal including diesel engine retrofits (7): Includes school bus, diesel truck and locomotive engine retrofits, and intermodal transfer facilities.

Public Education and Outreach(6): Ozone/Clean Air Programs and other activities designed to educate about the connection between transportation choices and air quality.

Transit Service Upgrades (5): Operational transit improvements such as reduced headways, bus rapid transit, park and ride facilities, transit centers, and new service.

Bicycle/Pedestrian (4): Bicycle and pedestrian facilities that are not exclusively recreational and reduce vehicle trips. Includes on road and separate side path facilities for bikes including wide shoulders, marked bike lanes, cycle paths, share the road treatments and any other bike treatment that can improve conditions to encourage increased bike usage. Also includes pedestrian facilities that enable pedestrian mobility, such as ADA compliance on any public space, sidewalks and access to bus stops.

Alternative Fuels and Vehicles - Non transit (4): Publically-owned alternative fuel vehicles and fueling facilities, certain hybrid vehicles.

Employer-based programs (4): Employer-sponsored programs to permit flexible work schedules, expand site-specific rideshare programs and other transportation management plans.

Travel Demand Management (3): Activities, programs and projects that reduce single occupant vehicle travel such as parking reduction programs, congestion pricing programs, telecommuting, etc.

Modal subsidies and vouchers (3): Subsidized parking for HOV lane users, employer provided transit passes, etc.

Transit Facility Upgrades (2): Infrastructure transit improvements such as new or rehabilitated rail cars, new or rehabilitated tracks or stations, bus shelters, and other amenities.

Other TCM's and Misc. (2): Other transportation control measures and activities that are CMAQ eligible.

- 2. Cost Effectiveness (20 points)** – A measure of the project’s ability to reduce emissions (HC, NO_x, and PM_{2.5}) per dollar invested (\$ per kg). Points will be awarded based on a sliding scale relative to all applications received. The following formula will be used to estimate the cost effectiveness:

$$CE \text{ \$/kg} = (\text{CMAQ \$ Request/Useful Life})/\text{Total Emissions Reduction}$$

Useful Life:

The design life of a project is utilized in the cost effectiveness section of the application. This section calculates the emission benefits compared to the cost of the project over that project’s expected life span. A project’s expected life span is the time (years) the project is expected to provide these benefits. The applicant should use verified information and reference it or provide an experienced estimate with explanation. The table below provides an estimated useful life for typical CMAQ eligible projects.

<u>Project Type</u>	<u>Useful Life Years</u>
Regional Rideshare / Vanpool Programs	# of year(s) for proposed program
Park and Ride Lots	12 years
Parking Structures	30 years
Congestion Reduction, Traffic Flow Improvements, ITS	
Signal Upgrades and Timing	10 years
HOV Lanes	15 years
Freight/Intermodal Projects	
Intermodal Facilities	20 years
Travel Demand Management	# of year(s) for proposed program
Transit Vehicle Replacements	
Heavy Duty Large Bus	12 years / 500,000 miles
Heavy Duty Small Bus	10 years / 350,000 miles
Medium Duty Bus	7 years / 200,000 miles
Light Duty Transit Vehicle	5 years / 100,000 miles
Alternative Fuels and Vehicles - Non-Transit	
Fueling Facilities	20 years
Vehicles	5 years / 100,000 miles
Diesel Engine Retrofit	New Vehicle/Equipment Useful Life -Current Years/Mileage in Operation
Service Vehicle - Light Heavy Duty Diesel	8 years / 110,000 miles
Service Vehicle - Medium Heavy Duty Diesel	8 years / 185,000 miles
Service Vehicle - Heavy Heavy Duty Diesel	10 years / 435,000 miles
Locomotive - Line Haul	10 years / 750,000 miles
Locomotive - Switcher	10 years / 750,000 miles
Diesel Engine Anti-Idle Auxiliary Heaters	5 years
Transit Vehicles	See Transit Vehicle Replacements above for New Useful Life
Truck Electrification Facilities	10 years
Public Education and Outreach	# of year(s) for proposed program
Employer-based Programs	# of year(s) for proposed program
Transit Service Upgrades	
New or Rehabilitated Rail Cars	20 years
New or Rehabilitated Tracks or Stations	30 years
Bus Shelters/Platforms	10 years
Amenities	2 years
Modal Subsidies and Vouchers	# of year(s) for proposed program
Bicycle/Pedestrian Facilities	15 years
Other TCMs and Misc.	Determined by Committee Review

- 3. Other Benefits (10 points)** – Many projects have ancillary or additional benefits beyond the primary goals of the CMAQ program. This criterion allows for a range of points based on several contributing factors including 1. safety, 2. fixed route transit service, 3. bike/pedestrian, 4. improved freight movement and 5. benefits to environmental justice populations. Up to 2 points per factor may be awarded.
- 4. Existing Modal Quality of Service (QOS) (15 Points)** – This documents the existing congestion in the project area. A project may be awarded up to 15 points depending upon the current QOS. No points will be awarded to projects to improve modes currently operating at a high level. The applicant must provide documentation and data showing how the quality of service was determined.
- For roadways the traditional level of service (LOS) is required where F=very low, E=low, and D=medium. These values must be provided by the sponsor or their consultant. AMATS no longer calculates the LOS but instead uses the percent of “free flow” speed to identify congestion. This measure is derived from tracking the flow of GPS devices such as cell phones. Free flow speed is calculated during non-peak hours and is the speed that traffic can travel without any resistance from other traffic. A roadway is considered congested if the speed of traffic drops below 65% of the free flow speed. A list of roadway segments and intersections in the AMATS area that meet this criteria can be found in the “AMATS 2020 Congestion Management Process” Report that is posted on the AMATS website.
 - For transit projects, the applicant is to provide information to assess the “quality of service.” This should be appropriate to the need the transit project is fulfilling. For a transit vehicle replacement project, the % of fleet over useful life should be provided. For a project that would provide more frequent service, the load factor (peak or off peak as appropriate) of the impacted route should be used. For geographic or service hour expansion a more qualitative rationale must be provided to assess the existing QOS.
 - Similarly, for bike or pedestrian projects, information is to be provided to demonstrate the poor quality of service being provided for users of those modes.

