VIII. PROJECT SELECTION PROCESS-GENERAL CONDITIONS Proposals for CMAQ funding should include a precise description of the project, providing information on its size, scope, location, and timetable. Also, an assessment of the project's expected emission reduction benefits should be completed prior to project selection to better inform the selection of CMAQ projects (See below).

A. Air Quality Analysis

1. Quantitative Analyses Quantified emissions benefits (i.e., emissions reductions) and disbenefits (i.e., emissions increases) should be included in all project proposals, except where it is not possible to quantify emissions benefits (see Qualitative Assessment, Section VII(A)(2) below). Benefits and disbenefits should be included for all pollutants for which the area is in nonattainment or maintenance status and should include appropriate precursor emissions. Benefits should be listed in a consistent fashion (i.e., kg/day) across projects to allow accurate comparison during the project selection process. Net benefits from all emissions sources involved should be included in the analysis. For example, in analyzing a commuter rail project, net benefits would include emissions reductions from the auto trips avoided, and emissions increases tied to locomotive operation.

State and local transportation and air quality agencies conduct CMAQ-project air quality analyses with different approaches, analytical capabilities, and technical expertise. Section 149(h) of title 23, United States Code, encourages State DOTs and MPOs to consult with State and local air quality agencies in nonattainment and maintenance areas 56 U. S. Department of Energy, Alternative Fuels Data Center, available at http://www.afdc.energy.gov/laws/matrix/incentive.November 12, 2013 31 about the estimated emission reductions from CMAQ proposals. However, while no single method is specified, every effort should be taken to ensure that determinations of air quality benefits are credible and based on a reproducible and logical analytical procedure.

 Qualitative Assessment Although quantitative analysis of air quality impacts is expected for almost all project types, an exception will be made when it is not possible to accurately quantify emissions benefits. In these cases, qualitative assessments based on reasoned and logical determinations that the projects or programs will decrease emissions and contribute to attainment or maintenance of a NAAQS are acceptable.

Public education, marketing, and other outreach efforts, which can include advertising alternatives to SOV travel, employer outreach, and public education campaigns, may fall into this category. The primary benefit of these activities is enhanced communication and outreach that is expected to influence travel behavior and thus air quality.

- 3. Analyzing Groups of Projects In some situations, it may be more appropriate to examine the impacts of comprehensive strategies to improve air quality by grouping projects. For example, transit improvements coupled with demand management to reduce SOV use in a corridor might best be analyzed together. Other examples include linked signalization projects, transit improvements, marketing and outreach programs, and ridesharing programs that affect an entire region or corridor.
- 4. Tradeoffs As noted above, emissions benefits should be calculated for all pollutants for which an area is in nonattainment or maintenance status. Some potential projects may lead to benefits

for one pollutant and increased emissions for another, especially when the balance involves precursors such as NOx and VOC. States and MPOs should consult with relevant air agencies to weigh the net benefits of the project.