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Legal Research Digests are issued to provide early awareness and encourage application of research results emanating from NCHRP Project 20-6, "Legal Problems Arising Out of Highway Programs." These Digests contain supplements and new papers that are periodically compiled as addenda to the treatise, *Selected Studies in Highway Law*, published by the Transportation Research Board.

Areas of Interest: I Planning, Administration, Environment

Federal Air Quality Laws Governing State and Regional Transportation Planning

A report prepared under NCHRP Project 20-6, "Legal Problems Arising Out of Highway Programs," for which the Transportation Research Board is the agency conducting the research. The report was prepared by Arnold W. Reitze, Jr. James B. McDaniel, TRB Counsel for Legal Research, was the principal investigator and content editor.

THE PROBLEM AND ITS SOLUTION

State highway departments and transportation agencies have a continuing need to keep abreast of operating practices and legal elements of specific problems in highway law. This report is a new paper, which continues NCHRP's policy of keeping departments up-to-date on laws that will affect their operations.

This paper will be published in a future addendum to *Selected Studies in Highway Law* (SSHL). Volumes 1 and 2 deal primarily with the law of eminent domain and the planning and regulation of land use. Volume 3 covers government contracts. Volume 4 covers environmental and tort law, inter-governmental relations, and motor carrier law. An expandable format permits the incorporation of both new topics as well as supplements to published topics. Updates to the bound volumes are issued by addenda. The 5th Addendum was published in November 1991. Addenda are published on an average of every three years. Between addenda, legal research digests are issued to report completed research. Presently the text of SSHL totals over 4,000 pages comprising 75 papers.

Copies of SSHL have been sent, without charge, to NCHRP sponsors, certain other agencies, and selected university and state law libraries. The officials receiving complimentary copies in each state

are the Attorney General and the Chief Counsel and Right-of-Way Director of the highway agency. Beyond this initial distribution, the 4-volume set is for sale through the Transportation Research Board (\$185.00).

APPLICATIONS

State and regional transportation planning has been affected by requirements imposed by the Clean Air Act (CAA) particularly the 1990 Amendments to that Act. These requirements have been expanded by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), especially provisions pertaining to metropolitan and statewide planning organizations.

The author provides an overview of legal requirements, identifying key provisions of the CAA and ISTEA that now govern state and regional transportation planning and their interrelationship. The reader should gain an understanding of the federal statutory framework and the regulatory requirements applicable to both state and regional transportation planning. This report should be useful to state transportation directors, attorneys, planners, environmental specialists, public information specialists, policy staff, and right-of-way-officials.

An additional study is under way that will track evolving litigation pertaining to CAA and transportation planning.

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Federal Air Quality Laws Governing State and Regional Transportation Planning

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I. INTRODUCTION

In 1970 transportation sources accounted for 42 percent (by weight) of the air pollution in the United States.¹ Almost two-thirds of the carbon monoxide (CO) and more than half the hydrocarbons came from internal combustion engines.² Transportation also was responsible for 39 percent of the nitrogen oxides.³ Congress responded by passing the Clean Air Act (CAA) of 1970.

From 1983 to 1992, CO emissions decreased 25 percent, nitrogen dioxide emissions increased 5 percent, and volatile organic compound (VOC) emissions decreased 11 percent.⁴ But in 1992 transportation sources accounted for 80 percent of the nation's CO emissions,⁵ 45 percent of the nitrogen oxide emissions,⁶ and 36.2 percent of the VOC emissions, which contribute to the ozone.⁷ Thus, CAA has not led to the reduction of mobile source air pollution that Congress considers necessary to ensure healthy air in urban areas.

A major reason for this is that transportation use has increased so much that it minimizes the improvements in the control of air pollution emissions. Although modern automobiles produce less air pollution than those manufactured in the 1970s, more vehicles are being driven more miles today than 20 years ago. From 1970 to 1991 the U.S. automobile fleet increased from 80.4 million to 123.3 million vehicles,⁸ and vehicle miles traveled increased from 916.7 billion miles to 1,515.4 billion miles.⁹ These factors have helped nullify the effectiveness of the CAA's mobile source program as Americans tried to have both clean air and increased use of motor-vehicle-dominated transportation. Congress responded in 1990 and 1991 with new air pollution and transportation legislation aimed at improving air quality by focusing on the consumption side of transportation. These additional requirements to both environmental and transportation laws are considered by many to be costly and intrusive.

In the 1990 CAA amendments Congress expanded on the requirements that transportation plans conform to CAA provisions applicable to nonattainment areas. The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) added to law programs aimed at environmental protection. The new requirements under CAA and ISTEA, like the National Environmental Policy Act (NEPA) of the 1990s, provide a mechanism to legally attack most large-scale projects that have a transportation component or that result in increased traffic. Conformity can be expected to be the battle cry of a new wave of litigators.

II. THE CLEAN AIR ACT AND THE REQUIREMENT FOR STATE IMPLEMENTATION PLANS

A. Introduction

The basic legislation used to control air pollution was enacted as the 1970 CAA amendments.¹⁰ That statute contained three subchapters. Subchapter I provided

a program to clean up the nation's air through controls on stationary sources and through controls on in-use motor vehicles. This program was administered primarily by the states, but was subject to overall federal control by the U.S. Environmental Protection Agency (EPA).

Subchapter II provided a program to control emissions from mobile sources. It was operated primarily by EPA and focused on new motor-vehicle emissions and fuels. It aimed to reduce air pollution emissions from new light-duty vehicles by 90 percent from a 1970 model year baseline.¹¹ This program has been relatively successful, although the 90 percent reduction goal has yet to be met.

Subchapter III contained the general provisions to administer CAA.

In the 1977 CAA amendments,¹² the Subchapter I program imposed additional requirements on areas that met the national ambient air quality standards (NAAQS) and on those areas that failed to meet NAAQS. The clean areas were called "prevention of significant deterioration" areas; the dirty areas were called nonattainment areas. The nonattainment areas were the focus of most transportation-related air pollution controls.

The 1990 CAA amendments¹³ have added three new subchapters. Subchapter IV provides an extensive program to reduce emissions (primarily sulfur dioxide and nitrogen oxides) from electric power plants. Subchapter V provides an operating permit program to control air emissions from stationary sources. This program is copied from the permit program used since 1972 under the Clean Water Act.¹⁴ Subchapter VI provides a program to regulate ozone-depleting chemicals to reduce the loss of stratospheric ozone. Because none of the new subchapters created by the 1990 CAA amendments has more than a minuscule effect on transportation controls, the effort to control air pollution from transportation-related sources continues along the path established in the 1970 CAA. However, extensive amendments to Subchapter I in 1977 and 1990 have produced a complex body of law aimed at controlling transportation-related air pollution. Because CAA aims to create an acceptably clean atmosphere, the emission controls placed on new motor vehicles and the controls on fuels imposed by Subchapter II become an important determinant of Subchapter I compliance. If sources that are supposed to be regulated under Subchapter II are not effectively controlled, then the requirements under Subchapter I must be made more stringent to bring atmospheric conditions within legal limits. Both subchapters are utilized to develop air pollution controls for transportation sources.

In addition, the 1990 CAA amendments blur the responsibilities of EPA and the states concerning Subchapter I and II requirements. The state's role in the control of emissions from new motor vehicles and from fuels has been expanded, and EPA's role in the control of air pollution from stationary and transportation sources has also been expanded. Changes in transportation laws, particularly the 1991 ISTEA,¹⁵ have also aimed to integrate transportation planning with air quality planning. Thus, the direction of air quality law requires cooperative integrated planning by federal agencies and state, regional, and local governments.

B. Requiring a State Implementation Plan—The Evolution of the Clean Air Act

The Air Quality Act of 1967¹⁶ established a philosophy of air pollution based on an ambient air quality control program. States were to create air quality control regions, adopt air quality standards, and then develop an implementation plan to achieve the air quality goals. The federal government did not set the air quality standards, nor did it have much control over the development of the implementation plan.

The 1970 CAA amendments¹⁷ began to shape the CAA into its current form. Air quality control regions continued as the basic jurisdictions for air pollution control.¹⁸ Primary and secondary air quality standards were now set by EPA, not the states.¹⁹ The new law provided a comprehensive Section 110 requiring each state to develop a state implementation plan (SIP). The SIP was to provide for the expeditious attainment of air quality standards, contain a program for enforcing emissions limitations, prohibit emissions from stationary sources that would prevent attainment of air quality standards, and otherwise include the elements set forth in Section 110(a)(2)(A)-(H). The SIP had to be submitted to EPA for approval. If the SIP met the statutory requirements, the EPA administrator was to approve it. If a state failed to submit a SIP, submitted an inadequate SIP, or failed to revise a plan when required to do so, the administrator was required to promulgate a federal implementation plan.

The original attainment target date for all criteria pollutants primary standards was May 31, 1975, with a few extensions to mid-1977. The secondary standards were to be attained within a "reasonable time," which most SIPs designated to be the same time as the primary standard attainment date. As the deadline for compliance arrived, many air quality control regions failed to meet the NAAQS. Congress responded in 1977 by amending the CAA and imposing new requirements on clean areas that met the NAAQS in a new Subchapter I, Part C. The clean areas were subject to a statutory "prevention of significant deterioration" program to protect existing high-quality air based on a preexisting regulatory program. Areas that did not meet the NAAQS were subject to a nonattainment program that extended the time to meet the primary standards, but imposed more stringent controls.²⁰

EPA's criteria for SIP approval are primarily in 40 C.F.R. Part 51. These regulations implement the statutory requirements found in Section 110.²¹ Once EPA approves a SIP, it codifies its decision in 40 C.F.R. Part 52, and the SIP becomes enforceable as federal and state law.²² EPA can enforce the SIP, even if revisions have been proposed by the state and even if EPA unreasonably delays reviewing the revisions.²³

A SIP is developed for each air quality control region in a state.²⁴ A state frequently allows local governments to participate in setting the SIP requirements, or a state may allow local governments to impose more stringent emission controls.²⁵ For CO or ozone nonattainment regions, metropolitan planning organizations (MPOs) designated to conduct the continuing, cooperative, and comprehensive transportation planning process under 23 U.S.C. Section 134 are expected to play a significant role in preparing the SIP.²⁶

When a state develops a SIP, it may adopt programs that are economically or technologically unfeasible. The CAA gives EPA no authority to question the wisdom of a state's choice.²⁷ Sources that are adversely affected may be able to pursue remedies in the state administrative or judicial system.²⁸ Other challenges to the SIP may be made in the U.S. Court of Appeals for the appropriate circuit within 60 days of promulgation or approval (with limited exceptions).²⁹ However, the scope of review is limited, and great deference is given to EPA.³⁰ Because a state is allowed to select economically or technologically unfeasible measures (as long as they meet air quality goals), appeals to federal courts are not likely to succeed if they are based on lack of feasibility of the selected control measures. Federal court review is concerned with the SIP's meeting the criteria of Section 110(a)(2). However, a state may go beyond Section 110 and submit a plan that is more stringent than federal law requires.

If a provision of the SIP is violated, the EPA administrator may enforce the SIP. Claims of economic or technological unfeasibility are relevant only to fashioning an appropriate compliance order under Section 113(a)(4) and as a defense in criminal enforcement actions. The SIP generally cannot be attacked as part of a defense to an enforcement action.³¹ Congress intended existing sources of pollutants either to meet the SIP requirements or close down.³² Once a SIP is approved, citizens' suits can be used to force states to meet commitments to implement air pollution controls provided in the SIP.³³ The 1990 CAA amendments added requirements for the SIP in Section 110(a)(2)(A)-(M).

Prior to 1990, EPA either approved, conditionally approved, or disapproved SIPs.³⁴ EPA could also partially approve revisions based on inferred authority in Section 110(a)(3)(A).³⁵ The new law in Section 110(k)(3) limits the use of partial disapproval and restricts the use of conditional approval to situations where approval can be obtained within 1 year.³⁶ EPA is also given expanded authority to call for plan revisions in Section 110(k)(5), provided such revisions do not interfere with applicable requirements concerning attainment.³⁷ EPA also received expanded sanction authority in Section 179 to be used if SIPs are inadequate. The most significant change in 1990 was that specific new control measures applicable to nonattainment areas for ozone, CO, and particulates are to be placed in SIPs, with the severity of the mandatory controls hinging on the degree of noncompliance.

C. Nonattainment

The 1970 CAA required states to meet the health-based NAAQS for regulated criteria pollutants.³⁸ The CAA in 1994 has NAAQS for six criteria pollutants: particulates, sulfur dioxide, nitrogen dioxide, CO, photochemical oxidants measured as ozone, and lead.³⁹ In addition, nonmethane hydrocarbons or VOCs are regulated to control photochemical oxidants (also known as smog or ozone).⁴⁰

The 1970 CAA did not specify the consequences if a state failed to meet the primary standards by the statutory deadline. By 1977 only two of the nation's 105 urban areas with populations greater than 200,000 were not experiencing photochemical oxidant levels above the NAAQS.⁴¹ EPA's pre-1977 position regarding nonattainment was to prohibit the construction or modification of any facility that would interfere with attainment or maintenance of an NAAQS.⁴²

The 1977 CAA amendments modified many of the regulatory requirements found in the prior program. States were required to submit revised SIPs for nonattainment areas. EPA was either to approve such revisions by June 30, 1979, or to impose sanctions. The states had to meet CAA primary NAAQS by December 31, 1982, or by December 31, 1987, for automotive-related pollutants. The latter date required that more stringent SIP provisions be implemented.

A new Section 107(d) required EPA to publish a list of the attainment status of areas within states as of August 7, 1977. On March 3, 1978, EPA first listed the attainment status of the 3,215 U.S. counties. Those in nonattainment status included the following: 607 for oxidants, 421 for particulates, 190 for CO, 101 for sulfur dioxide, and 8 for nitrogen dioxide.⁴³ The list has since been revised several times.⁴⁴

The major provisions of the 1977 act concerning nonattainment areas were as follows:

- Areas were to make "reasonable further progress" each year toward meeting the NAAQS.

• Secondary standards were to be attained by 1982 where "reasonably available control measures" could achieve the standard, otherwise a later date was acceptable.

• New or modified major sources were required to obtain a permit and to meet a "lowest achievable emission rate" that was determined on a case-by-case basis, but was at least as stringent as the new source performance standard.

• Sources could not contribute to violations in other states.

• Existing sources covered by EPA guidelines had to meet emissions requirements based on "reasonably available control technology."⁴⁵

• In ozone and CO nonattainment areas, a transportation control plan was to be part of the SIP revision.

• No major stationary source was to be constructed if its emissions would contribute to air pollution for which the area was in nonattainment status.

In addition, the 1977 CAA amendments added the conformity provision of Section 176 that, as amended in 1990, has become the subject of major concern to transportation planners. (The 1990 version is discussed in detail later in this article.⁴⁶) The 1977 amendments prohibited federal grants for transportation projects, with some exceptions, where transportation control measures (TCMs) were necessary to attain a primary ambient air quality standard and a SIP revision had not been submitted that considered the elements set forth in CAA Section 172. Also, no grant could be made in an area that was not implementing SIP requirements. Finally, no MPO could approve any project, program, or plan that did not conform to the SIP promulgated under CAA Section 110. The assurance of conformity was the affirmative duty of federal agencies.⁴⁷ Each department, agency, or instrumentality of the federal government having authority over any program with air-quality-related transportation consequences was to give priority to portions of SIPs prepared under Section 176 that were aimed at achieving and maintaining national primary standards.⁴⁸ Under a June 1980 EPA and U.S. Department of Transportation (DOT) joint guidance document, a transportation project conformed if it was a TCM that was included in the SIP, if it came from a conforming transportation improvement program (TIP), or if it did not adversely affect the TCMs in the SIP.⁴⁹

If an area would not meet ozone or CO primary standards by the end of 1982, despite adopting reasonably available control technology measures, an extension until 1987 was allowed. To obtain such an extension, the SIP was to be revised by July 1, 1982. The following were among the requirements:

- an inspection and maintenance program for existing in-use motor vehicles
- implementation of each TCM listed in the CAA, unless such measures were not justified
- urban areas were to use all available funds to expand or improve public transit

As the 1987 deadline approached, most areas that were nonattainment in 1977 had still not attained all the national standards.⁵⁰ In late 1987, EPA was given a temporary reprieve by the fiscal year 1988 continuing resolution proposed by Sen. George Mitchell (D-ME) and Rep. Silvio Conte (R-MA). The Mitchell-Conte amendment prohibited EPA from imposing the otherwise mandatory sanctions prior to August 31, 1988. It was expected that new legislation would be enacted to deal with this issue, but Congress ended 1988 without enacting such legislation. Meanwhile, in November 1988 a federal district court, in *NRDC v. New York State Department of Environmental Conservation*,⁵¹ held that EPA had a manda-

tory duty to require SIP revisions. EPA had said that calls for revised SIPs would be issued by the fall of 1988, but it did not meet this goal.⁵²

Environmental groups litigated to force EPA to implement the CAA.⁵³ The courts ordered EPA to promulgate federal implementation plans where states had failed to act.⁵⁴ These cases were not necessarily made moot when the 1990 amendments created new requirements.⁵⁵

In 1990, nearly 100 areas exceeded the ozone standard, more than 40 areas exceeded the CO standard, and more than 50 areas exceeded the particulates standard. Subchapter I of the 1990 CAA amendments addressed this problem with revised requirements for nonattainment areas and specific additional requirements for ozone, CO, and particulate nonattainment areas.⁵⁶

The 1990 amendments require states to submit revised SIPs after reclassifying areas under CAA Section 107, based on the type and degree of air pollution.⁵⁷ New measures to achieve primary health-based standards within 3 to 20 years, depending on the severity of pollution and the criteria pollutant involved, must be incorporated into the SIPs.⁵⁸ The revised SIPs must impose a construction permit program on new major sources and major modifications of existing sources.⁵⁹ Major modifications in nonattainment areas must obtain offsetting reductions in emissions from other sources of similar pollutants in order to obtain a construction permit.⁶⁰ Existing, modified, and new sources may each be required to obtain an operating permit.⁶¹

A question arises as to whether portions of a SIP, such as TCMs, required to demonstrate reasonable further progress⁶² remain enforceable during the period when the 1990 requirements, including the SIP revision requirements, are being implemented. Congress did not address this issue, although the general rule has been that once EPA approves a SIP, the state must comply until a new revised SIP is formally approved and in place. The 1990 amendments also support this position in Section 110(n), which makes it clear Congress intended to hold agencies to their existing SIP obligations pending approval of new SIPs. This position has been extended by judicial interpretation to mean that reasonable further progress commitments, including TCMs, remain in force until a new SIP is approved, regardless of whether the statutory deadline for compliance has passed.⁶³

The 1990 amendments also rewrote the planning procedures of Section 174. New planning procedures were required to be developed. The SIP revisions are to be prepared by an organization that includes elected officials of local governments in the affected area and representatives of the state air quality agency, the state transportation agency, the MPO, and any other organization with air pollution responsibilities.

The 1990 CAA amendments categorize ozone nonattainment areas based on their degree of pollution. Ozone nonattainment areas are designated as marginal, moderate, serious, severe 1 and severe 2,⁶⁴ and extreme.⁶⁵ Carbon monoxide nonattainment areas are designated as moderate or serious.⁶⁶ Particulate nonattainment areas are considered moderate, though EPA has the power to determine that some of the particulate nonattainment areas cannot practicably attain the standard by the deadline and therefore should be reclassified as serious.⁶⁷ As the classification of nonattainment moves from marginal to extreme, the legal requirements applicable to such areas become more stringent.