Please note: for transit, bike and pedestrian projects, lack of service or absence of a facility alone does not equate to poor level of service. Information must be provided that demonstrates there is demand for the service or facility that is not being met. The calculation of demand should relate to demand used in the cost effectiveness calculations.

- 5. Positive Impact on QOS (15 Points)** – This assesses the impact the proposal will have on the existing situation, ranging from 0 to 15 points. Some examples of Positive Impacts on QOS for Roads, Transit and Bicycle and Pedestrian are shown in the tables below.

ROAD QOS (LOS) IMPACTS

HIGH	MEDIUM	LOW
The project will improve the LOS from F to C	The project will improve the LOS from F to D or from E to C	The project will improve the LOS from F, E or D by one level or substantially reduce delay if resulting LOS remains F.

TRANSIT QOS IMPACTS

HIGH	MEDIUM	LOW
Significantly increases service and reliability. Interconnect or fare coordination project, bus turnouts at major intersections, intermodal facility accommodating major transfers, reduces travel time. Fleet expansion will be considered high impact.	Increases service/reliability in a minor capacity, interconnect or fare coordination project, general bus turnouts, intermodal facility with major transfers. Vehicle replacement will be considered a medium impact.	Increases passenger comfort or convenience, bike racks.

BICYCLE and PEDESTRIAN QOS IMPACTS

HIGH	MEDIUM	LOW
Facility that will primarily serve commuters and/or school sites, sidewalks where none exist. Completes final pieces of a significant regional route.	Mixed use bicycle/pedestrian facility (recreation & commuter), usable sidewalk segments including upgrades and new installations and signage.	Public educational, promotional, and safety programs that promote and facilitate increased use of non-motorized modes of transportation.

FREIGHT QOS IMPACTS

HIGH	MEDIUM	LOW
Facility or equipment that will improve the movement or processing of freight by 50% above existing conditions or other qualitative assessment	Facility or equipment that will improve the movement or processing of freight by 25% above existing conditions or other qualitative assessment	Facility or equipment that will improve the movement or processing of freight by 15% above existing conditions or other qualitative assessment

6. Status of Project (10 Points) - This reflects the existing status of the project. The closer a project is to the construction/implementation phase, the more points it will receive. Those that are early in the project development process with environmental studies underway will receive 2 points. Projects with a completed environmental status earn 6 points; those with right-of-way cleared and complete will be awarded 8 points. Non construction projects that do not require right-of-way and are ready for authorization such as a bus purchase also earn 8 points. Projects with construction plans complete earn 10 points. Ellis should be used when evaluating Project Status.

7. Non-CMAQ Funding (10 Points) - The criteria rewards applicants that leverage additional funding above the required rate for local participation. The standard match rate for federal CMAQ funds is 20 percent (although there are exceptions). The applicant can gain up to a maximum of 10 points through leveraging non CMAQ resources towards the CMAQ eligible project cost for the phase(s) requesting CMAQ funding. Up to 5 points awarded based on percent of funding non-CMAQ funding and up to 5 points for amount of non-CMAQ funding. The non-CMAQ funding can be local, private, state or other federal provided it is not federal funding controlled by the submitting MPO.

Local Match %	Points	Local Match \$	Points
> 40%	5	> \$2.0 M	5
>35 – 40%	4	\$1.0 M - \$2.0 M	4
>30 – 35%	3	\$500 K - \$1.0 M	3
>25 – 30%	2	\$150 K - \$500 K	2
>20 – 25%	1	\$50 K - \$150 K	1
Up to 20%	0	\$0 - \$50 K	0

- 8. Regional Priority (10 Points)** - MPO's will be responsible for collecting, reviewing for completeness and ranking CMAQ applications from the eligible recipients in their regions. Top ranking projects from each region will receive 10 points, second highest receives 7 points, third highest receives 4 points, fourth highest receives 2 points. All others receive 0 points. Each MPO will develop their own approach to determining their regional priority. In cases where a project is in more than one MPO an average point score will be used.
- 9. History of Project Delivery (0 to -10 Points)** - It is critical that projects that compete for and receive Ohio CMAQ dollars be delivered on time and within budget in order to fully realize the user benefits for Ohio citizens. Therefore, an applicant who has accepted CMAQ dollars in FY 2015 or later and allows the project to slip beyond the programmed year of obligation will be penalized 5 points on all subsequent applications for a period of two years. Applicants that allow two or more projects to slip will be penalized 10 points on subsequent applications for a period of two years. Project cancellation will also be cause for a 10 points reduction for a period of two years. Exceptions may be granted for circumstances beyond the control of the applicant.