

Michigan Department of Transportation
Congestion Mitigation and Air Quality Improvement Program
Statewide Guidance for Non-Transit Diesel Engine Retrofits

Background

The Congestion Mitigation and Air Quality (CMAQ) Program funds transportation projects or programs that will contribute to the attainment or maintenance of the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide (CO), or particulate matter (PM). Nonattainment areas are those where air pollution levels exceed NAAQS. Maintenance areas are those that were out of compliance with NAAQS for these pollutants, but now meet the standards. For a list of nonattainment and maintenance areas, visit <https://www.epa.gov/green-book>.

Further, all CMAQ projects must meet these three eligibility requirements:

- Have a transportation focus
- Reduce air emissions
- Be located in or benefit a nonattainment or maintenance area

The Federal Highway Administration (FHWA) website titled “CMAQ and Diesel Retrofits” provides guidance on the Diesel Retrofit projects and provides information on eligibility requirements, as well the benefits of these projects, and is available at www.fhwa.dot.gov/environment/air_quality/cmaq/reference/cmaq_diesel_retrofits/index.cfm.

This guidance has been developed to address issues that have occurred with funding of non-transit, diesel-fueled vehicle replacements within the eligible category of “Diesel Engine Retrofit.”

Regulations and Guidance

The FAST Act¹ continued the CMAQ Program to provide a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act.²

The vehicle being purchased must be included in an approved FHWA Buy America³ waiver request, and only the cab and chassis are eligible expenses. Requests are submitted by the Michigan Department of Transportation (MDOT) to FHWA on a quarterly basis. Any new project added to the current fiscal year CMAQ Program will be submitted in the next quarter’s Buy America waiver request and must be approved prior to the project authorization. This may take between three to six months.

MDOT must obtain an authorization to proceed from FHWA before any work can begin on any federal-aid project.⁴ Work cannot proceed on the project until MDOT has received this authorization, and then at that time the local agency may proceed with the project.

¹ [FAST Act § 1114, 23 USC 149](#)

² [42 USC § 7401](#)

³ [23 CFR 635.410 Buy America Requirements](#)

⁴ [23 CFR 630.106 Authorization to Proceed](#)

Eligibility

Funds may be used for a transportation project or program that is likely to contribute to the attainment or maintenance of a NAAQS, with a high level of effectiveness in reducing air pollution. This project or program must be included in the Metropolitan Planning Organization's (MPOs) current transportation plan and Transportation Improvement Program (TIP), or the current State Transportation Improvement Program (STIP) in areas without an MPO. Eligible projects include acquisition of retrofitted vehicles, installation of tailpipe emissions control devices, and provision of diesel-related outreach activities.

The FAST Act amended the eligible uses of CMAQ funds set aside for PM_{2.5} nonattainment and maintenance areas. PM_{2.5} set-aside funds may be used to reduce fine particulate matter emissions in a PM_{2.5} nonattainment or maintenance area, including:

- Diesel retrofits
- Installation of diesel emission control technology on non-road, diesel equipment or on-road, diesel equipment that is operated on a highway construction projects
- The most cost-effective projects to reduce emissions from port-related, landside, non-road or on-road equipment that is operated within the boundaries of the area⁵

In Michigan, only agencies who are able to receive federal aid under Michigan Act 51 of 1951 (as amended) can apply for CMAQ funding. These agencies include MDOT, county road commissions, cities/villages, and public transit agencies. MPOs or regional planning agencies (RPAs) may receive federal aid through a Transportation Work Authorization (TWA) or agreement with MDOT.

The MDOT CMAQ Subcommittee will review each project to determine eligibility and final eligibility determination will be made by FHWA, Michigan Division Office.

Only federal aid eligible expenses incurred for the purchase of the vehicle are reimbursable. Only the cab and chassis are eligible expenses. Examples of ineligible expenses include snow plows, lawn equipment, and graders. Periphery equipment not already installed on the vehicle may also be ineligible. This includes items that are considered maintenance equipment.

Replacement projects occur when older vehicles/equipment are replaced with cleaner vehicles/equipment before they would have been removed through normal fleet turnover or attrition. The vehicle being replaced must have remaining useful life and should be taken out of service. Project agreements involving replacements, for either engines or full vehicles, must include a provision for disposal of the engine block, verification that the engine is no longer contributing emissions. Additional information on the remaining service life of a vehicle can be found at the MDOT CMAQ website at www.michigan.gov/cmaq.

Project Changes

CMAQ funding is programmed on projects with a specific scope. Funds are programmed for project phases in multiple federal fiscal years in order to maintain a fiscally constrained program.