D. Transportation Controls in the SIP

The 1970 CAA provided for SIPs to include land-use and transportation controls.⁶⁸ It required that SIPs provide, to the extent necessary and practicable, for

periodic inspection and testing of motor vehicles.⁶⁹ There were also requirements added by the Federal Aid Highway Act of 1970⁷⁰ that highway projects be "consistent" with air quality plans adopted by the states. However, the development of a transportation control plan by a state to control air pollution was unusual, and DOT did not require air quality reviews of regional transportation plans.⁷¹

The 1977 CAA amendments provided that states with areas that did not attain the primary NAAQS for CO or photochemical oxidants by July 1, 1979, had to revise their SIP.⁷² The plan was to be coordinated with the continuing, cooperative, and comprehensive transportation planning process required under Section 134 of Title 23 and the air quality planning process required under CAA Section 110.⁷³ Other agencies of the federal government with programs that would have air-quality-related transportation consequences were required to use their authority consistent with the need to attain the NAAQS.⁷⁴

To assist federal agencies and states, EPA was required to produce information on a variety of TCMs that could reduce automotive air pollution.⁷⁵ This information could be used to meet the required SIP revision involving transportation controls and air quality maintenance plans for areas that were redesignated as attainment areas.⁷⁶ The SIP revision also had to provide, to the extent necessary and practicable, a program for the periodic inspection and maintenance of motor vehicles.⁷⁷

Areas that did not meet the NAAQS for photochemical oxidants (ozone) or CO on July 1, 1979, and that received an extension until December 31, 1987, to meet the standards had to also meet the requirements of Section 172(b). That is, the state had to identify measures necessary to attain NAAQS and include them in its plan, and the plan had to have an inspection and maintenance program.⁷⁸ State air quality agencies, however, had no meaningful control over transportation planning and "consistency" requirements.⁷⁹ One critique of transportation planning alleges that consistency requirements were never implemented.⁸⁰ The 1977 CAA amendments made it more difficult to control some sources of transportation-related air pollution. Indirect source review was barred from being a federal requirement,⁸¹ federal parking regulations were voided,⁸² and SIP provisions involving motor vehicles could be suspended by the states.⁸³ The management of parking by EPA and the required preferential use of bus or carpool lanes were also prohibited.⁸⁴

The 1990 CAA amendments continued the 1977 approach to controlling photochemical oxidants and CO, but were more specific concerning what the states must do and how they must shape their SIP revisions. The list of TCMs in Section 108(f),⁸⁵ for which EPA is to provide information, was updated. Many of the 1977 restrictions on the use of transportation controls, such as restriction on management of parking supply, gas rationing, and regulations for review of proposed parking facilities, were repealed.⁸⁶ The secretary of transportation was given increased responsibility for coordinating transportation planning with air pollution control.⁸⁷ Various TCMs were specifically required in nonattainment areas by a new Section 182.

1. Transportation Control Measures

a. *CAA Section 108(f)*.—A list of 16 TCMs, which is not inclusive, is found in Section 108(f)(1)(A). The list includes public transit improvements, as well as exclusive bus and high-occupancy vehicle roads or lanes.⁸⁸ EPA, after consulting with DOT and receiving public comment, was to issue information on the emis-

sion-reduction potential of TCMs for attaining NAAQS by November 15, 1991. This information was actually made available on May 29, 1992.⁸⁹

EPA was also required to update the 1978 transportation/air quality planning guidelines within 9 months after enactment of the 1990 CAA amendments after consultation with DOT and receiving public comment.⁹⁰ These guidelines are intended to provide a framework for a continuous transportation/air quality planning process and provide guidance on the development and implementation of transportation-related measures, as well as other measures deemed necessary to attain and maintain the NAAQS.⁹¹ DOT and EPA were to submit a report to Congress by January 1, 1993, and every 3 years thereafter.⁹² The report must contain the results of reviews of state and local air-quality-related transportation programs, including the adequacy of funding for transportation projects identified in the SIP. It must also evaluate the extent to which DOT's existing air-quality-related transportation programs and proposed budget will achieve the goals of the CAA. Finally, it must include recommended changes, if any, to existing programs and proposed budgets, as well as to any statutory authority relating to air-quality-related transportation programs that would improve the achievement of CAA goals.⁹³ Each subsequent report must include a description of the actions taken to implement the changes recommended in the preceding report.⁹⁴

2. Selection of Transportation Control Measures

When a state prepares or revises its SIP for ozone nonattainment areas, is it required to adopt all of the control measures listed in CAA Section 108(f),⁹⁵ or may it select the measures it considers appropriate? In *Delaney v. EPA*⁹⁶ the petitioners argued that the Arizona SIP for Maricopa and Pima counties failed to adopt most of the 45 measures recommended by the regional planning organization and also failed to adopt most of the 12 measures recommended in an EPA-sponsored study of the counties. In addition, the SIP failed to adopt most of the control measures required by Section 108(f)(1)(A) of the CAA.⁹⁷ In fact, the SIP adopted only 3 control measures. EPA contended it properly approved the Maricopa and Pima plans with just 3 control measures because additional control measures "could not be demonstrated to further accelerate the projected attainment date."

The court held that EPA had:

arbitrarily shifted from Arizona the burden of demonstrating that control measures would not accelerate the projected attainment date. An EPA guidance document explicitly provides that each of the eighteen measures listed in 42 U.S.C. § 7408 is presumed reasonably available; a state can reject one of these measures only by showing that the measure either would not advance attainment, would cause substantial widespread and long-term adverse impact, or would take too long to implement.⁹⁸

The court found that neither the Maricopa plan nor the Pima plan contained serious commitments to the measures listed in CAA Section 108(f), including: "1) limiting portions of roads to common carriers; 2) improving transit systems with major changes in existing facilities; 3) controlling on-street parking; 4) establishing auto-free zones; 5) instituting road user fees that discourage single occupant automobile trips; or 6) retrofitting older vehicles with emission control devices."⁹⁹ Yet Arizona had not demonstrated that any of the control measures listed in the CAA or identified by the Maricopa Association of Governments was impracticable or unreasonable.

Furthermore, a nonattainment area that qualified under the 1977 CAA amendments for deadline extension to 1987 was required to implement not only all reasonably available control measures, but also any additional measures necessary to ensure timely attainment.¹⁰⁰ "If such an area failed to attain the relevant ambient air quality standard by 1987, the EPA required implementation of 'all possible measures' and more extensive evidence to justify failure to adopt any of the measures listed in section 7408 in order to ensure the most expeditious [attainment] date beyond 1987."¹⁰¹ "The EPA expressly applied these requirements to nonattainment areas that failed to meet the 1982 statutory deadline and did not qualify for deadline extensions to 1987."¹⁰²

Thus, the court concluded that EPA had arbitrarily and capriciously found that the Maricopa and Pima plans provided for sufficient control measures. The court directed EPA to disapprove the plans and to develop federal implementation plans consistent with its opinion within 6 months. The new plans were to utilize all available control measures to attain the CO ambient air quality standard as soon as possible. The new plans were also to contain contingency and conformity plans in accordance with EPA guidelines that were based on the most recent traffic projections currently available.

3. Post Delaney

The 1990 CAA amendments did not include any explicit provision requiring adoption of all reasonably available control measures in a nonattainment area.

a. The Conference Bill.—In reporting the conference bill to the Senate, the CAA conference chairman, Senator Baucus, stated:¹⁰³

The sponsors believe that EPA's initial (1979) guidance for the application of the 1977 Law's requirement to adopt "all reasonably available control measures" in each area was sound. The Ninth Circuit recently reviewed and correctly applied EPA's guidance. The bill (sections 108(f), 172(c)(1)) retains the general planning approach of the 1977 law and ratifies EPA's guidance as recently construed by the Ninth Circuit in the case involving the Arizona State Implementation Plan. *Delaney v. EPA*, 898 F.2d 687 (1990).

The Senate Committee bill, S. 1630, modified the requirements for the adoption of transportation control measures in State Implementation Plans (SIPs). The Committee bill required that identified transportation control measures be incorporated into each implementation plan for severe and extreme ozone, in serious ozone non-attainment areas under certain circumstances, and in serious carbon monoxide non-attainment area unless the state could demonstrate that a measure would not contribute any additional progress toward attainment in the area.

During Senate floor debate, these provisions were modified to require that each listed measure be considered by the state, but the mandatory obligation to incorporate each measure in the absence of a negative determination was removed. The emphasis in the amendment, therefore, was on a state selecting and implementing those measures "necessary to demonstrate attainment with national ambient air quality standards," including, of course, interim reduction requirements. The sponsors' intention in accepting this amendment was to retain current law with regard to the consideration of transportation control measures.

The Committee language in S. 1630 would have eliminated the option of the states to adopt less than all reasonably available control measures even in the circumstances where the states could make the demonstrations allowed by EPA's guidance. In agreeing to the amendment, the sponsors determined that the rigid application of control measures in the Committee bill was too restrictive. The bill (sections 182(c)(5), 182(d)(1) and 182(e)) adopts the final Senate provisions with respect to transportation control measures for ozone SIPs in addition to the general planning requirements for

reasonably available control measures in section 172(c)(1). Taken together, these provisions require the EPA's traditional guidance continues to govern the review of transportation control measures in state plans.

The sponsors believe that if the EPA consistently applies this guidance in the development of SIP revisions required by the bill, significant progress toward the control of mobile source emissions will be achieved. Of course, this bill adds statutory criteria defining "reasonable further progress" in terms of specified emissions reductions. The need for transportation control measures and the appropriateness of various measures should be evaluated with regard to these new interim increments of progress in the bill.

The sponsors intend that EPA expand its list of reasonably available transportation control measures to incorporate all the measures in Section 108(f)(1). In addition, EPA should evaluate and determine whether additional transportation control measures should be added to those identified in the bill.

b. EPA's Position.—In its 1992 General Preamble on SIPs,¹⁰⁴ EPA explained its position on the *Delaney* case as follows:

Section 172(c)(1) Requirement for All Reasonably Available Control Measures (RACM)¹⁰⁵

The Senate managers' explanation of the new transportation control provisions includes a statement endorsing EPA's 1979 guidance on RACM as recently construed by the Court of Appeals for the Ninth Circuit in *Delaney v. EPA*, 898 F.2d 687 (1990), 136 Cong. Rec. S16971 (daily ed. Oct. 27, 1990). In that case, the court held that EPA was bound to apply its then-applicable 1979 RACM guidance by its own terms, which created the presumption that all section 108(f) measures were reasonably available. However, the court did not hold that the statute required such an interpretation of the RACM requirement, nor that EPA could not in the future revise its RACM guidance. The EPA remains free to alter its past guidance consistent with a reasonable interpretation of statutory requirements in light of historical experience implementing TCM's.¹⁰⁶

The legislators who cited the *Delaney v. EPA* decision had lobbied in the Senate Committee bill for a requirement that all section 108(f) measures be implemented in severe ozone nonattainment areas. This position was however abandoned in the final Senate bill. Any statements in the subsequent Senate debates concerning implementation of all section 108(f) measures therefore do not necessarily reflect the views of the Senate as a whole, let alone the entire Congress.¹⁰⁷

Finally, EPA also notes that it believes the court in *Delaney v. EPA* mischaracterized EPA's guidance in one respect. The court stated that in light of the previous presumption that section 108(f) measures were reasonably available, "a state can reject one of these measures only by showing that the measure either would not advance attainment, would cause substantial widespread and long-term adverse impact, or would take too long to implement." *Delaney*, at 692. In the case before the court, EPA had argued that certain measures would have substantial widespread and long-term adverse impact. However, EPA believes that its revised RACM interpretation would provide for the rejection of control measures as not reasonably available for various reasons related to local conditions even where such costs fell short of substantial widespread impact. This is especially true in the absence of a presumption that any given measure is per se reasonably available.¹⁰⁸

Any future debate on this issue most probably will focus on whether Congress, in enacting the 1990 CAA amendments, restricted EPA's authority to change its guidance. Despite the confusion created by the legislative history of the 1990 CAA amendments and EPA's subsequent action regarding *Delaney*, it is safe to say that U.S. circuits and district courts will likely follow current EPA guidance, which eliminates the presumption that all TCMs are reasonably available.

4. Transportation-Related Provisions Applicable to Ozone Nonattainment Areas

Ozone nonattainment areas were classified into five categories, based on their degree of ozone pollution. Marginal areas were required to meet the primary standard attainment date of November 15, 1993,¹⁰⁹ and relatively few requirements had to be met.¹¹⁰

For areas that are moderate or worse, a SIP revision is required that provides for a reduction in VOC emissions of 15 percent by November 15, 1996.¹¹¹ In preparing this plan, the state must decide how much of the required VOC reduction is to come from controls on the various sources of VOCs. Thus, stationary sources, areawide sources (such as gasoline stations and dry cleaners), transportation sources, and individual citizens (house paint restrictions, limits on outdoor cooking, lawn mower restrictions) may be required to reduce emissions. The transportation control plan is a portion of this SIP revision, and its stringency is dependent on the quantity of VOCs emissions that must be eliminated and the proportion of that reduction that must come from the transportation sector.

a. Marginal Areas.—Marginal areas are the areas that exceed the ozone standard of 0.12 parts per million (ppm) by 15 percent or less (0.121 ppm up to 0.138 ppm) and were required to attain the standard by November 15, 1993.¹¹² SIP revisions must be submitted immediately after enactment, providing for more stringent “reasonably available control technology” requirements. Inspection and maintenance programs, if required prior to the 1990 amendments, must meet EPA guidelines or the areas’ existing SIP requirements, whichever is more stringent.¹¹³

b. Moderate Areas.—Moderate areas exceed the standard by 15 percent to 33 percent (0.138 ppm to 0.160 ppm) and are required to attain the standard by November 15, 1996.¹¹⁴ Moderate areas must meet marginal area requirements.¹¹⁵ In addition, moderate areas were to submit SIP revisions by November 15, 1993, that demonstrated “reasonable further progress” and must achieve VOC reductions by November 15, 1996, of at least 15 percent from 1990 baseline emissions (this requirement may be extended to nitrogen oxide emissions at EPA’s discretion).¹¹⁶

Emission reductions from motor vehicle exhaust or evaporative emissions, promulgated by EPA by January 1, 1990, or controls on fuel volatility promulgated by EPA after November 15, 1990, cannot be credited toward the required 15 percent reduction. Measures required to correct SIPs under EPA guidance and measures required to correct inspection and maintenance (I/M) programs cannot be credited toward the 15 percent reduction either.¹¹⁷

An I/M program is required in all moderate or worse ozone nonattainment areas.¹¹⁸ About 110 areas will need such programs, thus, 40 new programs must be developed.¹¹⁹ Gasoline vapor recovery is also required.¹²⁰

EPA was required to issue revised I/M guidance by November 15, 1991, and SIP revisions were due within 2 years of EPA’s publication of I/M guidance to meet the guidance requirements.¹²¹ Revised emission inventories were also to be required within 2 years of November 15, 1990.¹²² Final regulations were not promulgated until November 5, 1992,¹²³ but emissions inventories were due by November 15, 1992. Because of EPA’s failure to meet its statutory deadline, the U.S. Court of Appeals for the District of Columbia Circuit refused to impose sanctions on states that failed to meet the CAA deadlines for submitting SIP revisions covering I/M programs and other mandated revisions.¹²⁴

c. Serious Areas.—Serious areas exceed the standard by 33 percent to 50 percent (0.16 ppm to 0.18 ppm) and are required to attain the standard by November

15, 1999.¹²⁵ Serious areas must meet moderate area requirements.¹²⁶ In addition, these areas were to have revised SIPs to include enhanced I/M programs to reduce emissions of hydrocarbons and nitrogen oxides by November 5, 1992, if the area is an urbanized area with 1980 Bureau of Census populations of 200,000 or more.¹²⁷ Enhanced I/M will require inspections to be performed while the vehicle is undergoing simulated driving conditions or “load” to determine whether emission controls, including nitrogen oxide controls, are performing properly.¹²⁸ Enhanced I/M requires a centralized program unless a state can demonstrate that a decentralized program is equally or more effective.¹²⁹ Proposed I/M regulations were promulgated on July 13, 1992, and final regulations were issued on November 5, 1992.¹³⁰ In addition to the required I/M provisions, any state that has nonattainment areas may adopt the more stringent California standards for new motor vehicles.¹³¹

The areas must submit SIP revisions, by November 15, 1994, that demonstrate VOC reductions that average 3 percent per year averaged over each consecutive 3-year period beginning November 15, 1996.¹³²

A number of new requirements are imposed on motor vehicle fuels. Fuel volatility is subject to new controls.¹³³ Reformulated fuel must be used in summertime in specified nonattainment areas, but other areas may also mandate the use of such fuels to meet their SIP revision requirements.¹³⁴ The areas have to submit SIP revisions, within 42 months of enactment, to ensure the effectiveness of clean-fuel vehicle programs, including measures to make the use of clean alternative fuels economical for clean-fuel vehicle owners.¹³⁵

Beginning November 15, 1996, and at each 3-year period thereafter, states must submit data demonstrating whether vehicle emissions, congestion levels, vehicle miles traveled, and other relevant parameters are consistent with those levels projected in the SIP. Where the monitored levels exceed projected levels, the state has 18 months to submit SIP revisions that include TCMs to reduce emissions to levels consistent with SIP projections. The revisions are to be developed in accordance with guidance issued by EPA.¹³⁶

d. Severe 1 Areas.—Severe 1 areas (also known as severe 15 areas) exceed the standard by 50 percent to 58 percent (0.180 ppm to 0.190 ppm) and are required to attain the standard in 15 years.¹³⁷ Severe 1 areas must meet serious area requirements.¹³⁸ In addition, the areas were required to submit SIP revisions by November 15, 1992, to reduce vehicle emissions and to identify and adopt TCMs to offset growth in emissions from growth in vehicle trips or vehicle miles traveled.¹³⁹

Within 2 years of enactment, SIP revisions that require employers of 100 or more employees to increase the average passengers per vehicle work trip by not less than 25 percent above the average for all work trips in the area are due. The affected employers have to submit compliance plans within 2 years of the SIP revision (within 4 years of enactment), demonstrating compliance not later than 4 years after the revision (within 6 years of enactment).¹⁴⁰

If any severe area fails to attain on time, the state must show it meets required reductions in each 3-year interval after the failure. If the state fails to demonstrate an average 3 percent reduction per year in each consecutive 3-year period, it would be subject to sanctions for failure to make the required demonstration.¹⁴¹

e. Severe 2 Areas.—Severe 2 areas (also known as severe 17 areas) exceed the standard by 58 percent to 133 percent (0.190 ppm to 0.280 ppm) and are required

to attain the standard in 17 years. Provisions are the same as those in severe 1 areas.¹⁴²

f. Extreme Areas.—Extreme areas exceed the standard by more than 133 percent (0.280 ppm and above) and have 20 years to attain the standard.¹⁴³ Extreme areas must meet severe area requirements.¹⁴⁴ In addition, each SIP revision may contain measures to reduce the use of high-polluting vehicles or heavy-duty vehicles during heavy traffic hours.¹⁴⁵ Currently, Los Angeles is the only area classified as extreme.

5. Transportation-Related Provisions Applicable to Carbon Monoxide Nonattainment Areas

*a. Moderate Areas.*¹⁴⁶—Moderate areas exceed the 8-hour CO standard of 9 ppm by not more than 82 percent (9.1 ppm to 16.4 ppm). They are required to attain the standard by December 31, 1995.¹⁴⁷ Emissions inventories are due within 2 years of enactment, with revised inventories due no later than September 30, 1995, and no later than the end of each 3-year period thereafter until attainment.¹⁴⁸

For those areas with design values above 12.7 ppm, SIP revisions (due by November 15, 1992) have to contain vehicle miles traveled forecasts based on EPA's guidance. The SIPs must provide for annual updates of forecasts and annual reports regarding forecast accuracy.¹⁴⁹ The SIPs must include contingency provisions to be undertaken if vehicle miles traveled exceeds the forecast.¹⁵⁰

The areas are required to have I/M programs; those areas with design values above 12.7 ppm are required to have an enhanced I/M program.¹⁵¹ Areas with design values above 9.5 ppm must sell oxygenated fuel in the winter months, with levels of oxygen sufficient to meet the CO standard.¹⁵²

*b. Serious Areas.*¹⁵³—Serious areas exceed the 8-hour CO standard by 83 percent or more (16.5 ppm and higher). They are required to attain the standard by December 31, 2000.¹⁵⁴ Serious areas have to meet the requirements for moderate areas¹⁵⁵ and, by November 15, 1992, must revise their SIPs to provide for the identification and adoption of TCMs to offset any growth in emissions from growth in vehicle miles traveled or growth in vehicle trips.¹⁵⁶

By March 31, 1996, serious CO nonattainment areas must submit data to EPA demonstrating they have achieved CO emission reductions equal to the total specified annual emission reductions required by December 31, 1995.¹⁵⁷ If a state fails to make the submission or achieve the total reductions, the state must submit a SIP revision, within 9 months of notification, to implement an economic incentive and transportation control program. The program may include incentives and requirements to reduce vehicle emissions, including TCMs.¹⁵⁸

6. Control of Interstate Ozone Air Pollution

To control ozone in the Northeast, a super region, called an "ozone transport region," was established by CAA Section 184. It comprises Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the Consolidated Metropolitan Statistical Area, which includes the District of Columbia.

Each state in the region is required to submit a revised SIP that includes the following:

- an enhanced I/M program for metropolitan statistical areas with a population over 100,000

- reasonably available control technology for sources of VOCs covered by EPA control technique guidelines

In addition, EPA is to study controls comparable in effect to refueling controls and implement either those controls or refueling controls within 1 year after the study is completed. Stationary sources under this section that emit 50 tons of VOC per year are considered to be major stationary sources and are subject to the requirements of major stationary sources in moderate nonattainment areas.

