

regulations and programs have achieved and will achieve. There are also legal issues regarding whether the District can regulate private motor vehicle fleets. Hence, no potential emission reductions would be lost by not retaining R-705/N-705.

### **3.2. Transportation Control Measures**

TCMs are strategies that reduce motor vehicle emissions by reducing vehicle trips, vehicle use, vehicle miles traveled (VMT), vehicle idling, and traffic congestion. The CAAA requires TCMs, to meet progress milestones and demonstrate attainment of national air quality standards. The following strategies reduce emissions from on-road motor vehicles. These strategies were also in the 1994 AQMP.

Trip Elimination: This strategy reduces vehicle emissions by eliminating vehicle trips. The primary emissions eliminated are the cold-start emissions that occur when vehicle engines have been at rest for a period and then restarted. Cold-start emissions occur after engine startup but before the engines are warm enough for the emission control systems to work effectively. Cold-start emissions are a large percentage of total vehicle emissions and thus a major source of ozone precursors. Telecommuting, carpooling, combining trips, flexible work schedules, and certain land use measures that provide housing near jobs and shopping centers are strategies that eliminate vehicle trips.

Vehicle Substitution: This strategy reduces emissions associated with motor vehicle use by using nonmotorized transportation modes, which do not produce air emissions. Walking, biking, and telecommuting are all examples of vehicle substitution. Adopting trip reduction ordinances is a mechanism to encourage walking or biking facilities and discourage motor vehicle use in highly congested areas.

Vehicle Miles Traveled Reduction: This strategy reduces motor vehicle emissions because vehicles traveling fewer miles produce fewer emissions. This strategy does not reduce cold-start emissions. Park-and-ride lots, carpooling, and land use measures are all ways to reduce trip distances and, therefore, vehicle miles traveled and vehicle emissions.

Vehicle Occupancy: Increasing the number of passengers per vehicle can reduce all emissions associated with motor vehicle use. Transit, carpools, and vanpools are all mechanisms to implement this strategy. Other mechanisms include providing ridematch services for carpools and vanpools, restricting or limiting roads for high occupancy vehicles and passenger buses, establishing employer-based transportation management programs that encourage carpooling, vanpooling and transit use among employees.

Technological Improvements: This strategy reduces emissions through technological improvements to the internal operation of motor vehicles and the technologies used to improve the performance of transportation systems. Clean-fuel/electric vehicles, vehicle emission controls, Intelligent Transportation Systems, signal synchronization and freeway management

systems that improve the performance of transportation systems are all mechanisms to implement this strategy. Programs to control extended idling of vehicles and remove older, high-polluting vehicles through vehicle scrapping incentives reduce emissions as well.

### 3.2.1. Transportation Control Measures Categories and Projects

This section presents the transportation control measures (TCMs) in the 2007 AQMP. The TCMs are grouped by categories and projects under control measure R-700/N-700, Transportation Control Measures, an umbrella control measure retained from the 1994 AQMP. To be included in the AQMP, potential projects must be TCMs in SCAG's Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP).

Candidate projects are first screened by District, Ventura County Transportation Commission (VCTC), and SCAG staff to determine if they are TCMs as defined by the project categories listed in Table 3-5. SCAG's [Transportation Conformity Working Group](#), the local agency for the interagency consultation process required by the federal transportation conformity regulation, then formally confirms the projects as TCMs eligible for inclusion in the RTP and RTIP. The interagency consultation process is part of the federal transportation conformity regulation that requires procedures for federal, state, and local air districts and transportation agencies to consult with each other on transportation plans, programs, and projects. Transportation conformity is a regulatory process to help ensure that transportation plans, programs, and projects are consistent with air quality goals. District Rule 221, *Transportation Conformity*, contains a memorandum of understanding that outlines the interagency consultation process. Further information regarding transportation conformity is presented in Section 3.3 below.

The RTP is a long-range regional plan (minimum 20-years) that provides a blueprint for future transportation improvements and investments based on specific transportation goals, objectives, policies, and strategies. RTPs, based on federal transportation law, identify strategies to meet mobility, financial and air quality requirements. RTIPs are short-term transportation programs, with a six-year planning horizon, that identify specific transportation projects to implement the RTPs. SCAG is the Metropolitan Planning Organization responsible for updating the RTP and RTIP every four and two years, respectively, for the six-county [SCAG region](#), including Ventura County. Both the RTP and RTIP for the SCAG region are on SCAG's [RTP](#) and [RTIP](#) websites.