⁵ [23 USC 149\(k\)\(2\) & \(4\)](#)

As projects are implemented, the local agency may request changes to the projects scope, schedule, or budget, however, these must be submitted to the CMAQ Program Manager.

For scope changes, the CMAQ Program Manager must be notified by the local agency and depending on the changes to the project, an eligibility determination may be needed from the CMAQ Subcommittee to ensure the project is still CMAQ eligible.

For schedule changes, the CMAQ Program Manager will work with the MDOT MPO Program Manager in the Bureau of Transportation Planning, Statewide Planning Section to determine whether there are impacts to the TIP. If the TIP will be impacted, the MPO Program Manager will work with the MPO to ensure the TIP is updated.

For budget changes, the CMAQ Program Manager must be notified by the local agency. Information must be provided on the reason for the budget change. All cost overruns are the responsibility of the local agency.

Record Retention

Pursuant to the State of Michigan Records Retention and Disposal Schedule, MDOT will retain all files pertinent to the Diesel Retrofit project while the contract is active, plus a minimum of seven years. The CMAQ Program Manager will be responsible for the keeping of a contract folder and will utilize ProjectWise to store this information electronically.

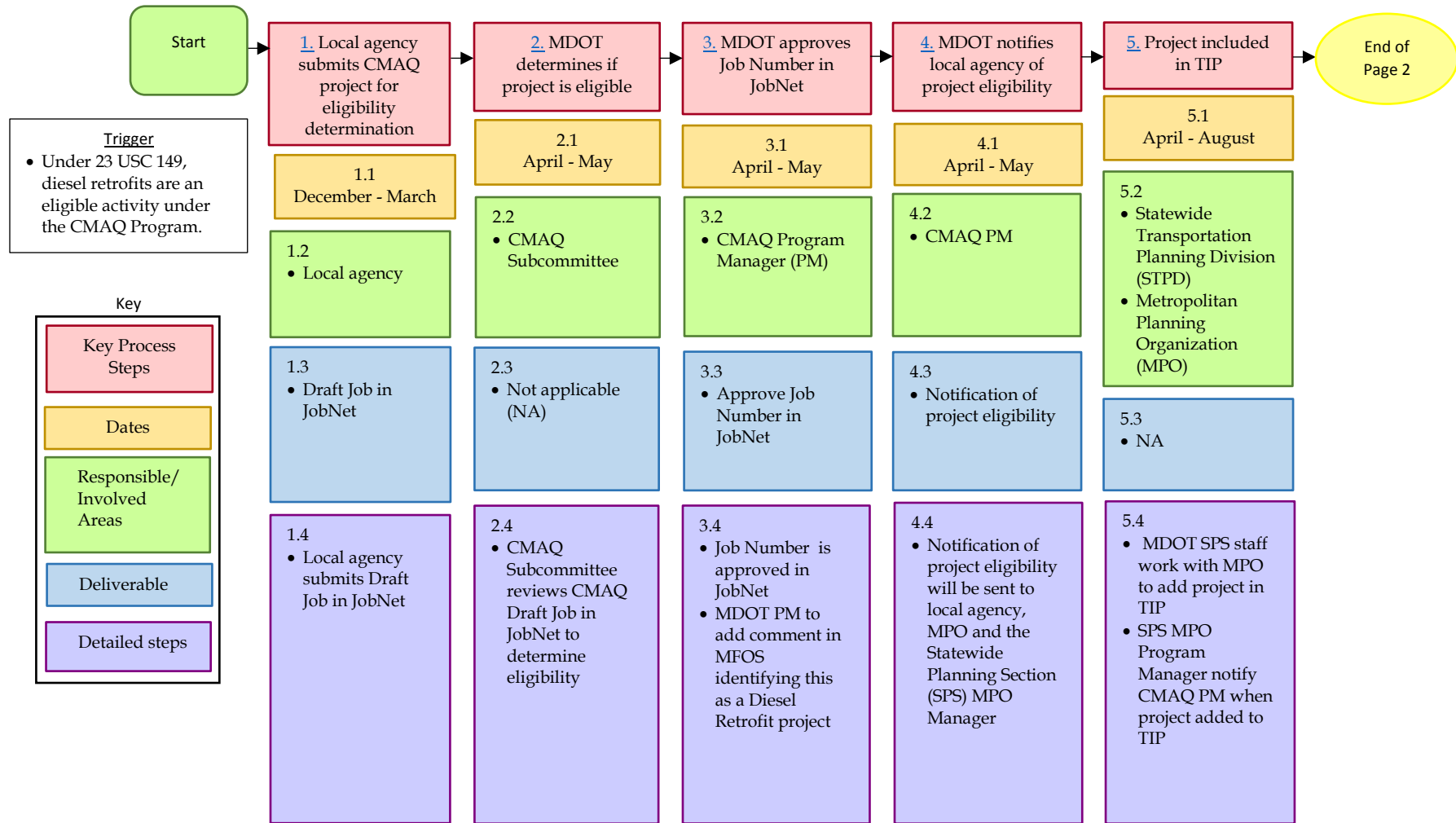
Bureau of Transportation Planning

Congestion Mitigation and Air Quality Diesel Retrofit Project Implementation Process Map and Guidance Documentation