CAA Section 184(c) allows the interstate transport commission created under Section 176 to impose additional control measures necessary to bring any area in the region into attainment. This organization is usually called the Ozone Transport Commission. A commission may be established for other regions when the interstate transport of air pollutants causes a violation of an NAAQS in one or more states.

E. Sanctions

1. Sanctions under the 1990 CAA Amendments

EPA may impose sanctions when a state fails to submit a revised SIP or when the revised SIP is unacceptable and cannot be remedied. The 1990 CAA amendments revised the law concerning sanctions and set forth criteria in Section 179(a) to determine when EPA may apply the two types of sanctions specified under Section 179(b). The two major sanctions are highway funding restrictions and increased emissions offset ratios for new and modified sources. The construction ban provisions of Section 110(a)(2)(I) were largely repealed. However, other provisions of the CAA provide for construction bans and other sanctions to prevent increases in air pollution that result from SIP planning or implementation failures.¹⁵⁹

EPA may refuse to issue construction permits for major stationary sources if the approved SIP for meeting nonattainment requirements is not being adequately implemented for the nonattainment area in which the new or modified source is located.¹⁶⁰ CAA Section 113(a)(5) may also be used to issue general construction bans. It authorizes EPA to prohibit the construction or modification of specific major stationary sources and to take other enforcement actions against individual sources if the EPA administrator finds that a state is not complying with any requirement or prohibition of the act concerning construction of new sources or modification of existing sources. A third sanction under Section 179(a) allows the administrator to withhold all or part of the grants that support air pollution planning and control programs that may be awarded under CAA Section 105.¹⁶¹

Section 110(m)¹⁶² gives the administrator discretion to impose sanctions on any portion of the state that he or she determines is reasonable and appropriate. Section 179(a) requires the administrator to impose sanctions 18 months after a finding, if the deficiencies on which the sanctions are based are not corrected. Section 110(m) does not provide a specific time frame for application of Section 110(m) sanctions, but allows EPA to apply sanctions "at any time" after the agency makes a finding. EPA expects that it will impose sanctions earlier than 18 months after a finding only in limited circumstances, such as where a state has indicated an explicit resistance to working to resolve a plan deficiency.¹⁶³ This will be done only after notice and comment rulemaking. The specific sanctions that may be applied under Section 110(m) or must be applied under Section 179(a) are

listed in Section 179(b). Section 110(m) and Section 179 are interrelated, and by discussing the two sections together, the requirements of Section 110(m) may be clarified.¹⁶⁴

Section 179(b) establishes the two types of sanctions that the administrator may impose pursuant to Section 110(m): a highway funding sanction and a two-to-one offset sanction. Under the highway funding sanction provision, the administrator may prohibit the approval of certain projects by the secretary of transportation or the awarding of certain grants under Title 23 of the U.S. Code. Under the emissions offset sanction provision, a ratio of at least two-to-one will be required for emissions reductions from existing sources within the nonattainment area to offset emissions from major new or modified facilities.

Under Section 110(m), Section 179(b) sanctions may be applied when the administrator makes a finding under Section 179(a)(1) through (4), and the agency has followed all procedural requirements (for example, rulemaking requirements, such as notice and comment) for imposing a sanction. The administrator has no authority under Section 110(m), nor any mandatory duty under Section 179(a), to impose sanctions until a finding has been made.

Section 179(a) sets forth the four types of findings that may lead to the imposition of a sanction:

1. That a state has failed to submit a SIP or an element of a SIP for a nonattainment area, or the SIP or SIP element fails to meet the completeness criteria issued pursuant to Section 110(k).
2. That EPA disapproves a SIP submission for a nonattainment area based on its failure to meet one or more plan elements required by the CAA.
3. That the state has not made any other submission, or has not made a complete submission, as required by the amended CAA, or that EPA disapproves such a submission.
4. That a requirement of an approved plan is not being implemented.

When a finding under Section 179(a) has been made,¹⁶⁵ the administrator may, under Section 110(m), apply Section 179(b) highway sanctions and offset sanctions to any area of the state that is determined to be reasonable and appropriate.

On September 24, 1993, EPA announced that it would standardize the sequence of penalties that states would be subject to if they failed to submit an adequate SIP.¹⁶⁶ In its announcement, EPA acknowledged that it retained the discretion to administer the penalties provided by the CAA in any order it chose. However, EPA stated that by providing a standard sequence of penalties for states that do not file adequate SIPs, regulators would save time by having the need for individual rule makings eliminated.

Under this proposed rule, states submitting inadequate SIPs would first be subject to two-to-one emission offsets for new sources after 18 months. States would have 18 months to correct the defective SIP. After that, new sources locating in the state would have to find offsets from other sources equal to twice the emissions they would be releasing. If the SIP was not corrected within 6 months after the implementation of the two-to-one offsets, states would face a cutoff of federal highway funds. Under this proposed rule, the clock for sanctions begins to run after EPA has determined that it will not approve the SIP, the state has failed to submit a SIP, or the state does not implement required air pollution control measures.¹⁶⁷ Until the rule is final and effective, EPA must provide for notice and comment before applying sanctions.

2. Criteria for Exercising Sanctions

Section 110(m) requires the agency to establish criteria that EPA must apply if the agency considers applying sanctions under Section 110(m) on a statewide basis within 24 months of a Section 179(a) finding. These criteria will be used by EPA to determine when a political subdivision, rather than the entire state, is principally responsible for a Section 179(a) deficiency.

The EPA rule of January 11, 1994 sets forth criteria that the EPA administrator must consider when exercising his or her discretionary authority to apply sanctions on a statewide basis pursuant to CAA Section 110(m).¹⁶⁸ EPA uses five criteria to determine when a state has relinquished its primary control over an activity to a political subdivision and the political subdivision has failed to perform that required activity.¹⁶⁹ EPA believes that this delegation is established when a political subdivision:

- has the legal authority to perform the required activity
- has traditionally performed, or has been delegated the responsibility to perform, the required activity
- has received, where appropriate, adequate funding or authority to obtain funding from the state to perform the required activity
- has agreed to perform (and has not revoked that agreement) or is required to accept responsibility for performing the required activity
- has failed to perform the required activity

If one or more political subdivisions each meet all five criteria, EPA will consider those subdivisions principally responsible, therefore, EPA may impose sanctions only on those political subdivisions and on other areas (short of the entire state) for which the agency determines it is reasonable and appropriate.¹⁷⁰ If EPA imposes sanctions statewide, it need not consider the criteria. Consequently, EPA may impose sanctions on any area or political subdivision for which EPA deems reasonable and appropriate, provided that the requirements of Section 110(m) are satisfied. However, if all the criteria have not been met by at least one political subdivision, EPA will use its discretion to determine whether to apply sanctions on a statewide basis.

Once a finding under Section 179(a) has been made, the administrator may, pursuant to Section 110(m), apply Section 179(b) sanctions to any portion of the state. Section 110(m) allows sanctions to be applied on a broader basis than sanctions imposed pursuant to Section 179(a). Although Section 110(m) indicates that sanctions may be applied to any area of the state, Section 179(b)(1) contains a specific geographic limitation: "[t]he Administrator may impose a prohibition, applicable to a nonattainment area" on the approval by the secretary of transportation of certain projects or the awarding of certain grants under Title 23 U.S.C.¹⁷¹

Nothing in the act precludes EPA from applying sanctions pursuant to Section 110(m), without examining the criteria, if the agency elects to impose a sanction on a less-than-statewide basis or where EPA imposes statewide sanctions more than 24 months after a finding. Furthermore, there are no statutory limitations where each political subdivision in a group, whose combined area comprises the entire state, suffers a deficiency.

III. OVERVIEW OF THE TRANSPORTATION PLANNING PROCESS

Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) planning regulations require urban areas with populations greater than

50,000 to have a continuous, cooperative, and comprehensive transportation planning process.¹⁷² This "3C" planning process is used by local and state governments to qualify for federal highway and transit assistance. Much of the planning work is carried out by MPOs.¹⁷³

Each urbanized area must develop a transportation plan and a TIP.¹⁷⁴ To be eligible for federal funds, the plan must be approved by the MPO, and the TIP must be approved by the MPO and the state governor.¹⁷⁵ The transportation plan is a long-range plan describing policies, strategies, and facilities to accommodate current and future travel demands and to make more efficient use of the existing transportation system. It identifies facilities that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions.¹⁷⁶

"The TIP is a more specific program of transportation projects that are consistent with the transportation plan. The TIP includes a priority list of projects and project segments to be carried out within each three-year period after the initial adoption of the TIP."¹⁷⁷ The MPO develops the TIP and updates it at least every 2 years.

"Each State must also prepare and submit annually to DOT a statewide program of projects that the State proposes for Federal assistance. Projects for urbanized areas are expected to be drawn from each area's TIP."¹⁷⁸

For the metropolitan portion of the statewide TIP, FHWA and FTA must find (1) the planning process was carried out by the state and local governments in accordance with Title 23 U.S.C. or the Federal Transit Act, and (2) in nonattainment areas, the metropolitan TIP must conform to the SIP, with priority being given to TCMs in the SIP in accordance with the "conformity" requirements of Section 176 of the CAA. Conformity is discussed in more detail later in this article.¹⁷⁹

Section 176 of the CAA and implementing regulations require transportation planning to conform to the requirements of the CAA.¹⁸⁰ However, the provisions of ISTEA¹⁸¹ must also be met, and it is the combined requirements of both air pollution law and transportation law that shape transportation planning. ISTEA has provisions designed to protect the environment, and they must be incorporated into the planning process in metropolitan areas and states under both Title 23 U.S.C. and the Federal Transit Act.¹⁸² To implement ISTEA, FHWA and FTA have jointly issued planning regulations¹⁸³ to ensure the adequacy of statewide and metropolitan transportation planning and programming and the eligibility of states and metropolitan areas for federal highway and transit funds.¹⁸⁴ The DOT final rule applies to all MPOs serving urbanized areas with a population of at least 50,000 people.¹⁸⁵ This DOT rule provides for the development of transportation plans and TIPs and specifies how federally funded transportation projects are to be selected.

The most obvious overlap between air pollution and transportation planning is the TCMs in the SIP and TIPs aimed at reducing transportation-related pollution.¹⁸⁶ The use of TCMs to reduce pollution has been given a lot of publicity and is sometimes controversial,¹⁸⁷ but such measures may not provide much air quality benefit. For example, in Washington, D.C., an ozone nonattainment air quality control region with little industrial but significant mobile source pollution, TCMs make only a small contribution to the emissions reduction required by the CAA. To meet the reasonable further progress requirements of the 1990 CAA amendments,¹⁸⁸ the Metropolitan Washington air quality control region needs to achieve an additional 137 tons per day of VOC reductions. High-tech inspection

and maintenance, stage II vapor recovery nozzles on gasoline pumps, and three other minor federally mandated measures are projected to reduce VOCs by 70.3 tons—more than half the required reduction. Reformulated gasoline accounts for an additional 24.0 tons of VOC reductions. TCMs in fiscal years 1994–1999 TIPs and other TCMs created since 1990 account for reductions of 2.2 tons, or less than 2 percent of the required VOC reduction.¹⁸⁹

Denver, which may be redesignated a serious CO nonattainment area, is seeking to reduce CO emissions by 45 percent by the end of 1995.¹⁹⁰ TCMs that could be used include repairs to 40 percent of the pre-1982 cars to obtain a 2 percent to 3 percent CO reduction and removal of 30,000 to 50,000 of the worst pre-1982 automobiles to obtain a 3 percent to 5 percent CO reduction.

Although available data fail to demonstrate that TCMs will contribute significantly to air quality improvement, they still must be part of transportation planning and TIPs because the plans need to conform to SIP emissions budgets.

Overall, however, the transportation planning process, imposed by the CAA amendments and ISTEA, is designed to ensure that federally funded transportation projects conform to SIPs in that they contribute to improving air quality for the area they serve. This is a continuing and dynamic process.

A. Metropolitan Transportation Planning—Developing the Regional Transportation Plan and the Transportation Improvement Program

The first federal legislation that required transportation planning in urbanized areas as a prerequisite for receiving federal-aid highway funds was the Federal-Aid Highway Act of 1962.¹⁹¹ This act resulted in either new agencies being created or existing organizations being designated to carry out the necessary planning at the local level.¹⁹² In the 1968 Intergovernmental Cooperation Act,¹⁹³ governors were required to establish a process to review and comment on the compatibility of proposed federal-aid projects on overall transportation plans.¹⁹⁴ As a result of the 1973 Highway Act, an MPO¹⁹⁵ had to be designated for each urbanized area. In many cases, local transportation policy boards that had been created in response to the 1962 Federal-Aid Highway Act were designated as MPOs.¹⁹⁶

The principal statute controlling metropolitan planning is 23 U.S.C. Section 134, as amended by ISTEA.¹⁹⁷ In cooperation with the state, MPOs are to develop transportation plans and programs for metropolitan areas of the state.¹⁹⁸ "The process for developing such plans and programs shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems."¹⁹⁹ Each metropolitan area is to cover the existing urbanized area and the area expected to become urbanized in the 20-year forecast period and may include the metropolitan statistical area or the consolidated metropolitan statistical area.²⁰⁰ Nonattainment and maintenance areas for transportation-related pollutants will be included in their entirety in the metropolitan area unless the MPO and the governor decide to exclude a portion.²⁰¹ If there are more than one MPO in a metropolitan area, they shall consult and work with the state to coordinate plans and programs.²⁰²

In developing transportation plans, MPOs are to consider the social, economic, energy, and environmental effects of transportation decisions, as well as land-use and energy-use effects.²⁰³ Each MPO is also to develop a long-range transportation plan that is consistent with CAA requirements.²⁰⁴ The public is to be allowed considerable freedom to comment on the long-term plan.²⁰⁵

MPOs, in cooperation with the state and affected transit operators, are to develop a TIP.²⁰⁶ This is to be accomplished with the participation of the affected citizens and the state governmental organizations. The program is to be updated every 2 years.²⁰⁷ Urbanized areas, with a population of over 200,000, are to be designated transportation management areas.²⁰⁸ These management areas are to develop transportation plans and programs based on continuing and comprehensive planning by the MPO in cooperation with the state and transit operators.²⁰⁹ A congestion-management system to plan travel-demand reductions and operational management strategies is to be included in the planning process.²¹⁰ For transportation management areas classified as nonattainment for ozone or CO, federal funds may not be used for any highway project that will result in a significant increase in carrying capacity for single-occupant vehicles, unless the project is part of an approved congestion-management system.²¹¹

ISTEA strengthened the metropolitan transportation planning process and emphasized measures to reduce congestion and make more efficient use of existing transportation systems.²¹² ISTEA also emphasized consideration of environmental effects and established a new congestion mitigation and air quality improvement program to provide funding for projects that improve air quality.²¹³ Eighty percent of the MPOs have moderate or worse congestion in their areas. In metropolitan areas that have a population over 1 million, 55 percent of the MPOs have serious or severe congestion.²¹⁴ ISTEA requires MPOs in urbanized areas with populations of more than 200,000 to develop a congestion management plan for the metropolitan planning area as part of the metropolitan transportation planning process.²¹⁵

Sixty percent of the MPOs are located in a regional agency, such as a council of governments, an association, or a separate agency. About 23 percent are located in a county or city planning department.²¹⁶ The 1977 CAA amendments required SIP revisions for nonattainment areas and encouraged MPOs to develop TCMs. MPOs became responsible for planning travel demand management for clean air purposes. However, MPOs were never required to plan demand management measures to achieve clean air.²¹⁷ In 1981, DOT issued regulations requiring transportation plans, programs, and projects to conform to SIPs in areas that failed to meet the NAAQS. However, some nonattainment areas, including Chicago, Denver, Los Angeles, and Phoenix, failed to revise their SIPs.²¹⁸ Many regions failed to update the transportation portions of their SIPs. EPA, however, usually imposed funding sanctions only on states that failed to develop I/M programs. Even if sanctions were imposed, states would often use funding from state sources to build controversial projects.²¹⁹

The 1990 CAA amendments linked transportation funding to the adoption of regional transportation plans that conformed to specific targets in the SIP. Both planning and implementation failures allow sanctions to be imposed on transportation programs. However, sanctions cannot be used to block projects that benefit air quality.²²⁰ Thus, the 1990 CAA amendments increase the responsibility of MPOs and strengthen the relationship between transportation planning and air quality planning.

A Government Accounting Office (GAO) survey found that 96 percent of all MPOs included transportation systems management activities or programs in their short-term plans, even though they are no longer required to do so.²²¹ Especially in more populated areas, transportation systems management planning has remained the same or has increased since 1983.²²² Half of the MPOs in areas with a population of 1 million or more have a transportation systems management

provision in their short-range plans. Nearly half the MPOs emphasize a supply-management activity,²²³ but demand-management activities play only a minor role in 74 percent of the MPOs.²²⁴ When MPOs have demand-management activities, they are likely to emphasize traditional activities, such as ridesharing and transit incentives rather than trip reduction actions or automobile-use restrictions.²²⁵ Only 2.5 percent of the areas with populations over 1 million use congestion pricing techniques,²²⁶ and only 7.5 percent have auto-use restrictions.²²⁷ Higher congestion levels do not necessarily lead to greater planning efforts to control demand.²²⁸ In areas with populations over 500,000, 61 percent of the MPOs considered the lack of effective information and 54 percent considered construction funding emphasis as important reasons for low usage of demand-management activities.²²⁹ Except for ridesharing and park-and-ride lots, even the most congested areas did not place even moderate emphasis on demand-management activities.²³⁰ However, implementing demand-management activities is less common than planning such activities, except for park-and-ride lots.²³¹

According to the GAO study, 80 percent of the areas with populations of 1 million or more and 75 percent of the areas with populations of 500,000 to 999,999 failed to meet the NAAQS for ozone.²³² In 70 percent of the areas, air quality concerns were not integrated into local transportation planning in any significant way.²³³ Only 15 percent of the MPOs in areas having ozone levels at the serious or worse levels emphasized air quality concerns in local transportation planning efforts.²³⁴ Even in the largest areas, only 31 percent of the MPOs routinely considered whether or not proposed transportation systems management efforts would improve air quality.²³⁵

Moreover, a different government agency often has primary responsibility for each key stage of the joint planning and implementation process. State air quality control commissions are often the lead agency for forecasting automobile emissions, state transportation departments usually have the lead in implementing demand management and integrating air quality and transportation planning. Often, however, no single agency has the responsibility for planning demand management or related air quality measures.²³⁶

Effective transportation systems management planning and implementation requires MPOs to coordinate the efforts of several organizations and agencies. In the San Francisco area, for example, 14 public transit operators and 97 private transit operators are part of a regional demand-management project.²³⁷ However, an MPO may have jurisdiction over only a portion of an air quality control region. For example, the air quality control region in Tampa, Florida, includes three MPOs, three county air quality agencies, a regional council of governments, a state transportation agency, and a state air quality agency.²³⁸ Local air quality agencies may have little control over transportation projects, even though such projects may increase air pollution. Even if transportation projects decrease regional air pollution, they may increase local or site-specific air pollution. This may result in local elected officials opposing such projects²³⁹ and in a lack of consensus as to which agency has the lead in monitoring and evaluating transportation systems management efforts.²⁴⁰ Thus, air quality planning and transportation planning has not been integrated in many areas, even those areas with serious or severe ozone problems.²⁴¹ Most MPOs consider themselves responsible for integrating air quality concerns into transportation planning, but it is usually less clear which agency has the lead role for planning demand-management or related activities.²⁴² Implementation of such measures is even more difficult to

manage.²⁴³ It is therefore not surprising that only 26 percent of the MPOs indicate their short-term plans include demand-management activities.²⁴⁴

B. Statewide Transportation Planning—Developing the Statewide Transportation Plan and State Transportation Implementation Plans

Prior to the 1991 ISTEA legislation, there was no statutory authority for FHWA or FTA to require statewide transportation planning. Only metropolitan areas were subject to planning requirements. ISTEA and the Department of Transportation and Related Agencies Appropriations Act (DOTA)²⁴⁵ amended Section 135 of 23 U.S.C. and Section 8 of the Federal Transit Act,²⁴⁶ respectively, to require a coordinated transportation planning process in each state. The DOT final rule, published October 28, 1993,²⁴⁷ follows the statutory approach, but adds material on coordination that is aimed at enhancing the effectiveness of the statewide transportation planning process. It also adds requirements that stress the importance of public involvement throughout the entire statewide transportation planning process.²⁴⁸

Statewide planning involves working with MPOs that are already engaged in transportation planning in metropolitan areas. Although a specific organizational arrangement for carrying out the statewide transportation planning requirements was not included in the DOT final rule, the requirements for the statewide transportation process are set forth in 23 U.S.C. Section 135 and in 23 C.F.R. Section 450.206.

