

# **SECTION C**

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## **SECTION C GENERAL REQUIREMENTS**

### **CHAPTER 3 TRANSPORTATION CONTROL MEASURES**

This chapter provides information on the requirements for transportation control measures (TCMs). TCMs include a wide variety of measures used to reduce motor vehicle emissions, primarily by reducing the total amount of vehicle miles of travel in an area. Examples of traditional TCMs include: transit, ridesharing arrangements, telecommuting and parking management. Transportation pricing has recently been discussed as a TCM with substantial potential to reduce travel however, implementation of pricing projects is still in its infancy. The following topics related to TCMs are discussed in this chapter.

1. What are TCMs?
2. When are TCMs included in SIPs?;
3. Timely Implementation of TCMs in SIPs;
4. Emissions Credits for TCMs in Regional Conformity Analysis;
5. Substitution of TCMs;
6. EPA and FHWA Information on TCMs; and
7. References.

#### **DESCRIPTION OF TRANSPORTATION CONTROL MEASURES**

Transportation control measures are defined in the transportation conformity rule as follows:

*40 CFR §93.101, as amended by 62 FR 43780, 43803, August 15, 1997*

*any measure that is specifically identified and committed to in the applicable implementation plan (SIP) that is either one of the types listed in §108 of the CAA, or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congested conditions. Notwithstanding the first sentence in this definition, vehicle technology-based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purpose of this subpart.*

The CAA included a list of TCMs (Exhibit 14) that can be considered, along with other transportation measures for inclusion in SIPs. As shown in the Exhibit, these TCMs include a host of transportation demand management programs as well as public transit, high occupancy vehicle lanes and other pedestrian

and bicycling programs; all of which are directed at reducing automobile travel and increasing vehicle occupancy levels.

**Exhibit 14**  
**Transportation Control Measures**  
**CAA §108(f)(1)(A), 42 U.S.C. §7408(f)(1)**

- (i) programs for improved public transit;
- (ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high-occupancy vehicles (HOV);
- (iii) employer-based transportation management plans, including incentives;
- (iv) trip-reduction ordinances;
- (v) traffic flow improvement programs that achieve emissions reductions;
- (vi) fringe and transportation corridor parking facilities serving multiple-occupancy vehicle programs or transit service;
- (vii) programs to limit or restrict vehicle use in downtown areas or other areas of emissions concentration particularly during periods of peak use;
- (viii) programs for the provision of all forms of high-occupancy, shared-ride services;
- (ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
- (x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
- (xi) programs to control extended idling of vehicles;
- (xii) reducing emissions from extreme cold-start conditions;
- (xiii) employer-sponsored programs to permit flexible work schedules;
- (xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
- (xv) programs for new construction and major reconstruction of paths, tracks, or areas solely for use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and
- (xvi) programs to encourage removal of pre-1980 vehicles.\*

\*Note: Excluded from CMAQ Funding under TEA-21

**WHEN ARE TCMs INCLUDED IN SIPs?**

Nonattainment and maintenance areas can include TCMs in SIPs as control measures to support the SIPs demonstration or as contingency measures. The CAA required that contingency measures be developed in moderate and above ozone nonattainment area 15% SIPs and in moderate (>12.7 ppm) carbon monoxide area SIPs.

## TIMELY IMPLEMENTATION OF TRANSPORTATION CONTROL MEASURES IN SIPs

The transportation conformity rule includes specific provisions for the criteria for determining if TCMs that are included in a SIP are being implemented in a timely manner. The intent of these provisions is to ensure that TCMs which are eligible for Federal funding receive priority for funding and that the SIP schedules and commitments are enforced. If a nonattainment or maintenance area cannot determine that TCMs are meeting the timely implementation requirement, the plan, TIP or project (not from a plan/TIP) does not conform.

