

MOSERS

TxAQPortal.org/MOSERS

TxAQ Portal

TxAQPortal.org

TWG Training

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TWG Meeting - June 4th, 2020

the MOSERS System

Documents, Data, and Tools

Module 1

Background Document

General information on transportation air quality

Module 2

Strategies and Emissions Equations Document

Module 3

MOSERS Tool and Activity Equations

Web Edition



- **Seamless updates**
 - Emission rates
 - Documentation
- **Supporting materials, training, etc.**

MOSERS Guide Edition 3 Documents

Final Adoption Process

Step
1

Comment Matrix for MOSERS Edition 3 documents
and
Final draft of MOSERS Edition 3 documents

to be shared with stakeholders with TWG **before June 30th**

Step
2

TTI will organize **webinars** with commenting agencies and stakeholders to review the comments and explain how they were addressed

Upon satisfactory review, concurrence with adoption via email

to be finalized **before July 31st**

Step
3

Address any remaining issues and finalize the documents
Publish the documents as final version on TxAQPortal.org
Send out adoption and publication notices via TWG

before August 31st

MOSERS Spreadsheet **Tool**

Status Update

A new draft version including **10 strategies**

Strategy 1.1. Transit System/Service Expansion

Strategy 3.2. Bicycle and Pedestrian Programs – Option 1

Strategy 3.2. Bicycle and Pedestrian Programs – Option 2

Strategy 4.2. Trip Reduction Programs

Strategy 5.1. Traffic Signalization

Strategy 6.1. Park-and-Ride – New Facilities

Strategy 10.2. Controls on Heavy-Duty Vehicles

Strategy 12.1. Telecommuting

Strategy 2.1. Freeway HOV Facilities

Strategy 5.7. Shoulder Lane Applications

before June 30th

High-Level Comparison of MOSERS Spreadsheet Tool & FHWA CMAQ Toolkit

		FHWA CMAQ Toolkit	MOSERS Spreadsheet Tool
Purpose and Applications	CMAQ Projects' Eligibility	✓	✓
	CMAQ Reporting Activities	✓	✓
	CMAQ Performance Measurement	✓	✓
	Transportation Conformity	x	✓*
	State Implementation Plan	x	✓*
Intended Users		DOTs, MPOs, and project sponsors across the U.S.	TxDOT, Texas MPOs, and Texas transportation air quality practitioners undertaking air quality planning and evaluation of mobile source emissions reduction strategies
Scope	Format	Multiple macro-enabled MS Excel workbooks. Emission rates embedded inside the tool.	Single macro-enabled MS Excel Workbook. Emission rates downloaded from a web-hosted data table on-demand.
	Strategies	The most frequently encountered CMAQ projects (18 strategies as of Feb. 2020)	The most frequently encountered Mobile Source Emission Reduction projects -- (8 Strategies as of Feb. 2020 – two more strategies will be added by June 2020)
	Vehicle Activity Changes	✓	✓
	Emission Changes	✓ (NO _x , VOC, PM _{2.5} , PM ₁₀ , CO, CO ₂ -eq, Energy)	✓ (NO _x , VOC, PM ₁₀ , CO, CO ₂)
	Emission Rates – Analysis Years	2019 – 2030 (embedded within the tool)	2014 – 2040 ** (dynamically downloaded)
	Emission Rates – Spatial Coverage	National-Level Annual Average ***	Local-Specific ** - Maximum between Summer and Winter
Features and Capabilities	Default Values	✓	✓
	Link to User Guide	✓	✓
	Project information input	x	✓
	Users can review all calculations	x	✓
	Generate standardized PDF report	x	✓

* When [vehicle activity results](#) combined with MOSERS guide emissions equations and official local-specific MOVES emissions rates. The capability of loading official local-specific emissions rates is planned for a future release. The emissions result using these official emissions rates will be valid for conformity and SIP purposes.

** TTI has started work on generating updated MOVES emission rates for analysis years 2020 to 2050. The inclusion of these emission rates into the MOSERS tool is planned for a future release. Local-specific input parameters are from input files used for regulatory inventory analyses by TxDOT and TCEQ.

*** MOVES' default values are used for all inputs.

Click here to [Download Summary Report](#)

MOSERS Web Edition Status Update

Updated MOSERS Web Portal on TxAQPortal.org

Improved design and user experience

Current and previous versions of MOSERS
documents and **spreadsheet tool**

Emissions equations and documentation
of **22 strategies**

Activity equations and documentation
of **10 strategies**

MOSERS Tools and Documentation
Tools and documentation materials for the Mobile Source Emission Reduction Strategies (MOSERS)

Current Version (2007) | Draft MOSERS Tool | Draft 3rd Edition

The Texas Guide to Accepted Mobile Source Emission Reduction Strategies (2nd Edition)
This guidebook is an updated reference for new and experienced technical staff in metropolitan areas undertaking transportation/air quality planning to better understand and utilize mobile source emission reduction strategies as they seek to achieve attainment for NAAQS. It is also intended to serve as an introduction for transportation professionals in new nonattainment areas with little or no experience in transportation/air quality issues. The guide provides an overview of the transportation/air quality relationship, along with specific details about mobile source emission reduction strategies, and serves several functions.

Guidebook Improvement Process
A process diagram describing how to improve the MOSERS guidebook.

Introduction Memorandum (2007)
Transmittal of "The Texas Guide to Accepted Mobile Source Emission Reduction Strategies, 2nd Edition"

Transit | Bicycle & Pedestrian | Infrastructure & Traffic Operations | Vehicle Activity & Technology | Travel Demand Management

1.1 System/Service Expansion
Increase ridership by providing new rail system services and/or expanding bus services.

Description
Expansion of a transit system or service can include the addition of rail services through increased frequency or route extension. Bus or paratransit services can be expanded with new vehicles and/or route extensions.

Application
Large cities or communities with enough population density to support reasonably frequent transit service.

Emissions Equations
$$\text{Daily Emission Reduction} = A + B - C - D(\text{g/day})$$

before August 30th



Welcome to the Texas Air Quality Portal

A centralized information hub for transportation air quality practitioners in Texas



Conformity

Regulatory transportation emissions assessment



MOSERS

MOBILE Source Emission Reduction Strategies



Training & Outreach

Transportation air quality training and outreach materials



Data & Analytics

Data and interactive analytics relevant to transportation air quality



Technical Reports

A catalog of policy, technical analysis, conformity and inventory reports



TWG

Texas Technical Working Group for Mobile Source Emissions

Texas Air Quality Portal Status Update

On-Going Activities

Updating MOSERS Section

Updating Conformity Section

Adding New Content

Transportation Air Quality Training Status Update

On-Going Activities

Finalizing draft Introduction to SIP

Developing draft Introduction to MOSERS