Statewide transportation planning is to be coordinated with the actions of Indian tribal governments, federal agencies, local governments, MPOs, large-scale public and private transportation providers, and multistate businesses.²⁴⁹ The minimum requirements for coordination are not specified; rather FHWA and FTA expect "the states to provide maximum practicable consideration to the 11 areas identified in the proposed regulation and to provide a reasonable explanation of the extent of such coordination or lack thereof."²⁵⁰

A transportation plan is to be developed for the entire state. The portion of the plan covering a metropolitan planning area is to be developed in cooperation with the MPOs and is to be consistent with regional plans.²⁵¹ The state plan is to be intermodal, covering rail, waterway, and aviation facilities, not merely roads and transit, and it must address a time period of at least 20 years.²⁵²

The statewide planning process is to include development of a statewide transportation improvement program (STIP). The STIP is to include a list of transportation projects to be carried out in the next 3 years that are consistent with the plan and for which funds can reasonably be expected to be available.²⁵³ The metropolitan TIP, when approved by the MPO and the governor, is automatically included in the STIP.²⁵⁴ In nonattainment and maintenance areas, there is an additional step: conformity findings are required to be made by FHWA and FTA before projects are included in a STIP.²⁵⁵

STIPs must include projects proposed for funding under Title 23 U.S.C. or under various provisions of the Federal Transit Act.²⁵⁶ They must also include all projects requiring FHWA or FTA approval and should include, for informational purposes, all transportation projects proposed to be funded with federal funds other than Title 23 U.S.C. or Federal Transit Act funds. Regionally significant transportation projects must also be included, regardless of the source of funding.²⁵⁷ The regulations include details on what should be included in the STIP.²⁵⁸ At least every 2 years each state must submit its proposed STIP to both FHWA and FTA for approval. Amendments, if necessary, also require approval. The

state must certify that the transportation planning process was carried out in accordance with applicable federal law, including, for nonattainment and maintenance areas, the conformity requirements of CAA Sections 174 and 176(c) and (d).²⁵⁹ Projects that are not included in a federally approved STIP, with some limited exceptions, are not eligible for Title 23 U.S.C. or Federal Transit Act funds.²⁶⁰

C. Public Participation

Public-participation requirements are designed to produce informed and involved citizens that have access to public records and the decisionmaking process.²⁶¹ There are, however, separate regulations for public involvement in statewide transportation planning and in metropolitan transportation planning. The basic statewide public-involvement provision is found in 23 C.F.R. Section 450.212, which provides for a public-involvement process that is proactive, with opportunities for early and continued involvement. The process is designed to provide timely information about transportation issues, with reasonable public access to the technical information used to develop the transportation plan and the STIP. There must be adequate public notice and time for public review and comment at key decision points. There must be explicit consideration of and response to public input and consideration of the needs of those traditionally underserved by existing transportation systems. The aim of the process is to provide full and open access for all public involvement. The metropolitan planning public-involvement provisions are found in 23 C.F.R. Sections 450.316(b)(1), 450.322(c), and 450.324(c). Metropolitan planning may meet the statewide public-involvement requirements by agreement of the state and the MPO.²⁶²

Statewide transportation plans and major revisions shall be published with reasonable notification of their availability and a reasonable opportunity for public comment. At a minimum, the state shall allow 45 days for public review and written comment before any changes in the procedures for public involvement. The statewide transportation plan must provide for public involvement as required by 23 C.F.R. Section 450.212.²⁶³ The metropolitan transportation planning process also is required to include a proactive public-involvement process.²⁶⁴

IV. CONFORMITY

A. The Conformity Provisions of CAA Section 176

The CAA defines conformity as conforming to a plan's purpose of eliminating and reducing the severity and number of violations of the NAAQS²⁶⁵ and achieving expeditious implementation of TCMs.²⁶⁶ Actions subject to a conformity finding must not contribute to new violations of an NAAQS, increase existing violations, or delay the attainment of a standard or other milestone.²⁶⁷ These changes broaden the scope of the conformity provision, which, in the past, limited its focus to ensuring transportation plans would not lead to interference with TCMs in the SIP. The essence of the 1990 conformity requirement is that transportation projects must contribute to improved air quality.

The 1977 conformity requirements continued to be applicable to all federal and federally assisted activities. No department, agency, or instrumentality of the federal government is to finance, license, permit, or approve any activity that does not conform to an approved implementation plan. This means that a myriad activities—from Corps of Engineers wetland permits to leases of federal lands—will require conformity findings. On November 30, 1993, EPA promulgated a final

rule concerning conformity of general federal actions.²⁶⁸ The 1990 CAA amendments to the Section 176 conformity provision²⁶⁹ increase the contributions transportation plans, programs, and projects must make toward air quality improvements in nonattainment areas. They emphasize reconciling the emissions from federal actions with the SIP rather than focusing on simply implementing SIP measures. The 1990 amendments and the implementing regulations created two conformity programs: the highway/transit conformity program and the general conformity program for all other federal or federally assisted activities.

Section 176(c)(2) of the CAA requires the estimated emissions from transportation plans and TIPs to be consistent with the SIPs' motor vehicle emission estimates and required emissions reductions. A transportation project conforms if it comes from a conforming plan and TIP or if it is demonstrated that the projected emissions from the project, when considered together with the emissions projected for the conforming transportation plan and TIP, are consistent with the emission-reduction projections and schedules in the SIP. The TIP must provide for the timely implementation of TCMs in a manner consistent with schedules included in the SIP.²⁷⁰ This integration of transportation and air quality planning is intended to protect the integrity of the implementation plan by ensuring that its growth projections are not exceeded unless additional measures are used to counterbalance the excess growth so that progress targets are achieved and air quality maintenance efforts are not undermined.²⁷¹

CAA Section 176, together with the interim requirements for transportation plans and TIPs, requires both expeditious implementation of TCMs in the applicable implementation plan and VOC and CO emissions reductions. In CO nonattainment areas, transportation projects also must eliminate or reduce the severity and number of violations of the CO standards in the area substantially affected by the project.²⁷²

According to Section 176(c)(4), EPA must promulgate criteria and procedures for determining conformity and must require each state to submit an implementation plan revision that includes such criteria and procedures. The final rule was promulgated on November 24, 1993.²⁷³ The criteria and procedures that EPA promulgates will apply as federal law to both federal and local (MPO) conformity determinations. The implementation plan revisions will make conformity criteria and procedures state requirements as well, although states may elect to incorporate conformity criteria and procedures in their implementation plans that are more stringent than those in the federal rule.²⁷⁴

Section 174 provides for review and update, if necessary, of air quality planning procedures. It provides for assigning responsibilities for plan development and implementation. The 1990 CAA amendments indicate that the state-certified organization preparing the SIP shall include local elected officials and representatives of the state air quality planning agency, the state transportation planning agency, the MPO, the organization responsible for the air quality maintenance planning process, and any other organization responsible for developing, submitting, or implementing the SIP.²⁷⁵

B. The Legislative History of Conformity

When Congress added Section 176 to the CAA in 1977, it provided little guidance as to what "conformity" meant.²⁷⁶ The legislative history accompanying the 1977 amendments made only a few references to Section 176 provisions, usually in the context of using the provision as a sanction by withholding federal highway funds if a state failed to submit an adequate SIP or a SIP revision.²⁷⁷ It was a

sanction to be used against recalcitrant states and local governments, rather than a tool to address the contribution transportation sources made to an area's nonattainment status.²⁷⁸

A 1980 EPA and DOT guidance document defined conformity as transportation plans and programs that do not adversely affect the TCMs in the SIP. A transportation project conformed if it was a TCM from a SIP, if it came from a conforming TIP, or if it did not adversely affect the TCMs in the SIP. This was subsequently issued as an interim final rule by DOT.²⁷⁹

Congress' failure in the 1977 amendments to elaborate on what conformity meant prompted a detailed explanation in the legislative history to the 1990 amendments.²⁸⁰ The 1990 legislative history states that the objective of Section 176 is "to promote the adoption and implementation of policies to reduce vehicle use in nonattainment areas."²⁸¹ To accomplish this goal, Congress wanted federal transportation investments in nonattainment areas for ozone or CO to focus on transportation programs that "provide alternatives to the single occupancy vehicle and that contribute to reducing future vehicle miles traveled."²⁸² This would include programs to encourage high-occupancy vehicles, shared rides, and facilities that help curtail the growth of vehicle miles traveled.²⁸³ The legislation's goal is not to withhold federal funds from nonattainment areas, but to ensure that federal funds are spent on programs in ozone and CO nonattainment areas that reduce vehicle miles traveled.²⁸⁴ For example, Congress wanted funds made available to eliminate safety hazards, such as bridge restoration funds in nonattainment areas, to be used in a manner consistent with the overall objectives of Section 176. Therefore, restructuring a bridge that adds traffic lanes or contributes to an overall increase in traffic capacity, and thus permits an increase in vehicle miles traveled, would generally not be permitted.²⁸⁵ However, federal funds may be used for a project that would result in such an increase in an ozone or CO nonattainment area if the project is part of a congestion-management system.²⁸⁶

The legislative history provides that when sanctions are in effect against a nonattainment area, the secretary of transportation and the EPA administrator may prioritize transportation projects in the affected area.²⁸⁷ Congress inserted this provision to further the section's objective of improving air quality.²⁸⁸ However, because one of the sanctions available for failure to have an adequate SIP is the withholding of highway funds,²⁸⁹ prioritization is best used when offset sanctions are imposed, because if highway funds are withheld there may be no transportation projects to prioritize.

Congress intended for the conformity provision to ensure that federal agency activities do not "cause or contribute to violations of an ambient air standard in any area, [do] not increase the severity or frequency of existing violations, and [do] not delay progress in achieving ambient standards in any nonattainment area."²⁹⁰ The provision is intended to encourage planning to achieve and maintain air quality standards and avoid future pollution problems.²⁹¹ States must identify the funding sources for their implementation strategies in the SIP. If funding in a given cycle is inadequate, expenditures of money provided by the federal government are limited to the air-quality-related projects listed in the SIP.²⁹²

Conformity for regional transportation plans should be determined by assessing the plan's impact on vehicle-use patterns in the entire nonattainment area over a long time period.²⁹³ This determination applies to each pollutant for which the area is in nonattainment.²⁹⁴ The vehicle-miles-traveled assumptions used to make this conformity determination must be consistent with the assumptions used in developing the SIP.²⁹⁵

The conformity determination also requires consideration of "any growth likely to result from such [transportation planning] activities."²⁹⁶ This, in turn, requires a quantification, to the extent feasible, of the impact of adding highway capacity in or near the nonattainment area. Elements to be considered in making this quantification include "the availability of alternative modes of transportation, ...the relative frequency and convenience of alternative modes, and policies in effect that offer incentives for the use of alternatives to single occupant vehicles or that impose disincentives to such use."²⁹⁷

These transportation-related conformity requirements are meant to encourage long-range planning to improve air quality.²⁹⁸ Projects that are not part of an approved SIP or program must be evaluated by the recipient of federal transportation funds to ensure they are in conformity with the SIP before the project can proceed.²⁹⁹ The project may include an independent evaluation for "hot spot" pollutants, such as CO, but must be considered in the context of the regional transportation plan for pollutants like particulates, ozone, and nitrogen oxides. The project review must use updated air quality information, even if the original plan did not.³⁰⁰ If the plan that includes the new project does not meet applicable air quality requirements, it may not be approved or it may not receive federal funds unless it is modified.³⁰¹

The administrator is required to promulgate conformity guidelines, in the form of regulations, within 1 year of enactment, which will supersede all criteria and procedures previously adopted by federal agencies. The new criteria are intended to serve as legal guidelines for reviewing implementation plans and to establish legal standards that federal government agencies can use to make conformity determinations.³⁰²

C. Clean Air Act Litigation Concerning Conformity

The CAA conformity requirements added to Section 176(c) in 1990 have been the subject of only a few cases,³⁰³ and only one case has reported decisions as of May 1994. In addition, challenges to both the general conformity and transportation conformity regulations have been brought in the Court of Appeals for the District of Columbia Circuit.³⁰⁴ A more detailed analysis of litigation concerning the CAA amendments and transportation planning will be the subject of a separate legal research digest; however, the one reported case will be discussed briefly.

In *Conservation Law Foundation v. Federal Highway Administration*,³⁰⁵ various environmental plaintiffs challenged the proposed construction of a 2-mile, four-lane, divided controlled-access highway on Jamestown Island, Rhode Island, located in the middle of Narragansett Bay. The highway is a small part of the 40-mile Route 138 corridor, which is part of a transportation system that allows traffic originating in Connecticut and the New York metropolitan area to reach Newport, Rhode Island, and Cape Cod. Plaintiffs alleged violations of NEPA, ISTEA, the Clean Water Act, DOTA, and CAA and lost on all claims.

The plaintiffs made three claims relating to air pollution and transportation planning:

1. ISTEA provisions in 23 U.S.C. Section 134(l) were violated by programming federal funds without an approved congestion management system.

2. CAA Section 176 was violated by approving a long-range transportation plan and a transportation improvement program that did not "conform" by

"contribut[ing] to annual emissions reductions consistent with" requirements in 42 U.S.C. Section 7511a(b)(1).

3. CAA Section 176 was violated by DOT's providing financial assistance and issuing a permit for a project that did not come from a conforming transportation plan and TIP.

The claims related to a project that began in 1969. By April 23, 1992, the date of the Interim Guidance on ISTEA Metropolitan Planning Requirement,³⁰⁶ nearly all the parcels necessary for construction had been acquired. The Interim Guidance does not apply to projects that have advanced beyond the NEPA process and are being implemented. Thus, projects at the right-of-way acquisition stage are deemed not to be subject to ISTEA requirements. The court noted that, under proposed regulations, a congestion management system for nonattainment areas is not required to be in place until October 1, 1995.³⁰⁷

The two claims that CAA Section 176 conformity requirements were not met also were limited by the fact that the time for full implementation of the CAA had not been reached. Rhode Island was not required to submit its revised SIP until November 1993. Prior to that date, conformity was demonstrated if transportation plans and programs relating to ozone and CO nonattainment areas contribute to annual emissions reductions. EPA's guidance, which was deferred to by the court, provided that if TIP's result in emissions that are less, by any amount, than the emissions that would result in the future from the current situation, then they are contributing to reductions consistent with 42 U.S.C. Section 7511a(b)(1). States should be free to decide how much reduction to require from motor vehicles and stationary sources to obtain the 15 percent VOC reduction required by Section 7511a(b)(1) through a conforming SIP. The court concluded that "under the regulations in place both at the time of the approval of the 1987 FSEIS [Final Supplemental Environmental Impact Statement] and at the time major steps toward implementation of the project occurred, the Jamestown Connector was not subject to further conformity review."³⁰⁸ The court then denied the motion for a preliminary injunction on the ground that the plaintiffs failed to show a likelihood of success on the merits.

The case was appealed to the U.S. Court of Appeals for the First Circuit.³⁰⁹ The district court's decision was reviewed to determine whether there was a manifest mistake of law or an abuse of discretion. The district court's denial of the plaintiff's motion for a preliminary injunction was affirmed.

The plaintiff's appeal involved NEPA,³¹⁰ Section 404 of the Clean Water Act,³¹¹ Section 4(f) of DOTA,³¹² and the conformity provision of CAA.³¹³ The court of appeals focused its conformity analysis to the time when CAA Section 176(c)(3) applies to a project. The court held that Section 176(c)(3) is aimed at projects whose conformity had not been demonstrated prior to the 1990 CAA amendments. The project of concern in this case was found to conform in 1988 at the latest.³¹⁴ The court's interpretation followed the Interim Guidance adopted by EPA and DOT that governed conformity determinations made between 1990 and 1993. Thus, projects that were basically on their way to completion before the 1990 CAA amendments are not subject to new conformity requirements.

The *Conservation Law Foundation* case may be more important for its holding that the conformity requirements are an emissions "standard of performance" that may be enforced by the citizen suit provision of CAA Section 304.³¹⁵ Specifically, transportation plans have to be consistent with the reasonable further progress 15 percent reduction requirements,³¹⁶ and this requirement is subject to a citizen suit challenge.³¹⁷

Because of the time required to move highway projects to conclusion, other cases may arise for which this case is support for requiring a lesser standard of compliance with ISTEA and CAA than will ultimately be required. However, the continuing changes in the regulatory program under both statutes limit the precedential value of even recently decided cases if the decisions are based on regulations that have been replaced.

D. Conformity Regulations

1. Introduction

The conformity provisions in the CAA amendments are designed to ensure consistency between federal actions and the air quality planning process. Until SIP revisions that include conformity criteria are approved by EPA, the provisions in CAA Section 176(c)(3) determining conformity must be followed for plans, programs, and projects during the interim period. DOT and EPA developed guidelines for the interim period between enactment of the 1990 CAA amendments and the date of the final regulation³¹⁸ that applied to transportation plans, programs, and projects submitted after November 15, 1990. Additional requirements in existing state air quality implementation plans and court orders also applied.³¹⁹ The interim conformity procedures applied to nonattainment areas for ozone, CO, and particulates,³²⁰ and during the interim period:

1. Transportation conformity determinations were to be based on detailed analysis of the potential impacts of transportation plans, programs, and projects on air quality. All FHWA/FTA conformity determinations made after November 15, 1990, had to meet the new requirements, even if the MPO made a conformity determination prior to November 15, 1990.

2. State and local agencies had to make new conformity determinations for their transportation plans and programs to ensure the continued availability of federal funds. The MPO and DOT had to determine whether the transportation plan would support the SIP in achieving the NAAQS for ozone, CO, and particulates.³²¹ They had to ensure that no goals, directives, recommendations, or projects identified in the transportation plan would have adverse impacts on the SIP and that the plan would provide for the expeditious implementation of TCMs in the appropriate SIP. If the transportation plan lacked the necessary specificity, it was to contain a commitment that TIPs would provide for expeditious implementation of TCMs from the SIP.

3. The MPOs were to analyze and reaffirm the conformity of their current transportation plan or take action on a new plan as soon as possible. A transportation plan found to conform by both the MPO and DOT prior to November 15, 1991, remained valid for up to 3 years if it continued to accurately reflect future demographics and transportation needs of the area. For TCMs no longer considered valid, replacements were to be developed that provide equal or greater emissions reductions.

4. After November 15, 1991, projects had to come from both a transportation plan and TIP that conformed under the CAA amendments. TIP analyses had to use the most recent population, employment, travel, and congestion estimates as determined by the MPO or other agency authorized to make such estimates. These estimates had to show reductions in emissions from the baseline (no-build) scenario. The TIP had to show expeditious implementation of the TCMs in the applicable SIP.³²²

On January 11, 1993, EPA published a Notice of Proposed Rulemaking to amend 40 C.F.R. Part 51.³²³ Three public hearings were held, and more than 300 written comments were submitted. A final regulation was promulgated on November 24, 1993.³²⁴ The rule amends 40 C.F.R. Part 51 by adding Subpart W to require states to revise their SIPs to include conformity requirements. Once SIPs are revised, federal agencies are subject to the requirements.³²⁵ The proposed rule also added a new Subpart B to 40 C.F.R. Part 93. This was necessary to apply the conformity requirements to federal agencies during the period after the rule becomes effective and until the states revise their SIPs. Part 93 requirements are identical to Part 51 requirements, except they do not require a state to revise its SIP. When Part 51 sections are cited herein, the discussion is also applicable to the appropriate Part 93 section.³²⁶

2. Summary of the Final Rule

This rule requires metropolitan planning organizations (MPOs) and the United States Department of Transportation (DOT) to make conformity determinations on metropolitan transportation plans and transportation improvement programs (TIPs) before they are adopted, approved, or accepted. In addition, highway or transit projects which are funded or approved by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA) must be found to conform before they are approved or funded by DOT or an MPO.³²⁷

States must revise their SIPs to establish conformity criteria and procedures consistent with this rule by November 25, 1994—1 year after promulgation of the rule. However, this rule applies as federal law beginning December 27, 1993. Conformity determinations after this date must be made according to the requirements of this rule, and after the conformity SIP revision is approved by EPA, conformity determinations must be according to the requirements of the applicable SIP.

The requirements of the final rule differ according to the pollutant for which an area is designated nonattainment or maintenance and according to the type of action (e.g., transportation plan, TIP, project from a conforming transportation plan and TIP, or project not from a conforming transportation plan and TIP). The rule requires regional emissions analysis of transportation plans and TIPs. Regionally significant highway and transit projects, regardless of funding source, must come from a conforming transportation plan and TIP; or must be included in the regional emissions analysis of the plan and TIP, which supports the plan or TIP; or must be included in a newly performed regional analysis. Transportation projects funded or approved by FHWA or FTA must also be analyzed for their localized air quality impacts in nonattainment areas for particulates and CO.