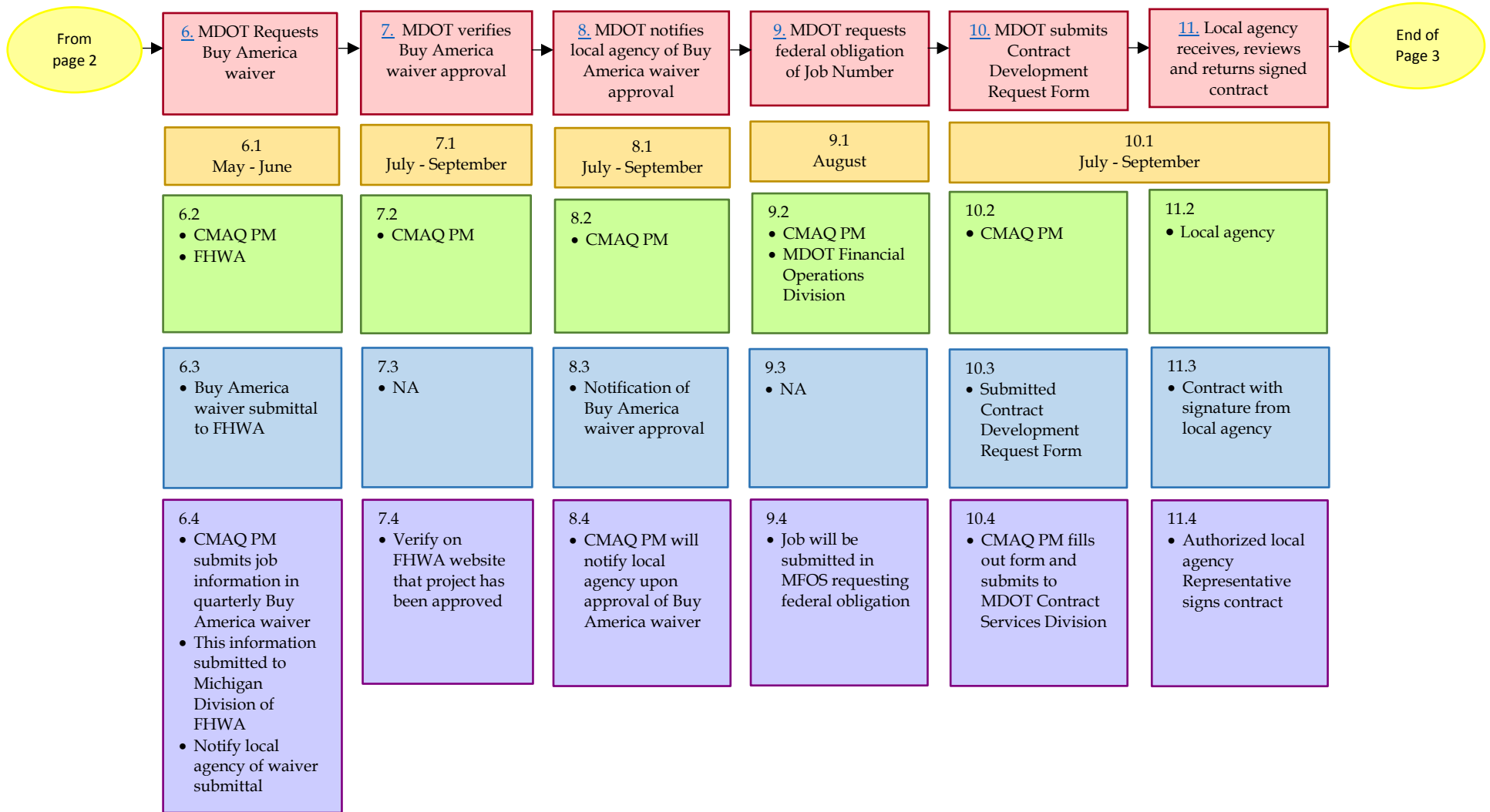


This information is provided to ensure that all Federal and State regulations are followed in the development and implementation of CMAQ Non-Transit Diesel Engine Retrofit projects. **Purchase of vehicles or other equipment cannot occur until notice has been given by MDOT.** For questions please contact the MDOT CMAQ Program Manager, Matt Galbraith at 517-335-2938 or galbraithm2@michigan.gov