The 2008 RTP is SCAG's multi-modal plan for a better regional transportation system, integrated with the best possible growth pattern for the region out to 2035. The plan provides the basic policy and program framework for long-term investment in the region's vast transportation system in a coordinated, cooperative, and continuous manner. Transportation investments in the SCAG region that receive state or federal transportation funds must be consistent with the RTP and must be included in the RTIP when ready for funding. SCAG's 2008 RTP provides the basis for the transportation control strategy of the 2007 AQMP and includes the total regional emission reductions from transportation projects in Ventura County.

**Table 3-5**  
**TCM Project Categories Included in R-700/N-700**

<b>Project Category</b>
<p><b>A. Ridesharing Measures</b> Carpooling, Vanpooling, Park and Ride Lots, Ride Matching Services, Incentive Programs, Satellite Work Centers, Guaranteed Ride Home Programs, Station Cars, Onsite Services</p>
<p><b>B. Non-Motorized Measures</b> Bicycle Paths/Facilities, Pedestrian Paths/Facilities, Telecommuting, Flexible Work Schedules, Bicycle and Pedestrian Programs</p>
<p><b>C. Traffic Flow Improvement Measures</b> Signal Synchronization, Intersection Improvements, Incentive/Disincentive Programs, High Occupancy Vehicle Lanes, Intelligent Transportation Systems, Ramp Metering</p>
<p><b>D. Land Use Measures</b> Transportation Demand Management (TDM) Ordinances, Smart Growth/Sustainable Community Projects, Mixed Use Development, Parking Management and Standards, Congestion Management Plan, TDM Strategies</p>
<p><b>E. Transit Measures</b> Bus Fleet Expansion, Shuttles and Paratransit Vehicles Expansion, Transit Stations and Facilities, Express Busways, Passenger Rail Service, Rail Stations and Facilities, Real-Time Transit Information Systems, Transit Subsidies</p>

The RTIP includes emission reductions from TCM projects. The emission reductions from TCMs are a subset of the total regional emission reductions from the RTP. The AQMP enforceable commitments for TCMs are to fund and implement the TCM projects contained in the first two years of the current six-year RTIP. Moreover, to be eligible for federal funding, the EPA's conformity rule requires that all TCMs in clean air plans undergo a timely implementation analysis in each RTIP update. The timely implementation requirement assures that TCMs receive priority funding and are implemented on schedule.

The RTIP update contains a timely implementation report, which tracks each committed TCM and demonstrates timely implementation. Appendix A presents the current list of committed TCMs in the 2006 RTIP.

### 3.2.2. TCM Rollover and Substitution

SCAG is responsible for updating the RTIP every two years. At each RTIP update, a new list of TCMs from the first two years of the RTIP, plus continuing TCMs from the previous RTIP, are rolled over into the AQMP upon approval by ARB and EPA. This "rollover" list becomes the committed TCMs for timely implementation and is monitored for compliance with the schedule established in the new RTIP. Once a TCM project is completed, it is reported in the RTIP update as completed and removed from future RTIPs. An RTIP update can occur more frequently than the biennial update. The rollover process applies when the RTIP requires a conformity analysis and finding.

A TCM substitution is required when a committed TCM project cannot be delivered or will be significantly delayed. The VCTC and/or the project sponsor must notify SCAG of the problem

and propose a substitute TCM project or group of projects. The TCM substitution must follow the process set forth in Section 6011(d) of the federal [SAFETEA-LU](#) (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) legislation and the federal transportation conformity rule. The substitute project(s) may not be from the committed TCM list.

### 3.2.3. Reasonably Available Control Measures - TCMs

The Clean Air Act requires a review of RACM for TCMs during AQMP development. For TCMs to be RACM, TCMs must be both technically and economically feasible and must advance the projected attainment date of the air quality standard by at least one year. EPA left the definitions for technically and economically feasibility vague so that areas could determine what measures would be feasible or infeasible according to local factors. Factors, such as the availability of control measures, ability to achieve emission reductions, and degree of cost effectiveness, are the primary considerations on an area-by-area basis. In addition, EPA did not provide a conclusive definition on “advancing attainment,” but agencies have based their determination of RACM on whether a measure or group of measures would advance attainment by at least one year.