Requirements vary according to the period of time in which the conformity determination is made. Transportation plans, TIPs, and projects must satisfy different criteria depending on whether a state has submitted a SIP revision that establishes control strategies to demonstrate reasonable further progress toward attainment. Criteria and procedures also vary depending on whether the SIP revision has been submitted and approved or disapproved, or the CAA deadline for submission of the SIP revision has been missed.

The final rule has several major changes from the proposed rule, including specific requirements for regionally significant "non-federal" projects (those projects not requiring FHWA or FTA funding or approval).³²⁸

a. *Who Is Subject to Conformity Requirements?*—FHWA/FTA must make conformity findings on transportation plans and TIPs before they are adopted, ac-

cepted, approved, or funded.³²⁹ Other federal agencies are responsible for meeting federal conformity requirements for actions in their area of responsibility.³³⁰

SIP revisions must include procedures to be undertaken by MPOs, state departments of transportation, DOT, state and local air quality agencies, and EPA before conformity decisions are made.³³¹ These organizations also participate in planning and project development and approval.³³²

b. What Transportation Activities Require a Conformity Determination?—Conformity determinations are required for transportation plans adopted in ozone nonattainment areas and in CO nonattainment areas.³³³ These are plans with a 20-year time frame.³³⁴ TIPs that are 3- to 5-year construction programs must also meet conformity requirements.³³⁵

Each new transportation plan must meet conformity requirements before it is approved by the MPO or is accepted by DOT.³³⁶ A transportation plan revision must also conform unless it merely adds or deletes projects that are exempted by 40 C.F.R. Section 51.460.³³⁷ Existing conforming transportation plans must have conformity redetermined within 18 months of either November 24, 1993, or the time of EPA approval of a SIP revision.³³⁸ Conformity determinations must be made every 3 years or the conformity status will lapse.³³⁹ TIPs are subject to similar conformity requirements.³⁴⁰ Once transportation plans lapse, no further project conformity determinations may be made. SIP deficiencies lead to a prohibition on plan or TIP conformity determinations 120 days after the date due for a SIP submittal or 120 days after EPA makes an incompleteness finding or disapproves a SIP.³⁴¹ Projects in a previously conforming TIP are also restricted if they violate a SIP requirement.

After January 1, 1995, in serious, severe, or extreme ozone nonattainment areas or in serious CO nonattainment areas, transportation plans must describe the transportation system envisioned for future years, called horizon years. The first horizon year may be no more than 10 years from the year used to validate the transportation demand planning model. The transportation plan is to quantify and document the factors influencing transportation demand. The highway and transit system, as well as additions and modifications that are expected to be operational in the horizon years, is to be described.³⁴²

Transportation plans and TIPs must be consistent with fiscal constraints found in DOT's metropolitan planning regulations at 23 C.F.R. Part 450.³⁴³ They must also meet the criteria and procedures set forth at 40 C.F.R. Sections 51.412 through 51.446 and requirements in applicable SIPs and court orders.³⁴⁴ The plan and the TIP must be consistent with the motor vehicle emissions budget in the applicable SIP.³⁴⁵ There must be a regional analysis of VOC, nitrogen oxides, CO, and particulates.³⁴⁶ The transportation plan and the TIP must contribute to emissions reductions in nonattainment areas.³⁴⁷ The conformity determination is to be based on the most recent planning assumptions in force at the time of the conformity determination.³⁴⁸ It must use the latest emissions model available.³⁴⁹ Nothing in the TIP may interfere with the implementation of any TCMs in the applicable implementation plan.³⁵⁰

Federal transportation plans or TIPs that receive federal funding or approval from FHWA or FTA require conformity determinations,³⁵¹ but some projects are exempt.³⁵² Projects must come from a conforming plan and program or meet the requirements of 40 C.F.R. Sections 51.434, 51.440, and 51.446.³⁵³ An FHWA/FTA project also "must not contribute or cause an increase in CO or particulates violation in non-attainment and maintenance areas."³⁵⁴ A project that is not from a conforming plan and TIP must include a regional emissions analysis. The proce-

dures for determining regional transportation-related emissions are found at 40 C.F.R. Section 51.452.³⁵⁵ For projects in or affecting locations that may have CO or particulates violations, a hot-spot analysis is required. A hot-spot analysis is defined in 40 C.F.R. Section 51.392.³⁵⁶ Procedures are specified in 40 C.F.R. Section 51.454.³⁵⁷ There are also conformity requirements for regionally significant state projects.³⁵⁸

c. Geographical Applicability.—The CAA is ambiguous concerning the geographical reach of the conformity requirements. The interim guidance imposed conformity requirements only in nonattainment areas. The proposed rule applied the requirements in nonattainment and in maintenance areas.³⁵⁹ The final rule states that it will apply only in nonattainment and maintenance areas,³⁶⁰ but a supplemental notice of proposed rulemaking will propose to require conformity also in some attainment areas.³⁶¹ As of May 1994 neither EPA nor FHWA has proposed that attainment areas be required to make conformity determinations.

d. Conformity Periods.—There are five conformity periods: Interim Phase I, Interim Phase II, Transitional Period, Control Strategy Period, and Maintenance Period.

The Interim Phase I period began on November 15, 1990, and ended December 27, 1993.³⁶² During this period, transportation plans and TIPs had to contribute to annual emissions reductions in ozone and CO nonattainment areas. For proposed transportation activities a "build/no-build" test was required to show that "the proposed action and all other expected regionally significant projects, would be less than the emissions from the current transportation system in future years."³⁶³ Substantial public comment criticized this test as being unable to achieve reasonable further progress required to attain the NAAQS.³⁶⁴

The Interim Phase II period began on December 27, 1993, and ends either with the submission of the control strategy SIP revision or the CAA deadline for submission of the control strategy SIP revision, whichever occurs first.³⁶⁵ This submission must include an emissions budget for highway-related emissions.³⁶⁶ During this period "regional analysis of transportation plans and TIPs in ozone and CO areas will have to satisfy the build/no-build test...and demonstrate emissions reductions from 1990 levels."³⁶⁷ All TCMs must also be completed.³⁶⁸

The Transitional Period begins when a state submits to EPA a control-strategy SIP revision endorsed by the governor.³⁶⁹ It lasts until EPA either takes final approval or disapproval action on the submission or finds it to be incomplete.³⁷⁰ During this period, the transportation plan and TIP must conform, according to transitional period criteria and procedures, within 1 year from the date the CAA requires submission of a control strategy SIP revision and must be consistent with the emissions budget submitted in the SIP revision.³⁷¹ It must also meet the build/no-build test.³⁷² Certain requirements, including the timely completion or implementation of all TCMs in the applicable SIP, apply during all conformity time periods.³⁷³ Areas that fail to submit a control strategy SIP revision as required may not have new transportation plans or TIPs approved for conformity beginning 120 days after the CAA deadline, and the overall conformity status ends 1 year after the deadline.³⁷⁴

The Control Strategy Period begins when EPA approves the control strategy implementation plan revisions for controlling emissions and ends when EPA approves redesignation to an attainment area.³⁷⁵ During this period, the transportation plan and the TIPs must be consistent with the motor vehicle emissions budget in the approved SIP.³⁷⁶ There also must be timely implementation of all TCMs.³⁷⁷

The Maintenance Period begins when EPA approves a state request to have an area redesignated as an attainment area. The period ends 20 years later, unless the applicable SIP specifies a longer time period.³⁷⁵ During this period there must be timely implementation of all TCMs.³⁷⁸ Emissions from implementation plans and programs must be consistent with estimates of emissions from motor vehicles and necessary reductions contained in applicable SIPs.³⁸⁰ The emissions budget is the mechanism EPA has identified for carrying out the demonstration of consistency.³⁸¹

e. Transportation Control Measures.—CAA Section 176(c)(2)(B) requires “timely implementation” of TCMs. A transportation plan, TIP, or FHWA/FTA project that is not from a conforming plan and TIP is required to provide for timely implementation of TCMs from a SIP.³⁸² If TCMs are delayed, conformity may be demonstrated only if all obstacles to implementation have been identified and are being overcome and if funding of TCMs is being given maximum priority. However, the regulation makes an allowance for delay in TCM implementation in the past as well as delay due to the time necessary to complete remaining essential steps or to obtain needed permits.³⁸³ TCM implementation may be timely if reasonable efforts are being made. The regulations pressure the agencies making conformity determinations to see that TCMs are implemented without creating inflexible requirements. Although TCMs in a conforming plan are given some slack in meeting timely implementation requirements, projects other than exempt projects that are not part of a conforming transportation plan and TIP will not be funded.³⁸⁴ Nothing in the TIP may interfere with implementation of a TCM in a SIP.³⁸⁵

f. Mitigation.—To demonstrate conformity, project-level mitigation or control measures may be necessary. Mitigation measures could include construction practices, operating policies, or even processes to determine operating policies, such as a process to set tolls to limit traffic to an agreed level.³⁸⁶ These measures are to be set forth in writing by project sponsors if the measures are to be used to obtain a positive conformity determination and must be honored. EPA can enforce mitigation commitments directly against a project sponsor.³⁸⁷ Written commitments in an approved SIP may also be enforced by states and citizens under the citizen suit provisions of CAA Section 304.³⁸⁸ If the MPO or project sponsor believes the mitigation measure is no longer necessary for conformity, the final rule provides a procedure for terminating the obligation.³⁸⁹

g. Time Limits on Project-Level Determination.—If a project is approved, but does not move forward, a new conformity determination may be required. If a delay occurs, implementation may continue only for those projects that have completed an NEPA document and project-level conformity determination and that have taken one of the following steps within the past 3 years: NEPA process completion; start of final design; acquisition of a significant portion of right of way; or approval of the plans, specifications, and estimates.³⁹⁰ Because of time factors, EPA does not require a supplemental NEPA document, unless there are significant changes as defined by the responsible federal agency.³⁹¹

h. Interagency Consultation.—SIP revisions that must meet conformity requirements are to establish interagency consultation procedures among MPOs, state and local air agencies, state and local transportation agencies, EPA, and FHWA/FTA concerning the development of SIPs, transportation plans, TIPs, and conformity determinations.³⁹² Until a conformity SIP revision is approved, EPA does not require specific measures, but a reasonable opportunity for interagency consultation must be provided.³⁹³ After SIP approval, a failure to follow the con-

sultation procedures is a SIP violation and undermines the validity of the conformity determination.³⁹⁴ Conflicts among state agencies are resolved by the governor.³⁹⁵ Where the metropolitan planning area does not include the entire nonattainment area or maintenance area, there must be a consultation agreement among the state department of transportation, state air agency, other affected local agencies, and the MPO.³⁹⁶ In addition to the final rule’s consultation requirements, there are consultation requirements imposed on MPOs by DOT’s metropolitan planning regulations.³⁹⁷

i. Frequency of Conformity Determinations.—A new transportation plan must conform before it is approved by the MPO or accepted by DOT.³⁹⁸ Transportation plan revisions must conform before being approved by the MPO unless the revision merely adds or deletes projects that are exempted by 40 C.F.R. Section 51.460.³⁹⁹ Existing transportation plans must determine conformity within 18 months of November 24, 1993, or when the SIP undergoes related revisions, or if there are changes in the TCMs.⁴⁰⁰ In all situations, conformity determinations must be made at least every 3 years.⁴⁰¹

FHWA/FTA projects must conform before they are approved or funded. Conformity must be redetermined if no major steps have occurred in the previous 3 years.⁴⁰² Without a conforming transportation plan and TIP, the only projects that may proceed are those exempt from conformity by the rule, projects that have completed all planning and conformity determinations, and nonfederal projects that are not regionally significant or that do not involve recipients of federal funds.⁴⁰³

j. Nonfederal Projects.—The thrust of the transportation conformity process is to review and control transportation projects that receive federal funds or approval. However, federal and nonfederal projects share the same SIP motor vehicle emissions budget.⁴⁰⁴

The CAA requires that a transportation project either come from a conforming transportation plan and TIP or that a regional emissions analysis demonstrates that the plan and TIP would still conform if the project were included.⁴⁰⁵ EPA has defined “transportation project” as any transportation project, rather than limiting it to mean only federally funded or approved projects. EPA is limiting its requirements to regionally significant projects.⁴⁰⁶ “A regionally significant project means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs...and would normally be included in the modeling of a metropolitan area’s transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.”⁴⁰⁷ A regionally significant nonfederal project must be included in either a conforming plan and TIP or a regional emissions analysis of a plan and TIP. Otherwise, there would be a violation of the SIP and CAA Section 176(c)(2)(C).⁴⁰⁸

SIPs are required to establish a mechanism to ensure that other recipients of federal funds disclose to the MPO their plans for construction of regionally significant nonfederal projects, including projects that are only being considered.⁴⁰⁹ To preserve the integrity of the transportation planning process, regionally significant nonfederal projects may not be implemented until their emissions impacts are accounted for in the regional emissions analysis. This is to prevent subsequent federal projects from being forced to offset the emissions from nonfederal projects after the nonfederal projects have been constructed.⁴¹⁰

Project-level conformity determinations must be made by MPOs only when they perform a project-level adoption or approval role. If DOT funds a project, a

project-level conformity determination is required. If the MPO does not have to adopt or approve the project, the determination will be made by the project sponsor, such as the state department of transportation, or the sponsor will perform the required analysis to assist DOT in making a conformity determination. EPA expects most project-level conformity determinations will be made as part of the NEPA process.⁴¹¹

k. SIP Revisions.—States with areas subject to conformity requirements must revise their SIPs by November 25, 1994, to provide for criteria and procedures to assess conformity of transportation plans and projects. The revisions may be more stringent than federal requirements if they apply equally to federal and nonfederal entities. Until EPA approves a revision, federal requirements under 40 C.F.R. Parts 51 and 93 apply. In addition, previously applicable SIP provisions relating to conformity remain enforceable until the state revises its SIP and the revision is approved by EPA. Following approval of the SIP revision, the new state requirements would govern conformity determinations.⁴¹²

V. ISTEA ENVIRONMENTAL PROGRAMS RELATING TO AIR QUALITY

A. The Congestion Mitigation and Air Quality Improvement Program

ISTEA created the congestion mitigation and air quality improvement (CMAQ) program to deal with air pollution from transportation-related sources. The CMAQ program aims to improve air quality, but only incidentally mitigates congestion. It directs funds to projects and programs primarily in ozone and CO non-attainment areas. A total of \$858 million was authorized for fiscal year 1992; \$1.028 billion each year for fiscal years 1993, 1994, and 1995; and \$1.029 billion each year for fiscal years 1996 and 1997.⁴¹³ There is also a congestion pricing program that provides testing for up to five projects. This program is to be funded by \$25 million of the FHWA's administrative funds each year from fiscal year 1992 to fiscal year 1997.⁴¹⁴

Guidance on the CMAQ program was provided in a memorandum from FHWA's associate administrator for program development.⁴¹⁵ The CMAQ program is viewed as having three phases. Phase one is the pre-fiscal year 1995 start-up period. Phase two is fiscal years 1995 through 1997, when the program is expected to reach its peak. Phase three is the post-fiscal year 1997 period after funding has ended, when the most serious nonattainment areas are scheduled to reach attainment.⁴¹⁶

The primary purpose of the CMAQ program is to improve air quality and meet milestones in ozone and CO nonattainment areas, but under certain conditions particulate nonattainment areas are eligible for the \$6 billion authorized under the CMAQ program.⁴¹⁷ Appropriate projects and programs include those that would be approved as TCMs in SIPs and receive emission-reduction credit from EPA. Such projects and programs are eligible for federal funding of 80 percent, but the funding can be as high as 100 percent for certain activities.⁴¹⁸

Projects eligible for CMAQ funds must come from a conforming transportation plan and TIP and must meet the consistency requirements of CAA Section 176(c). They must meet the requirements of NEPA, as well as the specific eligibility criteria of ISTEA. All such projects must include an assessment and documentation of air quality benefits by the state for FHWA and FTA to meet statutory obligations.⁴¹⁹

The highest priority for CMAQ funding is for transportation activities in approved SIPs. TCMs listed in CAA Section 108(f)(1)(A) are generally eligible, except for two that are specifically excluded: reduction of emissions from extreme cold-start conditions and programs to encourage removal of pre-1980 vehicles. Bicycle and pedestrian facilities are eligible for funding based on CAA Section 108, but ISTEA includes additional types of projects that are eligible for funding.⁴²⁰ Generally, traffic management systems to reduce congestion, public transportation facilities and equipment, and intermodal transportation projects are eligible for CMAQ funds. Some traffic monitoring systems costs and some costs necessary to improve I/M programs are also eligible CMAQ activities, as are many public transit improvements.⁴²¹ Operating and maintenance costs are not eligible for CMAQ funds.

The main criterion for receiving CMAQ funds is that a new project or program must have a documented air quality benefit.⁴²² Planning costs directly related to an eligible program are also eligible for federal CMAQ funds.⁴²³ Usually only publicly owned projects are funded, but private-sector activities are eligible for funds if they meet three tests: (1) the activity must normally be a public-sector responsibility, (2) private ownership or operation must be cost-effective, and (3) the state must be responsible for protecting the public interest and public investment.⁴²⁴ Construction projects that add new capacity for single-occupant vehicles are not eligible for CMAQ funds unless the project has a high-occupancy-vehicle facility that is only available to single-occupant vehicles at off-peak travel times.⁴²⁵ Other transportation projects and programs that are not specifically included among those discussed in the guidance document may receive CMAQ funds if they are based on promising technologies and feasible approaches to improve air quality.⁴²⁶

CMAQ funds are apportioned to the states on the basis of the severity of their ozone pollution and the size of the affected population. Additional funds are apportioned if an ozone nonattainment area is also classified as nonattainment for CO. A state's apportionment can therefore change from year to year. Each state, however, must receive at least 0.5 percent of the total funds even if it has no non-attainment areas,⁴²⁷ and a state does not have to allocate these funds in the same way they were apportioned. States that have no ozone or CO nonattainment areas may use their funds for any eligible project under their SIP.⁴²⁸

The programming of CMAQ projects should follow the procedures used for TIP development and project selection by MPOs.⁴²⁹ Projects to be funded with CMAQ funds must be included in the TIPs that are developed by the MPOs in cooperation with the state and transit operators. For projects targeting CMAQ funds, priority in the TIP should be based on the projects' estimated air quality benefits. Once such projects are included in a TIP that is approved by the MPO and the governor and are included in an FHWA/FTA-approved statewide TIP, they may be selected for implementation in accordance with the specified project-selection procedures.

Transit projects that intend to use CMAQ funds, just as with highway projects, must contribute to the attainment of the NAAQS as defined by ISTEA, the CAA amendments of 1990, and the guidance referenced earlier. The project must also be included in a conforming transportation plan and TIP developed by the MPO and the STIP. Projects must then be selected for implementation in accordance with the requirements of Section 8 of the Federal Transit Act and Sections 134 and 135 of Title 23.

NEPA documentation is prepared, and the project is submitted to the FTA. If the project submitted for CMAQ funding is unambiguously a transit project, the

FTA regional office will decide if the project is eligible for CMAQ funding and will manage the project. In the case of an intermodal project or other projects that have elements of both highway and transit improvements, the FTA and FHWA regional offices will jointly decide if the project is eligible for CMAQ funding, whether the application should be approved, and which agency will manage the project.⁴³⁰

Transportation projects and programs are eligible for CMAQ funds only if they meet the requirements of ISTEA. They must come from a conforming transportation plan and TIP and be consistent with the conformity provisions contained in Section 176(c) of CAA. NEPA documentation must be prepared for these projects.⁴³¹ In determining project eligibility under these criteria, priority is given to implementing projects and programs that are in an approved SIP as a TCM and will have air quality benefits.