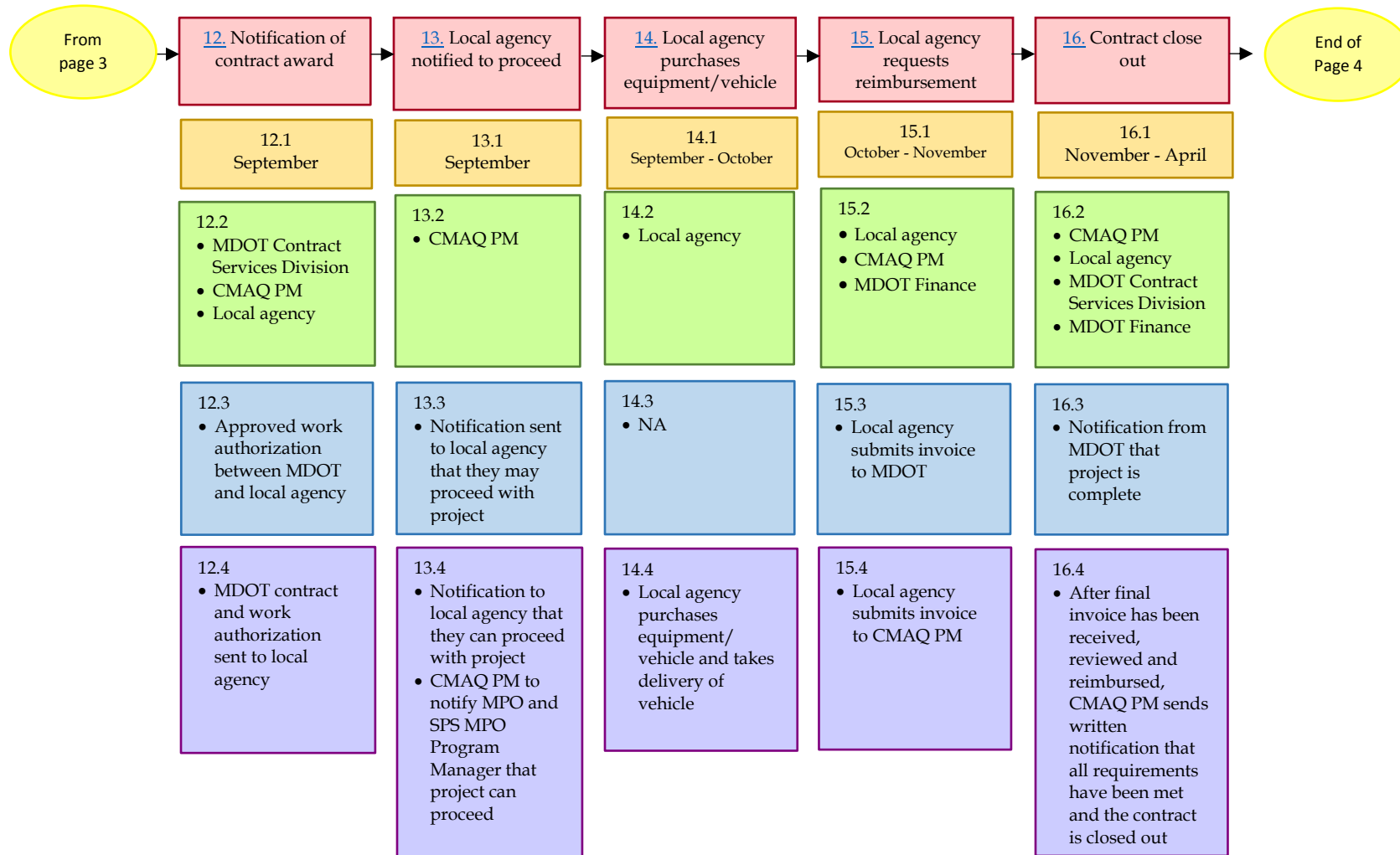
More detailed information for each step can be found at the end of the document. The date ranges provided are estimates and may fluctuate; many of these steps occur concurrently.



Note: The date ranges provided are estimates and may fluctuate based on many different variables.



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1. Local agency submits Congestion Mitigation and Air Quality (CMAQ) project for eligibility determination

- 1.1. December - March
- 1.2. Local agency
- 1.3. Draft Job in JobNet
- 1.4. Local agency submits Draft Job in JobNet.