CAA §176(c)(2)(B), 42 U.S.C. §7502(c)(2)(B)

*No metropolitan planning organization or other recipient of funds under title 23, United States Code, or the Urban Mass Transportation Act shall adopt or approve a transportation improvement program of projects until it determined that such program provides for timely implementation of transportation control measures consistent with schedule included in the application implementation plan.*

40 CFR §93.113, as amended by 62 FR 43809, August 15, 1997

*(a) The transportation plan, TIP, or any FHWA/FTA project which is not from a conforming plan/TIP must provide for the timely implementation of TCMs from the applicable implementation plan.*

58 FR 62197, November 24, 1993

*EPA believes that the determination of “timely implementation” should focus on the prospective schedule for TCM implementation, and all past delays should be irrelevant. Therefore, it is permissible for the plan/TIP to project completion of a TCM implementation milestone which is later than the SIP schedule if the lateness is due to delays which have already occurred, or due to the time reasonably required to complete remaining essential steps (such as preparation of a NEPA document, design, work, right-of-way acquisition, Federal permits, construction, etc.). It is also permissible to allow time for obtaining State or local permits if the project has not yet advanced to the point where a permit could have been applied for.*

*However, where implementation milestones have been missed or are projected to be missed, agencies must demonstrate that maximum priority is being given to TCM implementation. All possible actions must be taken to shorten the time periods necessary to complete essential steps in TCM implementation—for example, by increasing the funding rate—even though the timing of other projects may be affected. It is not permissible to have prospective discrepancies with the SIP’s TCM implementation schedule due to lack of programming funding in the TIP, lack of commitment to the project by sponsoring agency, unreasonably long periods to complete future work due to lack of staff or other agency resources, lack of approval or consent by local government bodies, or failure to have applied for a permit where*

*necessary work preliminary to such application has been completed. However, where statewide and metropolitan funding resources and planning and management capabilities are fully consumed with responding to damage from natural disasters, civil unrest, or terrorist acts, TCM implementation can be determined to be timely without regard to the above, provided reasonable efforts are being made. The burden of proof will be on the agencies making conformity determinations to demonstrate that the amount of time to complete remaining implementation steps will not exceed that specified in the SIP without good cause, and that where possible, steps will be completed more rapidly than assumed in the SIP in order to make up lost time.*

### **Which TCMs Are Required to Meet the Timely Implementation Test?**

In accordance with the conformity rule, those TCMs that are included in an EPA-approved SIP and that are eligible for Federal funding are subject to the timely implementation requirement.

*58 FR 62211, November 24, 1993*

*...since (transportation) plans/TIPs can at most “provide for” only those projects which are eligible for Federal funding, it is reasonable to define those TCMs required to be implemented by Clean Air Act section 176 (c)(2)(B) to be only those SIP TCMs that are eligible for Federal funding.*

As part of the interagency consultation process (see Chapter 2), a determination must be made that when TCMs included in an approved SIP have been delayed in the past or are currently behind schedule, all obstacles to implementation have been identified and are being overcome. In addition, U.S. DOT must, in approving a conformity determination, find that priority is being given to TCMs included in approved SIPs.

The criteria and procedures for determining timely implementation are different for plans and TIPs and projects not from a plan/TIP and are discussed below.

### **Criteria for Demonstrating Timely Implementation of TCMs in Plans**

Timely implementation of TCMs for transportation plans can be demonstrated by showing:

*40 CFR §93.113(b)(1-2), as amended by 62 FR 43780, 43809, August 15, 1997*

*(1) The transportation plan, in describing the envisioned future transportation system, provides for the timely completion or implementation of all TCMs in the applicable implementation plan which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws, consistent with schedules included in the applicable implementation plan; and*

*(2) Nothing in the transportation plan interferes with the implementation of any TCM in the applicable implementation plan.*

### **Criteria for Demonstrating Timely Implementation of TCMs in TIPs**

To demonstrate timely implementation of TCMs for TIPs, the following criteria must be met:

*40 CFR §93.113(c)(1-3), as amended by 62 FR 43780, 43809-10, August 15, 1997*

*(1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding of TCMs over other projects within their control, including projects in locations outside the nonattainment or maintenance area.*

*(2) If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvement projects, e.g. the Congestion Mitigation and Air Quality Improvement Program.*

*(3) Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan.*

### **Criteria for Demonstrating Timely Implementation of TCMs for Projects Not From a Conforming Plan/TIP**

*40 CFR §93.113(d), as amended by 62 FR 43810, August 15, 1997*

*(d) For FHWA/FTA projects which are not from a conforming transportation plan/TIP, this criteria is satisfied if the project does not interfere with the implementation of any TCM in the applicable implementation plan.*