B. Other Environmentally Related Programs Eligible for CMAQ Funding

ISTEA requires the development of six management systems.⁴³² Projects used to establish three of these management systems (traffic congestion, public transportation facilities and equipment, and intermodal transportation facilities and systems), as well as implementation of projects contained in them, may receive CMAQ funds where it can be demonstrated that they are likely to contribute to the attainment of NAAQS.⁴³³

In addition, ISTEA requires states to establish a traffic monitoring system for highways and public transportation facilities and equipment.⁴³⁴ Some operating expenses having air quality benefits are eligible for CMAQ funding for a period of 2 years from the beginning of the additional service. Capital expenses for air-quality-related facilities and programs are eligible when they contribute to attainment.⁴³⁵

I/M programs have potential for improving air quality. Construction of facilities and purchase of equipment for I/M stations in test-only networks are eligible for funding. Projects to implement these I/M programs and one-time start-up activities may also receive funding. Operating expenses are eligible for CMAQ funding, but I/M services must be new or additional services.⁴³⁶

Improved public transit is a TCM included in Section 108. EPA's Transportation Control Measures Information Document divides transit improvements into three broad types of actions: system/service expansions, operational improvements, and demand/market strategies. In general, the capital costs of system/service expansions qualify for CMAQ funding because of their potential for reducing trips by single-occupant vehicles. Capital projects that improve transit service are also eligible. Park-and-ride facilities related to transit systems are eligible for CMAQ funding. These projects may require an air quality analysis as part of NEPA compliance to avoid localized CO violations and to meet air quality conformity requirements. Vehicle replacements of the existing bus or rail fleet, including locomotives, may also be eligible. However, transit operating and maintenance costs are not usually eligible for CMAQ funds.⁴³⁷

Routine highway and transit maintenance projects are ineligible for CMAQ funding. Project planning and development activities that lead to construction of facilities or new services and programs having an air quality benefit are eligible. Also eligible for funding are studies for the preparation of environmental documents and related transportation/air quality project development activities. Necessary air quality monitoring to determine the air quality impacts of a proposed project are also eligible for funding.⁴³⁸

Economic or demographic studies or other general planning activities that do not directly propose or support a transportation/air quality project and the preparation of an NEPA or other environmental document not related to a transportation project to improve air quality are usually not eligible for funding. Regional or areawide air quality monitoring is not eligible.⁴³⁹

The CMAQ program aims primarily to fund projects or programs that are owned, operated, or under the primary control of the public sector, including public/private joint ventures; however, CMAQ funds may be used by a state for initiatives that are privately owned and/or operated, including efforts developed and implemented by transportation management associations.⁴⁴⁰

Implementation of employer trip reduction programs in severe and extreme ozone nonattainment areas are private responsibilities; however, employers are eligible for funding to help them plan and promote these programs. Trip reduction programs with new or redirected public transportation services are also eligible for public assistance support. Other transportation projects and programs may be funded under CMAQ, including innovative activities using new technologies and feasible approaches to improve air quality.⁴⁴¹ However, other private-sector responsibilities, such as vapor recovery systems at gas stations, are not eligible.

Section 134(l) of Title 23 U.S.C. and Section 8(l) of the Federal Transit Act prohibit federal funds from being used for highway or transit projects that significantly increase single-occupant vehicle capacity in transportation management areas⁴⁴² that are in nonattainment for CO and/or ozone unless the project results from an approved congestion management system.⁴⁴³ Because the implementation of the management systems under 23 U.S.C. Section 303 is not required before federal fiscal year 1995, an interim procedure was included in the metropolitan planning guidance to permit programming action.⁴⁴⁴ Specifically, if a project results from a metropolitan transportation planning or NEPA process that meets certain criteria, it will be considered a part of an approved congestion management system. In meeting the proposed requirements,⁴⁴⁵ the metropolitan planning or environmental impact analysis needs to address a range of multimodal transportation management options, including demand reduction, that demonstrates that additional single-occupant vehicle capacity will not be created.⁴⁴⁶

States, in cooperation with MPOs and agencies receiving Federal Transit Act assistance, must develop systems for traffic congestion management.⁴⁴⁷ As part of the transportation planning process in transportation management areas, congestion management uses travel demand reduction and operational management strategies.⁴⁴⁸

To meet the intent of ISTEA, the congestion management system would address a full range of reasonable trip reduction and operational management strategies, including such areawide strategies as employer trip reduction programs, carpooling, vanpooling, and other similar techniques. If the analysis of these strategies demonstrates that they cannot fully meet the need for additional capacity in the corridor, a project that provides significant increase in single-occupant vehicle capacity could be considered. Other travel demand reductions and operation management strategies appropriate to the corridor or subarea, but not appropriate for the proposed project, must be committed to by the MPO and the state.⁴⁴⁹

By October 1, 1994, states were to develop work plans and schedules that demonstrate full operation and use of congestion management systems by October 1, 1995, for transportation management areas that are nonattainment for

ozone and/or CO. All other areas must comply by October 1, 1996. Operational congestion management systems shall provide projects and programs for consideration in developing metropolitan and statewide transportation plans and improvement programs. Until CO and ozone nonattainment transportation management associations have congestion management systems that are operational, the interim requirements in 23 C.F.R. Section 450.336(b) must be met.⁴⁵⁰

C. A Summary of the Environmental Programs Relating to Air Quality⁴⁵¹

The ISTEA of 1991⁴⁵² authorizes \$151 billion in funding through 1997, of which \$119 billion is for highway projects and nearly \$32 billion is for mass transit, with provisions for further transfer of money to nonhighway options. Moreover, transportation projects are to be funded in a nondiscriminatory manner, with the states' share of project funding generally being 20 percent for highway or mass transit projects. It "restructures the Federal-aid highway program by creating broad funding categories. One of the new categories is the highly flexible Surface Transportation Program, which, at \$24 billion over 6 years, is the largest program in the ISTEA."⁴⁵³ The program allows state and local governments the discretion to fund a variety of activities, including highway and transit capital projects, carpool projects, bicycle and pedestrian facilities, planning, and research and development.

Under ISTEA, state and local governments will be able to improve transportation and the environment. ISTEA has strengthened the environmental aspects of transportation decisions. Major changes in the federal-aid highway and transit programs will assist state and local governments to comply with the CAA and finance transportation improvements.

1. Program Flexibility

ISTEA provides flexibility to state and local officials in selecting among highway, transit, and other transportation alternatives. For example, funds may be used for transit capital projects instead of highway projects. State and local officials may also transfer up to 50 percent of National Highway System funding and 20 percent of interstate maintenance funding to the Surface Transportation Program, without federal approval, and may transfer up to 100 percent of the funding if there is appropriate justification and federal consent. This flexibility allows state and local officials to select the mix of projects needed to address air quality, congestion, mobility, or other problems without being influenced by federal requirements that favor one mode over the other.

2. Statewide and Metropolitan Planning

ISTEA requires a statewide planning process that considers the economic, energy, environmental, and social effects of transportation decisions. It changes the metropolitan planning process by its emphasis on intermodal planning and coordination with land-use planning and air quality planning. The MPO must develop long-range transportation plans with the TCMs to achieve the air quality goals in the SIP. In air quality nonattainment areas, the metropolitan area boundaries must include the entire nonattainment area unless the MPO and the governor decide otherwise.

3. Funds for Air Quality Planning

The 1990 CAA amendments significantly increased the requirements for state and local transportation air quality planning.⁴⁵⁴ ISTEA expands federal funding

for planning to about \$117 million in fiscal year 1992, compared with \$47 million in fiscal year 1991. In addition, planning activities may be funded from the Surface Transportation Program and the National Highway System.

4. Congestion Pricing and Tolls

To reduce congestion and air pollution, ISTEA provides for five pilot projects to increase the cost of driving a single-occupant vehicle at congested hours. The aim is to make mass transit, bicycling, high-occupancy vehicles, and other transportation alternatives more attractive. "Congestion pricing techniques may include time-of-day related parking fees, tolls, peak hour charges for SOV's entering certain districts, and permit parking zones."⁴⁵⁵

5. Bicycle Transportation and Walkways

ISTEA encourages bicycle and pedestrian transportation. States and metropolitan area transportation plans are required to include a long-range plan for bicycle transportation and walkways and may use STP funds, including those designated for transportation enhancements, for bicycle and pedestrian transportation. With federal approval, CMAQ funds also may be used for these activities. CMAQ funds may have the greatest potential for actually funding bicycle-related actions. Chicago has been very willing to use CMAQ funds for bicycle projects. The federal-state government may pay up to 80 percent of the cost of bicycle and pedestrian facilities.

6. Surface Transportation Program Eligibility

Of the \$24 billion authorized for the Surface Transportation Program, ISTEA designated 10 percent to be used for improving safety. The remaining funds may be used by state and local officials for other highway or transit activities, including those that benefit the environment. "These include mitigation of damage to ecosystems, habitat, and wildlife; wetland banking; carpool projects, fringe and corridor parking facilities, bicycle transportation and pedestrian walkways; planning activities; and transportation control measures listed in the Clean Air Act."⁴⁵⁶

7. Transportation Enhancement Activities

ISTEA requires that a minimum of 10 percent of all Surface Transportation Program funds be used to enhance transportation activities. "Eligible activities include: bicycle and pedestrian facilities; acquisition of scenic easements and scenic or historic sites; scenic or historic highway programs; landscaping; rehabilitation and operation of historic transportation buildings, structures, or facilities; preservation of abandoned transportation corridors, as in rails-to-trails programs; archeological planning and research; control and removal of outdoor advertising; and mitigation of water pollution due to highway runoff."⁴⁵⁷

8. Early Acquisitions

Right of way acquired in advance of federal approvals may have its cost reimbursed if the properties are later incorporated into projects that are eligible for STP funding. Land needed for environmental and scenic protection and preservation is also eligible for cost recovery.

9. Environmental Research

Under ISTEA, funding for research and development will substantially increase, allowing FHWA to undertake significantly more research on air quality, wetlands, and other environmental issues.

VI. CONCLUSION

Federal regulatory requirements for state and regional transportation projects and programs differ depending on the pollutant for which an area is in nonattainment or maintenance and depending on whether the subject is a transportation plan, a TIP, a project from a conforming transportation plan and TIP, or a project that is not from a conforming plan or TIP. Regionally significant projects must either come from a conforming transportation plan and TIP or include a regional emissions analysis. With SIP revisions yet to be submitted and regulations recently promulgated, only generalizations can be made concerning conformity requirements. Whether air quality will improve in a manner commensurate with the cost of implementing conformity requirements for transportation activities is unknown.

Transportation emissions are a major source of the two "criteria" pollutants (under CAA) that are most difficult to control—CO and ozone. The use of TCMs in SIPs, TIPs, and STIPs to control transportation-related air pollution has been given much publicity; however, the available evidence does not demonstrate that these measures contribute significantly to improving air quality. Nonetheless, transportation plans must conform to SIP emissions budgets, and TCMs that are included in a SIP must be included in the regional transportation plans, TIPs, and STIPs.

A major challenge for transportation planning will be the need to demonstrate conformity with the "reasonable further progress" requirement imposed in moderate or worse ozone nonattainment areas. SIP revisions must demonstrate reasonable further progress by providing for a 15 percent reduction in VOC emissions by November 15, 1996. States were not required to submit SIP revisions until November 15, 1993; EPA then had 12 months to act on a submission. ISTEA does not specify rigid review requirements either, and FHWA and FTA do not plan to specify a standard approach, except as noted in the transportation conformity regulation.

The result is that despite the complexity of the regulatory material concerning the conformity requirements, the major requirement for transportation planners is that their plans conform to the SIP and meet the more detailed requirements set forth in the conformity regulations. To the extent that TCMs are used to obtain projected emissions reductions in the SIP, they will avoid problems with conformity requirements because, as part of the SIP, they will conform.

The transportation conformity final rule addresses three activities: the adoption of transportation plans, the adoption of TIPs, and the approval, funding, or implementation of FHWA/FTA projects. However, the regulations list many types of projects, such as safety improvements and minor mass transit improvements, that are exempt.

Transportation plans must be found to conform no less frequently than every 3 years. TIPs must conform before they are approved by the MPO or accepted by DOT. Projects must conform before they are adopted, accepted, approved, or funded. Projects that are part of a conforming transportation plan must meet the requirements of 40 C.F.R. Section 51.422. Projects that do not come from a con-

forming plan and program must meet additional requirements that may include a regional emissions analysis supporting conformity or a finding that the project is consistent with the motor vehicle emissions budget in the applicable SIP. Transportation projects funded or approved by FHWA or FTA must be analyzed for localized air quality impacts in particulate and CO nonattainment areas. The impact of transportation conformity requirements is limited to nonattainment and maintenance areas for transportation-related criteria pollutants.

The details of the process for integrating air pollution control and transportation planning will evolve over the next few years. But the central requirement will be for transportation projects to fit within the air pollution emissions budget developed as part of the SIP and, in particular, the motor-vehicle-related portion of the emissions budget. For nonattainment areas, each pollutant and associated precursors for which the area is in nonattainment must have an emissions budget, and consistency with this budget must be demonstrated as part of a conformity determination unless transportation sources are an insignificant contributor to the nonattainment status. A regional analysis of emissions from sources in the transportation plan and the TIP must be performed, and if emissions are projected to exceed the motor vehicle emissions budget, there is no conformity.

For moderate or worse ozone nonattainment areas, emissions as of November 15, 1990, plus an amount that accounts for projected growth of emissions in future years, is used as the baseline from which plans are to be developed to obtain a 15 percent reduction by November 15, 1996. This projected growth in emissions is incorporated into the SIP and is the emissions bank account that is to be subject to "withdrawals" as population increases, the number of stationary sources grows, and increases in vehicle miles traveled consume the air emissions account. The challenge for transportation planners is to quantify the air pollution impacts of a project and show that emissions are within the quantities allowed in the SIP. Transportation planning, therefore, is likely to become more holistic as projects that increase emissions are combined with projects that decrease emissions in order to stay within an emissions budget. For severe or worse ozone nonattainment areas, this emissions budgeting requirement is further emphasized by a statutory requirement for "specific enforceable transportation control strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles traveled or numbers of vehicle trips in such area."

The CAA amendments add new requirements to transportation planning. The costs of quantifying emissions and the associated delay will increase the complexity of the transportation planning process. But the most significant challenge will be the need to deal with the engineering trade-offs between increases in the use of transportation and the associated adverse air quality impacts and the need for those involved in planning to minimize these conflicts.

ENDNOTES

¹COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY, THE FIRST ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 62 (1970).

²*Id.* at 63.

³*Id.* at 65.

⁴EPA, NATIONAL AIR QUALITY AND EMISSIONS TRENDS REPORT 1992, 1-2, 1-6, 1-8 (EPA 454/R-93-031, Oct. 1993).

⁵*Id.* at 1-2.

⁶*Id.* at 1-6.

⁷*Id.* Table 3-4, at 3-26.

⁸STACY C. DAVIS & SONJA G. STRONG, TRANSPORTATION ENERGY DATA BOOK: EDITION 13 (Oak Ridge National Laboratory, 3-20, Mar. 1993).

⁹*Id.* at 3-23.

¹⁰Pub. L. No. 91-604, 84 Stat. 1676 (Dec. 31, 1970).

¹¹For nitrogen oxides, the baseline was model year 1971. In 1977 the baseline was changed for future requirements to that specified in CAA § 202(b)(1)(A); 42 U.S.C. 7521.

¹²Pub. L. No. 95-95, 91 Stat. 685 (Aug. 7, 1977).

¹³Pub. L. No. 101-549, 104 Stat. 2399 (Nov. 15, 1990).

¹⁴The national pollutant discharge elimination system, 33 U.S.C. § 1342 (1988).

¹⁵Pub. L. No. 102-240, 105 Stat. 1914 (Dec. 18, 1991).

¹⁶Pub. L. No. 90-148, 81 Stat. 485 (Nov. 21, 1967).

¹⁷Pub. L. No. 91-604, 84 Stat. 1676 (Dec. 31, 1970).

¹⁸CAA § 107; 42 U.S.C. § 7407.

¹⁹CAA §§ 108, 109; 42 U.S.C. §§ 7408, 7409.

²⁰CAA § 172; 42 U.S.C. § 7502.

²¹CAA § 110(a)(2); 42 U.S.C. § 7410(a)(2).

²²CAA § 113; 42 U.S.C. § 7413.

²³General Motors Corp. v. United States, 496 U.S. 530, 110 S. Ct. 2528 (1990). *But see*, Currie, *Relaxation of*

Implementation Plans Under the 1977 Clean Air Act Amendments, 78 MICH. L. REV. 155 (1979).

²⁴CAA § 107; 42 U.S.C. § 7407.

²⁵*See, e.g.*, Olson v. Arizona, 166 Ariz. 455, 803 P.2d 448 (1990).

²⁶CAA § 174(a); 42 U.S.C. § 7504(a).

²⁷Train v. NRDC, 421 U.S. 60 (1975). However, ISTEPA requires long-range transportation plans to demonstrate that resources are reasonably expected to be made available to carry out the plan. 23 U.S.C. § 134(g)(2).

²⁸Appalachian Power Co. v. EPA, 477 F.2d 495 (4th Cir. 1973).

²⁹CAA § 307(b)(1); 42 U.S.C. § 7607(b)(1).

³⁰Connecticut Fund for the Environment v. EPA, 672 F.2d 998 (2d Cir. 1982), *cert. denied*, 459 U.S. 1035 (1982).

³¹Appalachian Power Co., *supra* note 28.

³²Union Electric Co. v. EPA, 427 U.S. 246 (1976).

³³American Lung Association v. Kean, 871 F.2d 319 (3d Cir. 1989).

³⁴National Steel Corp. v. Gorsuch, 700 F.2d 314 (6th Cir. 1983); City of Seabrook, Texas v. EPA, 659 F.2d 1349 (5th Cir. 1981), *cert. denied*, 459 U.S. 822 (1982); Connecticut Fund for the Environment, Inc. v. EPA, 672 F.2d 998 (2d Cir. 1982), *cert. denied*, 459 U.S. 1035 (1982).

³⁵Public Service Co. of Indiana v. EPA, 682 F.2d 626 (7th Cir. 1982), *cert. denied*, 459 U.S. 1127 (1983).

³⁶CAA § 110(k)(3)&(4); 42 U.S.C. § 7410(k)(3)&(4).

³⁷CAA § 110(l); 42 U.S.C. § 7410(l).

³⁸CAA § 110(a)(1); 42 U.S.C. § 7410(a)(1).

³⁹40 C.F.R. § 50.2.

⁴⁰VOCs are defined at 40 C.F.R. § 52.741; NMHC is used in Subchapter II, e.g. CAA § 202(g); 42 U.S.C. § 7521(g).

⁴¹Air Quality Control Regions, Criteria, and Control Techniques, 43 Fed. Reg. 8962 (March 3, 1978).

⁴²To prevent this approach from stopping nearly all growth in developed areas, EPA adopted an "offset policy" on December 21, 1976, that allowed growth in nonattainment areas if air quality continued to improve. This policy was approved by Congress in the 1977 CAA as Subchapter I Part D of the new act.

⁴³Air Quality Control Regions, Criteria, and Control Techniques, 43 Fed. Reg. at 8964.

⁴⁴40 C.F.R. pt. 81.

⁴⁵EPA has interpreted reasonably available control technology to be "the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility [RACT]." The interpretation was upheld in *State of Michigan v. Thomas*, 805 F.2d 176 (6th Cir. 1986). EPA could require RACT in a nonattainment area unless the state demonstrated it could achieve the NAAQS without RACT. Sources could be required to meet RACT requirements without the need for showing the source contributes to nonattainment. *See National Steel Corp., Great Lakes Steel Div. v. Gorsuch*, 700 F.2d 314 (6th Cir. 1983).

⁴⁶*See infra* notes 272-78 and the related text.

⁴⁷CAA § 176; Pub. L. No. 95-95, 91 Stat. 685, 749 (Aug. 7, 1977).

⁴⁸CAA § 176(d); Pub. L. No. 95-95 (Aug. 7, 1977). A more detailed history of the 1977 conformity provision is found in the Transportation Conformity Final Rule at 58 Fed. Reg. 62,188 (Nov. 24, 1993).

⁴⁹Transportation Conformity Final Rule, 58 Fed. Reg. at 62,189.

⁵⁰In July 1987 EPA proposed to reject air pollution control plans for 14 cities because of deficiencies, *State*

Implementation Plans for Nonattainment Areas for Ozone and Carbon Monoxide, 52 Fed. Reg. 26,404 (July 14, 1987). In November 1987 EPA proposed a new round of planning to achieve attainment, *State Implementation Plans; Approval of Post-1987 Ozone and Carbon Monoxide Plan Revisions for Areas Not Attaining the National Ambient Air Quality Standards; Notice*, 52 Fed. Reg. 45,044 (Nov. 24, 1987). EPA believed it had sufficient authority under the CAA to set new attainment dates, but the law was not clear, and the policy of extending deadlines was considered by others to be illegal. U.S. GAO, *EPA's Ozone Policy Is a Positive Step but Needs More Legal Authority*, (GAO/RCED-89-28, Nov. 1988). Under EPA's proposed post-1987 strategy, about 60 nonattainment areas with a combined population of almost 100 million would have up to 8 more years to meet standards. They would escape sanctions if they reduced pollution emissions by at least 3 percent a year. *See State Implementation Plans, Approval of Post-1987 Ozone and Carbon Monoxide Plan Pensions for Areas Not Attaining the National Ambient Air Quality Standards; Notice*.

⁵¹700 F. Supp. 173 (S.D.N.Y. 1988).

⁵²On May 26, 1988, EPA did begin issuing notices of SIP inadequacy and called on states to correct their SIPs. *State Implementation Plans, General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990*, 57 Fed. Reg. 13,498 (1992).

