MOBILE SOURCE EMISSION REDUCTION STRATEGIES (MOSERS)

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Project Team

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MPOs
- AAMPO
- HGAC
- NCTCOG
- Others

TxDOT (Project Sponsors)
- Bill Knowles
- Janie Temple
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Other Stakeholders
- EPA
- FHWA
- TCEQ
MOSERS Background

**Hand calculations**
- Simple equations
- Require assumptions
- Less time and data needed

**Models**
- More accurate
- Complex and data intensive
- Require skills such as software programs
MOSERS Background—Current Official Version

MOSERS First Edition 2003
- Review agencies needed consistency
- Uniformity in emission reduction strategies

- Modifications to the equations as recommended by users
- Added new strategies
MOSERS Update - Motivation

- Reporting Requirements
- Basic Equations
- Emission Calculation Consistency
- Calculation Tools
- Activity Calculation Consistency
- Visual Experience

TIME TO UPGRADE
MOSERS - Modules

Module 1
- Background Document
- NAAQS, SIP, Conformity, etc.

Module 2
- Strategies
- Emissions Calculation Equations

Module 3
- Excel Workbook
- Activity and Emissions Calculation
Module 3 – Introduction

Spreadsheet tool

User experience

Strategy & worksheet Menus

Web Integration
Module 3 – Inputs

Main Menu

Save Report as PDF

Project Information

Open Strategy Documentation

Input Values Range

Default Values Range
Module 3 - Activity Calculation

Calculated Data range

• Interim data used for calculation of the Activity Output. No input is required in this range.

Activity Output data range

• Calculated data used for future emission calculations.

Consistency with the Module 2 Formulas
Module 3 – Emission Rates

Texas ERLT for Seven Regions

Strategy-Specific Rates (Bike peds, Signals, etc.)

Rates by metropolitan area, year, road type, road description, and speed

Flag to check correct emission factors are loaded

Macro to load the correct emission factors

<table>
<thead>
<tr>
<th>Description</th>
<th>Variable</th>
<th>NOx</th>
<th>VOC</th>
<th>PM10</th>
<th>CO</th>
<th>CO2</th>
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<td>Daily Emissions Reduction</td>
<td>A + B + C + D</td>
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<td>gm/pt/day</td>
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<td></td>
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</tbody>
</table>

Load ERM

Check whether selected the Metropolitan area, year and Road type are correct!

- **Area**: Austin
- **Year**: 2020
- **Road Type**: Rural Restricted Access

- **Yes**
- **No**
Module 3 – Emission Calculation

1. Daily Emission Reductions

2. Emission Factors

3. Emission Calculations
Module 3 – Reporting
Module 3 – Access and Support

Website - [https://txaqportal.org/](https://txaqportal.org/)
Key Points

- Stakeholders Participation Key for Successful Implementation
- Available Data at the User level
- Compatibility - Excel Version Used
- Initially Target Most Used Strategies
- Strategy and Emission Factor Matrix
MOSERS Tool Demonstration
Questions and Comments
Contact Information

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