### **Substituting Transportation Control Measures**

If the nonattainment or maintenance area cannot determine that TCMs are meeting the timely implementation criteria because obstacles to implementation are impossible to overcome or if other TCMs are identified which would be as or more effective, a SIP revision to remove and/or substitute the TCM may be necessary before the plan/TIP can be found to conform. In this case, the SIP revision would have to be approved by EPA before the plan/TIP can be found to conform. The decision to submit a SIP

revision to substitute or remove TCMs is made as part of the interagency consultation process.<sup>1</sup>

In the August 15, 1997 transportation conformity rule, EPA committed to issuing guidance in the future on how areas can substitute TCMs in previously approved SIPs without additional EPA approvals. EPA believes a substitution mechanism is currently possible under existing SIP policy if States explicitly incorporate such a policy in the SIP in accordance with all SIP planning requirements and criteria. EPA has already worked with some areas to approve TCM substitution mechanisms into SIPs. See Appendix N for the TCM substitution mechanism that EPA approved into the Portland, Oregon ozone maintenance plan in 1997.

### **CRITERIA FOR TRANSPORTATION CONTROL MEASURES TO BE INCLUDED IN SIPs**

TCMs must satisfy the following eight criteria before EPA will consider them for approval in a SIP:<sup>2</sup>

1. A complete description of the measure and its estimated emissions reduction benefits,
2. Evidence that the measure was properly adopted by a jurisdiction with legal authority to commit to and execute the measure,
3. Evidence that funding has been (or will be) obligated to implement the measure,
4. Evidence that all necessary approvals have been obtained from all appropriate government agencies (including MPOs and State transportation departments, if applicable),
5. Evidence that a complete schedule to plan, implement, and enforce the measure has been adopted by the implementing agency or agencies,
6. A description of the monitoring program to assess the measures' effectiveness and to allow for necessary in-place corrections or alterations,
7. Governor's approval of the SIP, and
8. Public hearing (as part of the SIP approval process).

### **EMISSIONS CREDITS FOR TCMs IN REGIONAL CONFORMITY ANALYSIS**

Credit can be claimed for TCMs in approved SIPs in the regional conformity analysis under the following circumstances (please refer to Chapters 5 and 6 for additional information on regional conformity analysis and analysis of TCMs):

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<sup>1</sup> 40 CFR § 93.105(c)(1)(iv), as amended by 62 FR 43805, Aug. 15, 1997.

<sup>2</sup> *Transportation Control Measures: State Implementation Plan Guidance*, U.S. EPA, 450/2-89-020, Sept., 1990.

- # The regulatory action required for the TCM is already adopted, and
- # The TCM is in an approved SIP and being implemented on schedule.

## **STATUS OF TCMs DURING A CONFORMITY LAPSE**

In accordance with the transportation conformity rule,<sup>3</sup> TCMs in an approved SIP can proceed in the event of a conformity lapse, provided they have been coordinated through the air quality/transportation planning<sup>4</sup> process. This allows for the timely implementation of TCMs that are included in an approved SIP even in the event of a conformity lapse.

*40 CFR 62 FR 43781, August 15, 1997*

*...The second set of amendments also allowed any transportation control measure (TCM) from an approved SIP to proceed during a conformity lapse, although EPA stated that it did not intend to approve SIPs containing TCMs that have not been coordinated through the transportation planning process, as required by 23 CFR part 450 and 49 CFR part 613. The Clean Air Act and the Intermodal Surface Transportation Efficiency Act require that an integrated transportation/air quality planning process be used to identify effective TCMs and ensure their funding sources.*

## **ADVANCING NEW TCMs DURING A CONFORMITY LAPSE**

In accordance with the National Memorandum of Understanding between the U.S. Department of Transportation and the U.S. Environmental Protection Agency for transportation conformity (See Appendix O), which was executed in April, 2000, the following procedures apply for areas that wish to advance new TCMs during a conformity lapse.