⁵³*See, e.g.*, *Delaney v. EPA*, 898 F.2d 687 (9th Cir.), *cert. denied*, 498 U.S. 998 (1990).

⁵⁴*E.g.*, *Coalition for Clean Air v. Southern California Edison Co.*, 971 F.2d 219 (9th Cir. 1992), *cert. denied*, 113 S. Ct. 1361 (1993); *Delaney v. EPA*, *supra* note 53; *Wisconsin v. Thomas*, No. 87-C-395 29, ENV'T. REP. 1077 (E.D. Wisc. 1989).

⁵⁶See e.g., Proposed Approval, Disapproval of California Air Quality Plan, 55 Fed. Reg. 36,458 (Sept. 5, 1990); Coalition for Clean Air, 971 F.2d at 226.

⁵⁷For the status of areas see 40 C.F.R. pt. 81 (1992).

⁵⁸If the air quality control region attains the primary ambient air quality standard and seeks redesignation under Section 107(d), it must also revise the SIP to provide a maintenance plan for at least 10 years to ensure the NAAQS continues to be met. CAA § 175A; 42 U.S.C. § 7505a.

⁵⁹See State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 57 Fed. Reg. 13,498.

⁶⁰CAA §§ 165(a), 172(c)(5); 42 U.S.C. §§ 7475(a), 7502(c)(5).

⁶¹CAA § 173(a)(1)(A); 42 U.S.C. § 7503(a)(1)(A).

⁶²CAA § 502; 42 U.S.C. § 7661a.

⁶³A SIP in a nonattainment area must require "reasonable further progress." CAA § 172(c)(2); 42 U.S.C. 7502(c)(2). For moderate or worse ozone nonattainment areas RFP requirements mandate that the SIP reduce VOC emissions by 15% by Nov. 15, 1996. CAA § 182(b)(1); 42 U.S.C. 7511a(b)(1).

⁶⁴Citizens for a Better Environment v. Wilson, 775 F. Supp. 1291 (N.D. Cal. 1991).

⁶⁵The transportation and air quality community calls these areas "severe 15" and "severe 17" because of the number of years the areas are given to achieve attainment.

⁶⁶CAA § 181; 42 U.S.C. § 7511.

⁶⁷CAA § 186; 42 U.S.C. § 7512.

⁶⁸CAA § 188; 42 U.S.C. § 7513.

⁶⁹CAA § 110(a)(2)(B); 42 U.S.C. § 7410(a)(2)(B).

⁷⁰CAA § 110(a)(2)(G); 42 U.S.C. § 7410(a)(2)(G).

⁷¹Pub. L. No. 91-605; 84 Stat. 1735 (1970) (codified at 23 U.S.C. § 109(j)).

⁷²Yuhunke, *Clean Air in Our Times? The Amendments to Reform Transportation Planning in the Clean Air Act Amendments of 1990*, TRB LEGAL WORKSHOP (July 23, 1991).

⁷³CAA § 174(a); 42 U.S.C. § 7504(a).

⁷⁴CAA § 174(b); 42 U.S.C. § 7504(b).

⁷⁵CAA § 176(d); 42 U.S.C. § 7506(d).

⁷⁶CAA § 108(f); 42 U.S.C. § 7408(f).

⁷⁷CAA § 110(a)(2)(B); 42 U.S.C. § 7410(a)(2)(B). Air quality maintenance requirements are now found in CAA § 175A.

⁷⁸CAA § 110(a)(2)(G); 42 U.S.C. § 7410(a)(2)(G).

⁷⁹CAA § 172(b)(11)(B); 42 U.S.C. § 7502(b)(11)(B).

⁸⁰CAA § 176(c); 42 U.S.C. § 7506(c). See *supra* notes 45-48 and the associated text.

⁸¹Yuhunke, *supra* note 71.

⁸²CAA § 110(a)(5)(A)(ii); 42 U.S.C. § 7410(a)(5)(A)(ii).

⁸³CAA § 110(c)(2)(B); 42 U.S.C. § 7410(c)(2)(B).

⁸⁴CAA § 110(c)(4); 42 U.S.C. § 7410(c)(4).

⁸⁵CAA § 110(c)(2)(D)&(E); 42 U.S.C. § 7410(c)(2)(D)&(E).

⁸⁶CAA § 108(f); 42 U.S.C. § 7408(f).

⁸⁷CAA § 110(c)(2)(A), (C), (c)(4), (d), (e); 42 U.S.C. § 7410(c)(2)(A), (C), (c)(4), (d), (e).

⁸⁸CAA §§ 108(f)(3)-(4), 176; 42 U.S.C. §§ 7408(f)(3)-(4), 7506.

⁸⁹CAA § 108(f), 42 U.S.C. § 7408(f):

(1) The Administrator shall publish...

(A) information...regarding the formulation and emission reduction potential of transportation control measures related to criteria pollutants and their precursors, including, but not limited to: (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; (iii) employer-

based transportation management plans, including incentives; (iv) trip-reduction ordinances; (v) traffic flow improvement programs that achieve emission 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 emission 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) programs to reduce motor vehicle emissions, consistent with subchapter II of this chapter, which are caused by 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 the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles

and pre-1980 model light duty trucks.

Note, however, that the TCMs described by (xii) and (xvi) are excluded by ISTE. See FEDERAL HIGHWAY ADMINISTRATION, A GUIDE TO THE CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM 15 (1994) [No. FHWA-PD-94-008].

⁹⁰Final documents; Information Regarding the Formulation and Emission Reduction Potential of Transportation Control Measures; Availability, 57 Fed. Reg. 22, 746 (May 29, 1992).

⁹¹CAA § 108(e); 42 U.S.C. § 7408(e).

⁹²CAA § 108(e); 42 U.S.C. § 7408(e)

...Such guidelines shall include information on:

(1) methods to identify and evaluate alternative planning and control activities;

(2) methods of reviewing plans on a regular basis as conditions change or new information is presented;

(3) identification of funds and other resources necessary to implement the plan, including interagency agreements on providing such funds and resources;

(4) methods to assure participation by the public in all phases of the planning process; and

(5) such other methods as the Administrator determines necessary to carry out a continuous planning process.

⁹³CAA § 108(f)(3); 42 U.S.C. § 7408(f)(3). The report was released by EPA on Aug. 20, 1993. ENVTL. REP. 782 (Aug. 27, 1993).

⁹⁴*Id.*

⁹⁵CAA § 108(f)(4); 42 U.S.C. § 7408(f)(4).

⁹⁶42 U.S.C. § 7408(f).

⁹⁷898 F.2d 687 (9th Cir.), *cert. denied*; 498 U.S. 998 (1990).

⁹⁸42 U.S.C. §§ 7408(f)(1)(A), 7410.

⁹⁹898 F.2d at 692 (emphasis added). Note that the 18 measures

referred to by the court were based on the 1977 CAA.

⁹⁹*Id.* See CAA § 108(f)(1)(A)(v), (vi), (vii), (ix), (xiii), (xvii); 42 U.S.C. § 7408(f)(1)(A)(v), (vi), (xiii), (xvii).

¹⁰⁰CAA § 172(b)(11)(C); 42 U.S.C. § 7502(b)(11)(C).

¹⁰¹State Implementation Plans; Approval of 1982 Ozone and Carbon Monoxide Plan Revisions for Areas Needing an Attainment Date Extension, 46 Fed. Reg. 7182, 7188 (Jan. 22, 1981).

¹⁰²EPA, GUIDANCE DOCUMENT FOR CORRECTION OF PART D SIP'S FOR NONATTAINMENT AREAS 32-33 (Jan. 27, 1984).

¹⁰³136 CONG. REC. S16971 (daily ed. Oct. 27, 1990).

¹⁰⁴State Implementation Plans, General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 57 Fed. Reg. 13,498.

¹⁰⁵*Id.* at 13,560.

¹⁰⁶*Id.* at 13,561.

¹⁰⁷*Id.*

¹⁰⁸*Id.*

¹⁰⁹CAA § 181(a)(1); 42 U.S.C. § 7511(a)(1).

¹¹⁰CAA § 182(a); 42 U.S.C. § 7511a(a).

¹¹¹CAA § 182(b)(1); 42 U.S.C. § 7511a(b)(1).

¹¹²CAA § 181(a)(1); 42 U.S.C. § 7511(a)(1).

¹¹³CAA § 182(a)(2)(A); 42 U.S.C. § 7511a(a)(2)(A).

¹¹⁴CAA § 181(a)(1); 42 U.S.C. § 7511(a)(1).

¹¹⁵CAA § 182(b); 42 U.S.C. § 7511a(b).

¹¹⁶Areas may use a percentage of less than 15 percent if they demonstrate to EPA's satisfaction that the SIP includes, among other things, all measures that can feasibly be implemented in light of technological achievability. CAA § 182(b)(1); 42 U.S.C. § 7511a(b)(1).

¹¹⁷CAA § 182(b)(1)(A); 42 U.S.C. § 7511a(b)(1)(A). EPA has provided additional guidance concerning some aspects of the 15 percent reduction requirements in a Memorandum, Office of Air and Radiation, Transportation Conformity Q&A's (May 2, 1994).

¹¹⁸CAA § 182(b)(4); 42 U.S.C. § 7511a(b)(4).

¹¹⁹See generally, Arnold W. Reitze, Jr., and Barry Needleman, *Control of Air Pollution from Mobile Sources through Inspection and Maintenance Programs*, 30 HARV. J. ON LEGIS. 409 (1993).

¹²⁰CAA § 182(b)(3); 42 U.S.C. § 7511a(b)(3).

¹²¹CAA § 182(a)(2)(B)(ii); 42 U.S.C. § 7511a(a)(2)(B)(ii).

¹²²CAA § 182(a)(1); 42 U.S.C. § 7511a(a)(1).

¹²³Inspection/Maintenance Program Requirements, 57 Fed. Reg. 52,950 (Nov. 5, 1992) (Final Rule).

¹²⁴NRDC v. EPA, 22 F.3d 1125 (D.C. Cir. 1994) 38 ERC 1481 (BNA).

¹²⁵CAA § 181(a)(1); 42 U.S.C. § 7511(a)(1).

¹²⁶CAA § 182(c); 42 U.S.C. § 7511a(c).

¹²⁷CAA § 182(c)(3); 42 U.S.C. § 7511a(c)(3).

¹²⁸Inspection/Maintenance Program Requirements, 57 Fed. Reg. at 52,951, 52,953-54 (Nov. 5, 1992).

¹²⁹CAA § 182(c)(3)(C)(vi); 42 U.S.C. § 7511a(c)(3)(C)(vi).

¹³⁰The proposed regulation is Vehicle Inspection and Maintenance Requirements for State Implementation Plans, 57 Fed. Reg. 31,058 (July 13, 1992). See also note 124 and the associated text.

¹³¹CAA § 177; 42 U.S.C. § 7507.

¹³²CAA § 182(c)(2)(B); 42 U.S.C. § 7511a(c)(2)(B).

¹³³CAA § 211(h); 42 U.S.C. § 7545(h).

¹³⁴CAA § 211(k); 42 U.S.C. § 7545(k).

¹³⁵CAA § 182(c)(4); 42 U.S.C. § 7511a(c)(4).

¹³⁶CAA § 182(c)(5); 42 U.S.C. § 7511a(c)(5).

¹³⁷CAA § 181(a)(1); 42 U.S.C. § 7511(a)(1).

¹³⁸CAA § 182(d); 42 U.S.C. § 7511a(d).

¹³⁹CAA § 182(d)(1); 42 U.S.C. § 7511a(d)(1).

¹⁴⁰CAA § 182(d)(1)(B); 42 U.S.C. § 7511a(d)(1)(B).

¹⁴¹CAA § 181(b)(4); 42 U.S.C. § 7511(b)(4).

¹⁴²CAA § 181(a)(2); 42 U.S.C. § 7511(a)(2).

¹⁴³CAA § 181(a)(1); 42 U.S.C. § 7511(a)(1).

¹⁴⁴CAA § 182(e); 42 U.S.C. § 7511a(e).

¹⁴⁵CAA § 182(e)(4); 42 U.S.C. § 7511a(e)(4).

¹⁴⁶There are 22 states with moderate CO nonattainment areas. *EPA Declines to Change Air Quality Standard for Carbon Monoxide*, CLEAN AIR REP., Sept. 23, 1993, at 7.

¹⁴⁷CAA § 186(a)(1); 42 U.S.C. § 7512(a)(1).

¹⁴⁸CAA § 187(a)(1), (5); 42 U.S.C. § 7512a(a)(1), (5).

¹⁴⁹CAA § 187(a)(2)(A); 42 U.S.C. § 7512a(a)(2)(A).

¹⁵⁰CAA § 187(a)(3); 42 U.S.C. § 7512a(a)(3).

¹⁵¹CAA § 187(a)(4), (6); 42 U.S.C. § 7512a(a)(4), (6).

¹⁵²CAA § 211(m); 42 U.S.C. § 7545(m). *But see* CAA § 187(b)(3); 42 U.S.C. § 7512a(b)(3).

¹⁵³Los Angeles is the only serious CO nonattainment area. *EPA Declines to Change Air Quality Standard for Carbon Monoxide*, CLEAN AIR REP., Sept. 23, 1993, at 6, 7.

¹⁵⁴CAA § 186(a)(1); 42 U.S.C. § 7512(a)(1).

¹⁵⁵CAA § 187(b)(1); 42 U.S.C. § 7512a(b)(1).

¹⁵⁶CAA § 187(b)(2); 42 U.S.C. § 7512a(b)(2).

¹⁵⁷CAA § 187(d)(1); 42 U.S.C. § 7512a(d)(1).

¹⁵⁸CAA § 182a(g)(4); 187(d)(3), 42 U.S.C. §§ 7511a(g)(4), 7512a(d)(3).

¹⁵⁹This material is drawn from State Implementation Plans: General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 57 Fed. Reg. 13,498, 13,566 (Apr. 16, 1992).

¹⁶⁰CAA § 173(a)(4); 42 U.S.C. § 7503(a)(4).

¹⁶¹CAA § 179(a); 42 U.S.C. § 7509(a).

¹⁶²42 U.S.C. § 7410(m).

¹⁶³Criteria for Exercising Discretionary Sanctions Under Title I of the Clean Air Act, 59 Fed. Reg. 1476 (Jan. 11, 1994) [hereinafter Final Criteria].

¹⁶⁴*Id.*, at 1477, 1478.

¹⁶⁵The CAA includes specific sanctions concerning permitting requirements. CAA § 502(d), (i); 42 U.S.C. § 7661(d), (i). The finding regarding the permit program is not a finding under § 179(a); thus § 110(m) does not apply to the use of sanctions for addressing permit-related failures.

¹⁶⁶*Air Pollution: Penalties for Inadequate SIP Submissions Would Follow Sequence Under EPA Proposal*, 24 ENV'T. REP. 1004 (Oct. 1, 1993).

¹⁶⁷*Id.*

¹⁶⁸Final Criteria, 59 Fed. Reg. at 1476.

¹⁶⁹*Id.* at 1478; 40 C.F.R. § 52.30(c).

¹⁷⁰*Id.*

¹⁷¹Although § 110(m) refers to the sanctions in § 179(b), there is no language stating that the same geographical limitations must apply. § 110(m) refers only to the sanctions themselves, not the accompanying limitations. The language of § 110(m) sets forth its own, broader limitations by expressly providing that sanctions may be imposed on an entire state or any portion of a state. § 110(m) states, "The Administrator may apply any of the sanctions listed in section 179(b)...with respect to any portion of

the State the Administrator determines reasonable and appropriate....¹⁷³ Therefore, although the administrator may impose § 110(m) sanctions on any area of the state, the offset sanction may only affect nonattainment areas or attainment areas that are otherwise subject to § 173. The highway sanction is not limited in such a manner and could be effective in all areas of a state.

¹⁷³23 C.F.R. pt. 450; 49 C.F.R. pt. 613.

¹⁷³Statewide Planning; Metropolitan Planning, 58 Fed. Reg. 58,040 (Oct. 28, 1993) (Final Rule).

¹⁷⁴23 U.S.C. 134(h)

¹⁷⁵58 Fed. Reg. at 58,068

¹⁷⁶Transportation Conformity NPRM, 58 Fed. Reg. 3768 (1993).

¹⁷⁷*Id.*

¹⁷⁸*Id.*

¹⁷⁹Prior to the implementation of a federally assisted transportation project there must be a project development/analysis of alternatives and a final design. The project development/analysis of alternatives gathers detailed information on the impacts of several potential project alternatives. The environmental, social, and economic impacts of the alternatives are analyzed, and the NEPA environmental assessments and impact statements are prepared. After public review and comment, a final NEPA document is prepared. NEPA requires the consideration of reasonable alternatives, but it does not require the environmentally preferred alternative to be chosen. FHWA or FTA must approve the final environmental document. "Once the environmental process is completed, the final design is developed, construction plans, specifications, and estimates are developed, cost estimates are refined, and rights-of-way are acquired. The project may then proceed to construction." *Id.* at 3769.

¹⁸⁰Transportation Conformity Final Rule, 58 Fed. Reg. at 62,188 (Nov. 24, 1993).

¹⁸¹Pub. L. No. 102-240, sec. 1025, 105 Stat. 1914 (Dec. 18, 1991).

¹⁸²49 U.S.C. app. § 1607.

¹⁸³23 C.F.R. pt. 450 and 49 C.F.R. pt. 613.

¹⁸⁴Statewide Planning; Metropolitan Planning, 58 Fed. Reg. 58,040 (Oct. 28, 1993) [hereinafter DOT Final Rule].

¹⁸⁵This rule replaces the interim guidance found in Intermodal Surface Transportation Efficiency Act of 1991; Implementation Guidance, 57 Fed. Reg. 14,943 (Apr. 23, 1992) (notice), ISTEA of 1991; Implementation Guidance, 58 Fed. Reg. 128 (Jan. 4, 1993) and the notice of proposed rulemaking found in Metropolitan Planning, 58 Fed. Reg. 12,064 (Mar. 2, 1993) and Statewide Transportation Planning, 58 Fed. Reg. 12,084 (Mar. 2, 1993).

¹⁸⁶CAA § 108(f); 42 U.S.C. § 7408(f).

¹⁸⁷See e.g., D'Vers Cohn, *Md., Va. May Go Separate Ways on Clean Air*, WASH. POST, Sept. 18, 1993, at B2.

¹⁸⁸CAA § 182(b)(1); 42 U.S.C. § 7511a(b)(1).

¹⁸⁹METROPOLITAN WASHINGTON AIR QUALITY COMMITTEE, THE CLEAN AIR CHALLENGE: RECOMMENDED AIR QUALITY CONTROL MEASURES FOR 15% EMISSIONS REDUCTION PLAN, (Metro. Wash. Council of Governments, Aug. 4, 1993) at 7.

¹⁹⁰*State Seeks Redesignation of Denver as Serious Non-attainment Area for CO*, ENV'T. REP., Nov. 22, 1993, at A-4.

¹⁹¹Pub. L. No. 87-866; 76 Stat. 1145 (1962).

¹⁹²U.S. GAO, ACTIVITIES TO REDUCE TRAVEL DEMAND AND AIR POLLUTION ARE NOT WIDELY IMPLEMENTED 21 (GAO/PEMD-93-2, Nov. 1992) [hereinafter GAO].

¹⁹³Pub. L. No. 90-577, 82 Stat. 1103 (1968) (codified at 40 U.S.C. § 531 *et. seq.*).

¹⁹⁴These clearinghouses were established by the Bureau of the Budget Circular A-95 and, thus, became known as A-95 agencies: When MPOs came into existence they became responsible for interagency coordination. GAO *supra* note 192, at 21.

¹⁹⁵23 C.F.R. § 450.104.

¹⁹⁶Separate funding for urban transportation planning became available under the 1973 Federal-Aid Highway Act. Pub. L. No. 93-87, 87 Stat. 250 (1973).

¹⁹⁷§ 1024, Pub. L. No. 102-240, 105 Stat. 1955 (Dec. 18, 1991).

¹⁹⁸An MPO is to be designated for each urbanized area of over 50,000 population. 23 U.S.C. § 134(b)(1).

¹⁹⁹23 U.S.C. § 134(a).

²⁰⁰These are terms defined by the Bureau of the Census. 23 U.S.C. § 134(c).

²⁰¹23 U.S.C. § 134(c).

²⁰²23 U.S.C. § 134(e).

²⁰³23 U.S.C. § 134(f); 23 C.F.R. § 450.316.

²⁰⁴23 U.S.C. § 134(g).

²⁰⁵*Id.*

²⁰⁶23 C.F.R. § 450.324.

²⁰⁷23 U.S.C. § 134(h).