A list of candidate RACMs was prepared by SCAG and the District using TCMs from CAAA [Section 108\(f\)\(1\)\(A\)](#) and other Metropolitan Planning Organizations and air districts. The TCMs are organized according to the sixteen TCM categories listed in CAAA [Section 108\(f\)](#). Each candidate TCM has a control measure number, title, and a brief description. The District, along with SCAG and VCTC staff conducted the RACM analysis. If a TCM was found feasible for Ventura County, it was recommended as a potential measure for the 2007 AQMP with the appropriate implementing agency listed. If a TCM was determined infeasible for Ventura County, it was not recommended as a measure for the 2007 AQMP and the reasoned justification was provided. Appendix B is the RACM analysis conducted for the 2007 AQMP.

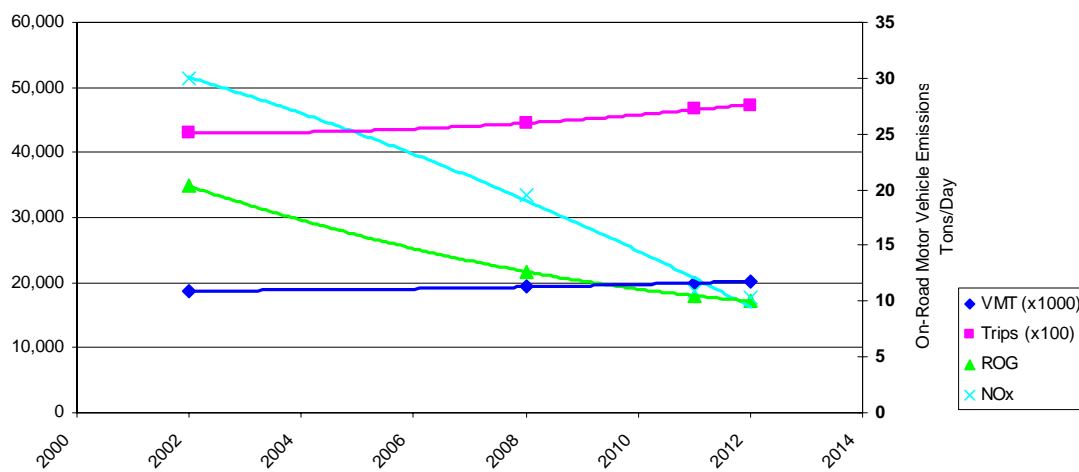
The RACM analysis was listed on the District’s website and reviewed by the Transportation Conformity Working Group, Technical Transportation Advisory Committee, and Transit Operators Committee. Based on this comprehensive analysis, the majority of TCMs determined to be feasible are either being implemented, or have been implemented, in Ventura County. The TCMs determined to be infeasible did not meet the criteria for RACM because of the individual reasons provided in the analysis. Moreover, implementing all feasible TCMs in the RACM analysis would not advance the county’s 8-hour ozone attainment date by at least one year. This criterion also applies to RACM implementation.

### 3.2.4. Motor Vehicle Trips and VMT vs. On-Road Motor Vehicle Emissions

[Section 182\(d\)\(1\)\(A\)](#) of the CAAA required that by November 15, 1992 the District submit specific enforceable TCMs and strategies to offset any growth in emissions from growth in VMT or number of vehicle trips, sufficient to allow total district-wide emissions to comply with the

reasonable further progress and attainment requirements. The District met that requirement and showed that countywide motor vehicle emissions were decreasing despite increasing VMT. The 2007 AQMP updates that demonstration as shown by the trend projections in Figure 3-1. The dramatic downward trend in motor vehicle emissions is due largely to California’s comprehensive motor vehicle emissions regulations.

**Figure 3-1  
Trips and VMT vs. On-Road Motor Vehicle Emissions Trends**



**NOTES:**  
 EMFAC2007v2.3, Nov. 1, 2006\*\*WIS Enabled.  
 Run Date: 03/12/2008 10:47:42.  
 Season: Summer.  
 See [Table 4-2](#) for underlying data.

### 3.3. Conformity

Conformity is a federal regulatory process required in nonattainment areas by CAAA [Section 176\(c\)](#) to ensure that federal funding and approvals will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS. Section 176(c) prohibits federal agencies, departments, or instrumentalities from engaging in, supporting, providing financial assistance for, licensing, permitting or approving any action which does not conform to an approved state or federal clean air plan. It is called conformity because federal agencies, such as the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Federal Aviation Administration (FAA), must show that their actions “conform with” (i.e., do not undermine or hinder) approved SIPs.

A conformity determination is a formal demonstration that the subject federal action is consistent with the respective SIP. Federal agencies make such demonstrations by performing conformity reviews of proposed federal actions. The conformity review evaluates and documents project-related air pollutant emissions, local air quality impacts, and the potential need for emission mitigation.