Using CalEEMod & CMAQ

Methods to estimate GHG reductions from proposed AHSC Projects Mana Sangkapichai Modeling and Forecasting 12/08/15

CalEEMod

- California Emissions Estimator Model(CalEEMod)
- Developed by SCAQMD
- Estimates potential criteria pollutants (NOx, PM) and GHG
- Calculate both direct & indirect emissions from land use development projects
- Use on-road vehicle GHG emission factors from the ARB's Mobile-Source Emission Factor Model (EMFAC2011)
- 25 VMT reduction measures developed by the California Air Pollution Control Officers Association (CAPCOA)
 - Details in CAPCOA GHG Quantification Report

CMAQ Methods

- Congestion Mitigation and Air Quality Improvement Projects (CMAQ)
- Developed by ARB and the California Department of Transportation
- Evaluate the cost-effectiveness of certain types of transportation projects:
 - bicycle paths, vanpools, and new bus service

CalEEMod Evaluation Process

- 1. VMT Reduction Strategies Checklist
- 2. Define the proposed project >>> Project specific data for inputs
- 3. Identify and enter VMT reduction measures
- 4. Generate CalEEMod Report
- 5. Calculate additional benefits & adjustments (if applicable)
- 6. Calculate the CalEEMod GHG Reduction over the project life
- 7. Reporting and Documentation

Thank you

sangkapi@scag.ca.gov