2. MDOT determines if project is eligible

- 2.1. April - May
- 2.2. CMAQ Subcommittee
- 2.3. Not Applicable (NA)
- 2.4. CMAQ Subcommittee reviews CMAQ Draft Job in JobNet to determine eligibility. If there are questions regarding the project or the information included in JobNet, the CMAQ Program Manager (PM) will follow-up with the applicant.

3. MDOT approves Job Number in JobNet

- 3.1. April - May
- 3.2. CMAQ PM
- 3.3. Approve Job Number in JobNet
- 3.4. Job Number is approved in JobNet by the CMAQ PM. MDOT PM to add comment in MFOS identifying this as a Diesel Retrofit project. This is to ensure that MDOT Finance can add a comment in the federal project remarks in FMIS identifying this as a Diesel Engine Retrofit project.

4. MDOT notifies local agency of project eligibility

- 4.1. April - May
- 4.2. CMAQ PM
- 4.3. Notification of project eligibility
- 4.4. Notification of project eligibility sent to local agency by the CMAQ PM. Notification is also sent to the Metropolitan Planning Organization (MPO) and the Statewide Planning Section (SPS) MPO Manager.

Note: The date ranges provided are estimates and may fluctuate based on many different variables.

5. Project included in Transportation Improvement Plan (TIP)

- 5.1. April - August
- 5.2. Statewide Transportation Planning Division (STPD), MPO
- 5.3. NA
- 5.4. MDOT SPS staff work with MPO to add project in TIP. SPS MPO PM notify CMAQ PM when project has been added to TIP.

6. MDOT requests Buy America waiver

- 6.1. May - June
- 6.2. CMAQ PM, FHWA Michigan Division Office
- 6.3. Buy America waiver submittal to FHWA
- 6.4. CMAQ PM submits job information in Quarterly Buy America waiver. This information is submitted to the FHWA Michigan Division Office. MDOT will notify local agency of waiver submittal.

7. MDOT verifies Buy America waiver

- 7.1. July - September
- 7.2. CMAQ PM
- 7.3. NA
- 7.4. Verify on FHWA website that project has been approved.

8. MDOT notifies local agency of Buy America waiver approval

- 8.1. July - September
- 8.2. CMAQ PM
- 8.3. Notification of Buy America waiver approval
- 8.4. CMAQ PM will notify local agency upon approval of Buy America waiver.

Note: The date ranges provided are estimates and may fluctuate based on many different variables.

9. MDOT requests federal obligation of Job Number

- 9.1. August
- 9.2. CMAQ PM, Financial Operations Division
- 9.3. NA
- 9.4. Job will be submitted in MFOS requesting federal obligation.

10. MDOT submits Contract Development Request Form

- 10.1. July - September
- 10.2. CMAQ PM
- 10.3. Submitted contract development request form
- 10.4. CMAQ PM fills out form and submits to Contract Services Division (CSD).

11. Local agency receives, reviews and returns signed contract

- 11.1. July - September
- 11.2. Local agency
- 11.3. Contract with signature from local agency
- 11.4. Authorized local agency Representative signs contract.

12. Notification of contract award

- 12.1. September
- 12.2. CSD, CMAQ PM, local agency
- 12.3. Approved work authorization between MDOT and local agency.
- 12.4. MDOT contract and work authorization sent to local agency.

Note: The date ranges provided are estimates and may fluctuate based on many different variables.

13. Local agency notified to proceed

- 13.1. September
- 13.2. CMAQ PM
- 13.3. Notification sent to local agency that they may proceed with project
- 13.4. Notification to local agency that they can proceed with project. CMAQ PM to notify MPO and SPS MPO Program Manager that project can proceed.

14. Local agency purchases equipment/vehicle

- 14.1. September - October
- 14.2. Local agency
- 14.3. NA
- 14.4. Local agency purchases equipment/ vehicle and takes delivery of vehicle.

15. Local agency requests reimbursement

- 15.1. October - November
- 15.2. Local agency, CMAQ PM, MDOT Finance
- 15.3. Local agency submit invoice to MDOT
- 15.4. Local agency submits invoice to CMAQ PM.

16. Contract close out

- 16.1. November - April
- 16.2. CMAQ PM, local agency, MDOT Contract Services Division, MDOT Finance
- 16.3. Notification from MDOT that project is complete
- 16.4. After final invoice has been received, reviewed and reimbursed, CMAQ PM sends written notification that all requirements have been met and the contract is closed out.

Note: The date ranges provided are estimates and may fluctuate based on many different variables.