Development of Transportation Air Quality Planning Tool for Transportation Agencies

Dataset Overview

The project uses data generated through the MOVES (Motor Vehicle Emission Simulator) model, focusing on emissions from transportation activities within Richland County, SC. This dataset supports air quality planning and policy evaluation.

- Key Features:
 - Geographic Focus: Richland County, SC
 - o Timeframe: 2023 to 2030
 - Pollutants Analyzed: Carbon Monoxide (CO), Oxides of Nitrogen (NOx), Atmospheric CO2, and Total Energy Consumption

Data Preparation

The MOVES model was utilized to generate emission rates for various transportation scenarios:

- 1. Emission Rate Calculation:
 - The MOVES model produced emissions estimates for multiple vehicle and road types under specified operational conditions.

2. Data Aggregation:

o Outputs were stored in a structured database, for detailed analysis and reporting.

3. Excel Tool Integration:

• The emission data was pre-processed and imported into a user-friendly Excel-based air quality planning tool for state and local agency use.

Project Contacts

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