### **Interim Plan and TIP Requirements**

Federal transportation law requires that projects must be in a plan and TIP to receive Title 23 and Title 49 funds. Therefore, in the event of a conformity lapse, an MPO must create an Interim Plan and TIP for any projects to be federally-funded and approved during the lapse, including exempt projects and transportation control measures (TCMs). The Interim Plan and TIP must be developed in a manner consistent with 23 U.S.C. 134, particularly these criteria:

1. The Interim Plan and TIP must be developed based on previous planning assumptions and goals; appropriately adjusted for currently available projections for population growth, economic activity and other relevant data.
2. The Interim Plan and TIP must be developed with public involvement consistent with the normal

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<sup>3</sup> 40 CFR §§93.114(b), 93.115(d), as amended by 62 FR 43810, Aug. 15, 1997.

<sup>4</sup> 23 CFR §450, 49 CFR Part 613.

transportation plan and program development processes.

3. The Interim Plan and TIP must satisfy the Title 23 and 49 requirements for financial planning and constraint, and, as appropriate, for congestion management systems.

4. The Interim TIP must be approved by the MPO and the Governor (or the Governor's designee).

### **TCMs in a previously conforming Plan and TIP**

Projects in the previously conforming transportation plan must be included in the Interim Plan and TIP if State and local agencies intend to request EPA to approve them into the SIP as new TCMs (as defined in 40 CFR 93.101 of the transportation conformity rule which includes TCMs defined by Section 108(f)(1)(A) of the Clean Air Act (CAA)) and if they have emission reductions benefits. The TCMs can not proceed during a conformity lapse until they are contained in an EPA approved SIP with identifiable emission reduction benefits. States may, but are not required to, apply the identified emission reduction benefits directly as SIP credits in control strategy SIPs and maintenance plans. Future conformity analyses may reflect the emission reduction benefits identified in the SIP for regionally significant TCMs; such emission reduction benefits must be adjusted to reflect latest planning assumptions (40 CFR 93.110) at the time of the conformity analysis, and as appropriate to meet the requirements of 40 CFR 93.122. For non-regionally significant TCMs, the emission reduction benefits identified in the SIP may be used for future conformity analyses; such emission reduction benefits must be adjusted to reflect latest planning assumptions (40 CFR 93.110) at the time of the conformity analysis, and as appropriate to meet the requirements of 40 CFR 93.122(a).

### **New TCMs not from a previously conforming Plan and TIP**

New TCMs, not included in a previously conforming Plan and TIP, may be advanced during a conformity lapse provided they are included in an Interim Plan and TIP that meet the criteria in Section A and are contained in an EPA approved SIP with identified emission reduction benefits. They must also meet the following criteria:

1. They must be identified through the interagency consultation process (i.e., Federal, State, and local transportation and air quality agencies).

2. They must be described at a level of detail and analysis appropriate to their overall level of investment and complexity (i.e., regionally significant TCMs must be described and analyzed at a significant level of detail, appropriate to the scale of the project and adequate for emissions analysis purposes, while non-regionally significant TCMs may be presented in much less detail).

3. If regionally significant (as defined in 40 CFR 93.101), they must be shown to yield reduced emissions on a regional basis compared to regional emissions without the TCMs for the analysis period. The analysis

period will include the SIPs milestone year(s) (if relevant), and the year the TCMs are open to traffic or become operational (if the TCMs's schedule is outside the SIP's time frame). Transportation and air quality planners must consult with each other on the methodologies used to estimate the transportation and air quality benefits of the regionally significant projects. Off-model analysis techniques must be used, to the extent possible, to quantify emissions benefits for non-regionally significant TCMs. Appropriate techniques will be decided through interagency consultation.

4. The TCMs will be submitted as a SIP revision to EPA for approval, and their emissions benefits must be identified to support EPA's approval into the SIP. TCMs can not proceed during a lapse until they are contained in an EPA approved SIP with identifiable emission reduction benefits. States may, but are not required to, apply the identified emission reduction benefits directly as SIP credits in control strategy SIPs and maintenance plans. Future conformity analyses may reflect the emission reduction benefits identified in the SIP for regionally significant TCMs; such emission reduction benefits must be adjusted to reflect latest planning assumptions (40 CFR 93.110) at the time of the conformity analysis, and as appropriate to meet the requirements of 40 CFR 93.122. For non-regionally significant TCMs, the emission reduction benefits identified in the SIP may be used for future conformity analyses; such emission reduction benefits must be adjusted to reflect latest planning assumptions (40 CFR 93.110) at the time of the conformity analysis, and as appropriate to meet the requirements of 40 CFR 93.122(a).

Under this scenario, the State and MPO may advance any TCMs defined by 40 CFR 93.101 of the transportation conformity rule (which includes TCMs defined by Section 108(f)(1)(A) of the CAA).

It is expected that the process necessary to develop Interim Plans and TIPs with new projects, not previously conforming, will take most areas at least 6 months. Areas which expect to return to conformity earlier than 6 months should concentrate on reestablishing conformity, rather than embarking on developing an Interim Plan and TIP, for new projects.

The DOT's planning regulations and EPA's conformity regulation will be amended to clarify the implementation of the TCMs processes outlined above.

## **VOLUNTARY MOBILE SOURCE EMISSION REDUCTION PROGRAMS (VMEP)**

In October, 1997, EPA issued *Guidance on Incorporating Voluntary Mobile Source Emissions Reduction Programs (VMEPs) in State Implementation Plans*. The VMEP guidance will allow areas to implement and claim SIP credit for these programs for the first time. VMEPs encompass many mobile source control measures; some of these are TCMs. The guidance document discusses how voluntary measures can be incorporated into the SIP and receive emissions reduction credit. EPA discusses the terms and conditions for establishing and implementing VMEPs and recognizes the potential that VMEPs have to contribute, in a cost-effective manner, to needed emissions reductions.

EPA's guidance establishes a cap on the SIP credit allowed for VMEPs to 3% of the total projected

future year emissions reductions required to attain the NAAQS. EPA notes that the emissions reduction potential of VMEPs is generally a fraction of one ton per day.

## **REFERENCE MATERIAL ON TCMs**

### **EPA Information on TCMs**

In March, 1992 the EPA published *Transportation Control Measure Information Documents* (400-R-92-006) which provides information on the emissions reduction potential of TCMs. The Information Documents identify examples of TCMs in the 16 categories included in the CAA and discusses implementation experience (as of 1992) with TCMs in different settings across the United States. Each TCM is described and includes:

1. A definition and the major variations of each TCM,
2. Summary description and examples of each TCM in practice,
3. Transportation, emissions, and air quality impacts of each measure in quantitative terms wherever possible, and including information on variables that impact the magnitude of the TCMs effectiveness,
4. An estimate of the expected capital and operating costs, other important factors, and principal travel markets affected. Major areas of uncertainty are also discussed,
5. Requirements to achieve effective implementation, including an assessment of major institutional and political considerations and a discussion of factors affecting the transferability of findings among urban areas, and
6. Bibliography of selected references.

### **FHWA Transportation Control Measure Case Study**

In February, 1995 the FHWA published a document<sup>5</sup> that provides detailed information on the TCM analysis used by the Metropolitan Washington Council of Governments (WASHCOG) in assessing TCMs for the region's 15 Percent Reasonable Further Progress Plan. The report provides background information, a description of the analysis tools and methodologies used, and a detailed description of how each measure was analyzed. Several significant points are made in the document that apply generally to TCMs and warrant inclusion here:

1. There is no single analysis tool available that can be applied to all TCMs. Different tools were used

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<sup>5</sup> FHWA, *Transportation Control Measure Analysis: Transportation Control Measures Analyzed for the Washington, D.C. Region's 15 Percent Rate of Progress Plan*, FHWA-PD-95-008, Feb., 1995.

in the analysis of different measures,

2. Impacts of TCMs must be determined specifically for each region and each project as it is defined. Though a general range of impacts can be found in literature on the effectiveness of TCMs, these generic estimates may not be applicable locally,
3. WASHCOG performed emissions analysis for VOCs, and both the impacts of reducing vehicle miles traveled (VMT) and vehicle trips were considered,
4. The document provides information on the relative effectiveness of different TCMs analyzed in absolute terms and in the categories within which WASHCOG grouped various TCMs, and
5. Only costs incurred by government or by private employers were considered in the analysis. Using these two cost factors, the report identified “Revenue Producing” TCMs which would reduce emissions and produce revenues.

### **Additional Reference Material**

In the past several years there has been a renewed emphasis on analyzing the impacts of TCMs in order to assist nonattainment areas in assessing the benefits and costs of TCM implementation. The analysis of TCMs that rely upon changes in travel behavior is particularly difficult due to the many variables which, taken together, affect travel behavior. It is difficult to isolate any single variable for its discrete impact on travel decisions and therefore analyzing the effectiveness of certain TCMs has been problematic. Chapter 6 discusses approaches to analyzing TCMs. A number of efforts have produced better information than had heretofore been available on TCM assessment and analysis techniques. They include the following:

*A Sampling of Emissions Analysis Techniques for Transportation Control Measures*, FHWA, at: <http://www.fhwa.dot.gov/environment/tcm.htm>, March, 2001.

*Analysis of Indirect Source Trip Activity at Regional Shopping Centers*, California Air Resources Board, November, 1993.

*Cost Effectiveness of TCMs by CMAQ Category*, North Carolina State University, Center for Transportation and the Environment, Raleigh, North Carolina, March, 1997.

*Development of an Improved Framework for the Analysis of Air Quality and Other Benefits and Costs of Transportation Control Measures*, (Phase I Findings: Interim Reports), National Cooperative Highway Research Program, Research Results Digest, Mar.1998, Number 223.

*EPA's Transportation Air Quality Center World Wide Website* at: [www.epa.gov/oms/traq](http://www.epa.gov/oms/traq) and then

click on “Transportation Control Measures”.

*Guidance on Incorporating Voluntary Mobile Source Emissions Reduction Programs in State Implementation Plans*, U.S. EPA, October 23, 1997.

*Guidance on the Use of Market Mechanisms to Reduce Transportation Emissions*, U.S. EPA, U.S. DOT, May, 1998.

*Methodologies for Estimating Emissions and Travel Activity Effects of TCMs*, EPA, July, 1994, EPA-420-p-94-002.

*Methodologies for Quantifying the Emissions Reductions of TCMs*, Sierra Research, Inc., October, 1991.

*Timely Implementation of TCMs*, Memorandum from FHWA/FTA, February 20, 1998.

*Transportation Control Measures for the Air Quality Plan, San Diego Association of Governments*, March, 1992.

*Transportation Control Measures: State Implementation Plan Guidance*, EPA System Applications, Inc., September, 1990.

*The Use and Evaluation of Transportation Control Measures*, Research Report 1279-6, Texas Transportation Institute, TTI:0-1279, September, 1994.

## QUESTIONS AND ANSWERS

*(From EPA’s February 15, 1994 Memoranda on Transportation Conformity Q & As)*

**Must conformity determinations demonstrate timely implementation of TCMs which are included in a submitted SIP, but are not included in the existing SIP approved by EPA?**

Conformity determinations must demonstrate timely implementation of only those TCMs which are included in a SIP which has been approved by EPA. However, the transportation community should consider whether it will be necessary to begin implementation of TCMs in a submitted SIP before the SIP is approved, in order to meet the implementation deadline in the SIP once the SIP is approved. For example, TCMs which are relied on for 15% reductions in volatile organic compounds (VOC) emissions (for moderate and above ozone areas) or for attainment demonstrations will have to be programmed and implemented in the very near term. Considering the approaching attainment deadlines for many areas, it would not be prudent to defer such measures until the SIP is approved by EPA.

**Is street sweeping for PM-10 control a TCM for which timely implementation must be demonstrated, if it is included in an approved SIP?**

Yes. The purchase and operation of street sweeping equipment is eligible for CMAQ funding, and EPA and DOT believe that timely implementation of the street sweeping measures included in an approved SIP must be demonstrated for the purposes of conformity. SIPs may vary in whether they commit to specific purchases of street sweeping equipment or commit to certain operation (e.g., frequency of operation) of street sweeping equipment, or both.