²⁰⁸A list of areas to be designated as transportation management areas is found in Intermodal Surface Transportation Efficiency Act of 1991; Implementation Guidance, 57 Fed. Reg. 14,880, 14,949 (April 23, 1992).

²⁰⁹23 U.S.C. § 134(i).

²¹⁰23 U.S.C. § 134(i)(3). Metropolitan areas not designated as transportation management areas may be allowed to use abbreviated transportation plans and programs. 23 U.S.C. § 134(j).

²¹¹23 U.S.C. § 134(l).

²¹²*Id.*

²¹³23 U.S.C. § 149.

²¹⁴GAO, *supra* note 192, at 33.

²¹⁵23 U.S.C. § 134(i)(3), 49 U.S.C. app. § 1607. See also FEDERAL HIGHWAY ADMINISTRATION, A GUIDE TO THE CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM, 17-26, (1994) [No. FHWA-PD-94-008], for a listing of the 117 MPOs in 37 states and the District of Columbia that are in ozone and CO nonattainment areas.

²¹⁶GAO, *supra* note 192, at 33.

²¹⁷*Id.* at 4.

²¹⁸*Id.* at 25.

²¹⁹*Id.* at 26.

²²⁰See *supra* notes 160-72 and the associated text.

²²¹From 1975 to 1983, each MPO was required to include a transportation systems management (TSM) element in its short-range plan to qualify for federal-aid highway or mass transit funds. The TSM program, designed to reduce traffic congestion in urban areas, had its roots in programs developed under the Federal-Aid Highway Act of 1968 (Pub. L. No. 90-495, 82 Stat. 816 (1968)) and in the Emergency Highway Energy Conservation Act of 1974 (Pub. L. No. 93-239, 87 Stat. 1046 (1974)). TSM plans were to use low-cost techniques to control transportation supply and demand. Supply management involved using techniques such as traffic-signal coordination to maximize the capacity of the transport system, while demand management focused on reducing vehicle miles traveled or lowering the number of vehicle trips. In 1975, the FHWA and the Urban Mass Transportation Administration (now the FTA) promulgated regulations providing for MPOs to conduct local transportation planning, both long and short term. This planning required a TIP to contain all transportation projects that were to be federally funded in urban areas in a 5-year period. This short-term plan was to contain an "annual element" to be used for federal funding decisions each year.

From 1975 until 1983 the TSM program was primarily shaped by the 1975 planning regulations. When new regulations were promulgated in 1983, the federal role in urban transportation planning declined. A TSM element in short-term plans was no longer required. MPOs became increasingly subject to state requirements and funding as federal funds were reduced and federal planning requirements were relaxed.

²²²GAO, *supra* note 192, at 23, 34-35.

²²³The most common supply management activities are traffic signal improvements, restriping and widening roads without major construction, incident management and motorist aid programs, and real-time highway surveillance and control systems. *Id.* at 28.

²²⁴Demand management TSM activities include ridesharing programs; park-and-ride lots; high-occupancy-vehicle lanes, ramp meters, or toll bypass lanes; off-peak-hour use of central business district by trucks; auto-use restrictions; parking management programs; trip reduction ordinances; peak-period fees and congestion pricing; provisions to reduce work or nonwork trips. *Id.* at 28-29.

²²⁵*Id.* at 36.

²²⁶*Id.* at 37.

²²⁷*Id.*

²²⁸*Id.* at 38.

²²⁹*Id.* at 41.

²³⁰*Id.* at 42.

²³¹*Id.* at 45.

²³²*Id.* at 47.

²³³*Id.*

²³⁴*Id.*

²³⁵*Id.* at 48.

²³⁶*Id.* at 49.

²³⁷*Id.* at 50.

²³⁸Under the current regulation, to the extent possible, only one MPO is to be designated for each urbanized area. 23 C.F.R. § 450.306; DOT Final Rule, 58 Fed. Reg. at 58,070.

²³⁹GAO, *supra* note 192, at 51.

²⁴⁰*Id.* at 53.

²⁴¹*Id.* at 55.

²⁴²*Id.*

²⁴³*Id.*

²⁴⁴*Id.* at 7.

²⁴⁵Pub. L. No. 102-388; 106 Stat. 1520 (1992).

²⁴⁶49 U.S.C. app. § 1601 *et seq.*

²⁴⁷DOT Final Rule, 58 Fed. Reg. at 58,040.

²⁴⁸*Id.* at 58,046, 58,067; 23 C.F.R. § 450.212.

²⁴⁹DOT Final Rule, 58 Fed. Reg. at 58,066; 23 C.F.R. § 450.210(a)(5).

²⁵⁰Metropolitan Planning NPRM 58 Fed. Reg. at 12,086. This was not materially changed by the final rule. DOT Final Rule, 58 Fed. Reg. at 58,046.

²⁵¹Requirements for metropolitan transportation plans are specified under 23 U.S.C. § 134.

²⁵²DOT Final Rule, 58 Fed. Reg. at 58,067; 23 C.F.R. § 450.214.

²⁵³*Id.* at 58,068; 23 C.F.R. § 450.216.

²⁵⁴*Id.*

²⁵⁵*Id.* Conformity requirements are found at 40 C.F.R. pt. 51. See also 23 C.F.R. § 450.216(a).

²⁵⁶49 U.S.C. app. §§ 1602, 1607a, 1612, 1614 *et seq.*; DOT Final Rule, 58 Fed. Reg. at 58,068.

²⁵⁷DOT Final Rule, 58 Fed. Reg. at 58,068. See also *infra* notes 451-57 and accompanying text.

²⁵⁸23 C.F.R. § 450.216.

²⁵⁹The list of applicable federal laws is found at 23 C.F.R. § 450.220; DOT Final Rule, 58 Fed. Reg. at 58,069.

²⁶⁰DOT Final Rule, 58 Fed. Reg. at 58,069, 23 C.F.R. § 450.222.

²⁶¹DOT Final Rule, 58 Fed. Reg. at 58,043.

²⁶²23 C.F.R. § 450.212(b); 58 Fed. Reg. 58,067 (Dec. 1, 1993).

²⁶³23 C.F.R. § 450.214(c)(3); 58 Fed. Reg. 58,068.

²⁶⁴23 C.F.R. § 450.316(b)(1); 58 Fed. Reg. 58,073.

²⁶⁵CAA § 176(c)(1)(A); 42 U.S.C. § 7506(c)(1)(A).

²⁶⁶*Id.*

²⁶⁷CAA § 176(c)(1)(B); 42 U.S.C. § 7506(c)(1)(B).

²⁶⁸Determining Conformity of General Federal Actions to State or Federal Implementation Plans, 58 Fed. Reg. 63,214 (Nov. 30, 1993).

²⁶⁹Provisions of CAA § 176(c) may be summarized as follows:

(1) Before the federal government engages in, supports, or gives financial assistance, or a license or a permit, CAA § 176(c) requires that the activity must conform to an approved SIP. No MPO shall approve a project, program, or plan unless it conforms to an approved or promulgated SIP.

Conformity means:

(A) eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards; and

(B) that such activities will not (i) contribute to any new violations of any standard in any area, (ii) cause or increase the frequency or severity of any existing violation of any standard in any area, or (iii) delay timely attainment of any standard, any required interim emission reductions, or other milestones in any areas.

(2) Any transportation plan or program developed under Title 23 or the Urban Mass Transportation Act is to implement the transportation provision of the applicable SIP. No federal agency may approve, accept, or fund any transportation plan, program, or project unless it conforms to any applicable implementation plan.

(A) No transportation plan or TIP may be adopted by an MPO unless emissions from the plan or program are consistent with estimates of emissions from motor vehicles and necessary emissions reductions required in the SIP.

(B) No recipient of funds under Title 23 or the Urban Mass Transportation Act may adopt a TIP unless there is timely implementation of the TCMs in the applicable SIP.

(C) A transportation project may be adopted or approved only if it comes from a conforming plan and program and significant changes have not occurred since the conformity finding.

(D) A project, not referred to in subparagraph (c), conforms only if its emissions and all other projected emissions do not cause total emissions to exceed emissions projections in the applicable implementation plan.

(3) Until a SIP revision with the conformity assessing provisions is approved, conformity is demonstrated if:

(A) a plan or program is (i) consistent with mobile source emission estimates; (ii) provides for expeditious implementation of TCMs; and (iii) contributes to emission reductions in ozone and CO nonattainment areas.

(B) the transportation projects must (i) come from a conforming plan and program and (ii) in CO nonattainment areas, transportation projects must reduce the severity and number of CO violations in the area substantially affected by the project.

(4) (A) By Nov. 15, 1991, the administrator was required to promulgate criteria and procedures for determining conformity except for transportation plans, programs, and projects. By the same date, the administrator, with the concurrence of the secretary of transportation, was to promulgate criteria and procedures for demonstrating conformity with transportation plans, programs, and projects.

(B) At a minimum the procedures and criteria shall, (i) address the consultative procedures between the MPO and the secretary of transportation with state and local air quality

agencies and the state department of transportation used to make conformity determinations; (ii) determine the frequency of conformity determinations that are to be made at least every 3 years; and (iii) address how conformity determinations will be made with respect to maintenance plans.

(C) By Nov. 15, 1992, each state is to revise its SIP to include criteria and procedures for assessing the conformity of any plan, program, or project that is subject to conformity requirements.

(D) Any federal agency that conducts or supports any program with air-quality-related transportation consequences is to give priority to implementation of those plans that meet conformity requirements to achieve and maintain national primary ambient air quality standards. This paragraph extends to, but is not limited to, authority exercised under the Urban Mass Transportation Act [49 U.S.C. App. § 1601 *et seq.*], Title 23, and the Housing and Urban Development Act.

²⁷⁰Transportation Conformity Final Rule, 58 Fed. Reg. at 62,197 (Nov. 24, 1993).

²⁷¹*Id.* at 62,190.

²⁷²CAA § 176(c)(3)(B); 42 U.S.C. § 7506(c)(3)(B)(ii).

²⁷³Transportation Conformity Final Rule, 58 Fed. Reg. at 62,188.

²⁷⁴*Id.* at 62,201; 40 C.F.R. § 51.396.

²⁷⁵CAA § 174(a); 42 U.S.C. § 7504(a). The 1977 amendments to the CAA made it clear that the MPO should be the organization that develops the transportation portion of the SIP.

²⁷⁶BNA, THE CLEAN AIR ACT AMENDMENTS: BNA'S COMPREHENSIVE ANALYSIS OF THE NEW LAW 48 (1991).

²⁷⁷See A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1977, Vol. 3 (Committee Print, 95th Cong., 2d Sess. 536, 775, 1383).

²⁷⁸S. Rep. No. 228, 101st Cong., 2d Sess. 26, reprinted in 1990 U.S. Code CONG. ADMIN. NEWS 3385, 3412 [hereinafter Senate Report].

²⁷⁹Air Quality Conformity and Priority Procedures for Use in Federal-Aid Highway and Federally Funded Transit Programs, 46 Fed. Reg. 8426 (Jan. 26, 1981). The rule amended 23 C.F.R. pt. 770 (FHWA Air Quality Guidelines) and added 49 C.F.R. pt. 623 (UMTA Air Quality Conformity and Priority Procedures).

²⁸⁰See Senate Report, *supra* note 278, at 28, 1990 U.S. Code CONG. ADMIN. NEWS at 3414. Although about 5 pages of legislative history on conformity was included in the Senate Report, not much specific guidance concerning conformity regulations is found in the legislative history of the 1990 CAA amendments.

²⁸¹See *id.* at 27, 1990 U.S. CODE CONG. ADMIN. NEWS at 3413.

²⁸²*Id.* at 26; 1990 U.S. CODE CONG. ADMIN. NEWS at 3412.

²⁸³*Id.*

²⁸⁴*Id.*

²⁸⁵*Id.* at 27; 1990 U.S. CODE CONG. ADMIN. NEWS at 3413.

²⁸⁶23 U.S.C. § 134(l).

²⁸⁷*Id.*

²⁸⁸*Id.*

²⁸⁹CAA § 179(b)(1); 42 U.S.C. § 7509(b)(1).

²⁹⁰Senate Report, *supra* note 278, at 27; 1990 U.S. CODE CONG. ADMIN. NEWS at 3414.

²⁹¹*Id.*

²⁹²*Id.*

²⁹³*Id.* at 29, 1990 U.S. CODE CONG. ADMIN. NEWS at 3415.

²⁹⁴*Id.*

²⁹⁵*Id.*

²⁹⁶*Id.*

²⁹⁷*Id.*

²⁹⁸*Id.*

²⁹⁹CAA § 176(c)(2)(D); 42 U.S.C. § 7506(c)(2)(D).

³⁰⁰See Senate Report, *supra* note 278, at 30; 1990 U.S. Code CONG. ADMIN. NEWS at 3416.

³⁰¹*Id.*

³⁰²*Id.*

³⁰³This information is taken from an FHWA information release with no date or author. It was later published as Reid Alsop, *Clean Air Act Litigation Involving FHWA*, NATURAL LAWYER, July 1993, at 6. The information is updated from DOT sources.

(1) Environmental Defense Fund v. Browner, No. C-92-1636-TEH (N.D. Cal. filed Apr. 30, 1992). Plaintiffs seek to compel EPA and DOT to promulgate regulations governing the conformity of federal and federally assisted projects with SIPs on the grounds that EPA and DOT failed to meet the statutory deadline contained in § 176(c)(4) of the CAA. The case was settled without an opinion.

(2) The Laguna Greenbelt, Inc. v. U.S. Department of Transportation, No. C-93-0252 MHP (N.D. Cal. filed Jan. 22, 1993). Plaintiffs seek to halt construction of a toll facility (the San Joaquin Hills Transportation Corridor) in Orange County, Calif. They contend that the project does not comply with the conformity requirements of the CAA because (a) it has changed in design, concept, and scope from the project that was described in the long-range plan and the TIP when the plan and TIP were found to conform, and (b) it does not reduce the severity and number of CO violations in the project's vicinity. They also allege violations of NEPA and § 4(f). On March 19 the court granted defendants motion to transfer the case to the Central District (Los Angeles).

(3) Clean Air Act Alternative Coalition, Inc. v. U.S. Department of Transportation, No. C-93-0721-VRW (N.D. Cal. filed Mar. 2, 1993). Plaintiffs seek to halt construction of the I-880/Cypress Replacement Highway in Oakland, California. They contend

that (a) the project does not come from a conforming plan or TIP because it was not adequately described in the plan or TIP, (b) it could not have been contained in a conforming TIP because the design, concept, and scope of the project has been changed significantly since the time the TIP was found to conform, and (c) the air quality consequences of the project were not determined either at the time of TIP conformity or when the ROD was approved. They also contend that the project violates the air quality requirements of 23 U.S.C. 109(j). In addition, plaintiffs allege failure to comply with the Civil Rights Act, NEPA, § 4(f), the National Historic Preservation Act, and other provisions of Title 23. The case was settled without an opinion.

(4) Conservation Law Foundation v. FHWA, No. 393-CV-00561 (D. Conn. filed Mar. 18, 1993). Plaintiffs allege that the transportation plans and TIPs developed by three MPOs in southwestern Connecticut do not conform with the SIP, as required by § 176(c) of the CAA. They contend that the conformity determinations made by the MPOs and by FHWA violate the CAA because the plans and TIPs do not adequately demonstrate annual reductions in emissions as required by the CAA. Plaintiffs seek to invalidate the MPO and FHWA conformity determinations and to require that future conformity determinations demonstrate the contribution air quality that they contend the CAA requires.

³⁰⁴American Road & Transp. Builders Ass'n v. EPA, No. 93-1830 (D.C. Cir. filed Dec. 8, 1993). This case is the consolidation of five cases brought against the EPA in the Court of Appeals for the D.C. Circuit concerning conformity regulations. The general conformity regulations were challenged by the Conservation Law Foundation and the City of Tempe, Ariz. The transportation conformity

regulations were challenged by the American Road and Transportation Builders Association and the Environmental Defense Fund. The South Coast Air Quality District challenged both sets of regulations. This resulted in the consolidation of the challenges from all five groups.

³⁰⁵827 F. Supp. 871 (D.R.I. 1993).

³⁰⁶57 Fed. Reg. 14,943 (Apr. 23, 1992).

³⁰⁷Management and Monitoring Systems, 58 Fed. Reg. 12,096, 12,121-22 (Mar. 2, 1993).

³⁰⁸Conservation Law Foundation, 827 F. Supp. at 890.

³⁰⁹Conservation Law Foundation v. Federal Highway Administration, 24 F.3d 1465 (1st Cir. 1994), 1994 WL 192435 (1st Cir. (R.I.)).

³¹⁰42 U.S.C. §§ 4321-47.

³¹¹33 U.S.C. § 1344(a).

³¹²49 U.S.C. § 303(c).

³¹³CAA § 176; 42 U.S.C. 7506.

³¹⁴24 F.3d 1465 at 1477-78 (1994).

³¹⁵42 U.S.C. § 7604(f)(1).

³¹⁶CAA § 182(b)(1); 42 U.S.C. § 7511a(b)(1).

³¹⁷*Supra* note 309.

³¹⁸Summary of EPA/DOT Guidance for Interim Conformity Procedures (June 7, 1991) [hereinafter Interim Procedures]. The final regulation was promulgated at 58 Fed. Reg. 62,188 (Nov. 24, 1993).

³¹⁹The EPA/DOT guidance governed in any situation where existing regulations and/or guidance conflict. However, it did not supersede agreements reached among DOT, EPA, and MPOs prior to its issuance, regarding analytical methodology, approval criteria, or completed MPO conformity findings.

³²⁰Analytical techniques for modeling particulates are not well developed. Therefore, in the interim, a particulates conformity determination could be based on a qualitative assessment agreed to by DOT, EPA, and MPOs.

³²¹Interim Procedures, *supra* note 318.

³²²Projects approved by DOT prior to Nov. 15, 1990, could proceed without further conformity determinations. Projects derived from TIPs found to conform between Nov. 15, 1987, and Nov. 15, 1990, were considered to conform until Nov. 15, 1991. For this conformity determination to continue beyond that date, projects had to have received NEPA approval by Nov. 15, 1991.

³²³Transportation Conformity NPRM, 58 Fed. Reg. 3768 (Jan. 11, 1993).

³²⁴Transportation Conformity Final Rule, 58 Fed. Reg. at 62,188.

³²⁵Determining Conformity of General Federal Actions to State or Federal Implementation Plans, 58 Fed. Reg. 63,214, 63,215 (Nov. 30, 1993) (final rule). The new rule supersedes the 1979 and 1985 conformity rules found at 40 C.F.R. § 6.303.

³²⁶Transportation Conformity Final Rule, 58 Fed. Reg. at 62,188, 62,189.

³²⁷*Id.* at 62,188.

³²⁸*Id.* at 62,189.

³²⁹*Id.*; 40 C.F.R. § 51.400(d).

³³⁰These actions are subject to regulations found in Determining Conformity of General Federal Actions to State or Federal Implementation Plans, 58 Fed. Reg. 63,214 (Nov. 30, 1993).

³³¹Transportation Conformity Final Rule, 58 Fed. Reg. at 62,219; 40 C.F.R. § 51.402.

³³²*Id.*

³³³Transportation Conformity Final Rule, 58 Fed. Reg. at 62,189; 40 C.F.R. § 51.394.

³³⁴*Id.* at 62,210.

³³⁵*Id.* at 62,223; 40 C.F.R. § 51.422.

³³⁶*Id.* at 62,219; 40 C.F.R. § 51.400.

³³⁷*Id.*

³³⁸*Id.* The regulation does not specify, but presumably the earlier date would control.

³³⁹*Id.*

³⁴⁰*Id.*

³⁴¹*Id.* at 62,228; 40 C.F.R. § 51.448(a)(2).

³⁴²*Id.* at 62,220; 40 C.F.R. § 51.404.

³⁴³*Id.* at 62,221; 40 C.F.R. § 51.408.

³⁴⁴*Id.*; 40 C.F.R. § 51.410.

³⁴⁵*Id.* at 62,223; 40 C.F.R. § 51.428.

³⁴⁶*Id.* A plan that mitigates some factors may exacerbate others. For example, a plan that reduces congestion (thereby reducing VOC emissions) may still be found not to conform because it will result in vehicles traveling faster, which would cause a slight increase in nitrogen oxide emissions. Even though the nitrogen-oxide-emission increase may be slight, it may require an offset before the plan will be found in conformity.

³⁴⁷*Id.* at 62,221, 40 C.F.R. §§ 51.434-446

³⁴⁸*Id.* at 62,221, 40 C.F.R. § 51.412.

³⁴⁹*Id.* at 62,221, 40 C.F.R. § 51.414.

³⁵⁰*Id.* at 62,222; 40 C.F.R. § 51.418(c)(3).

³⁵¹*Id.* at 62,218, 40 C.F.R. § 51.394.

³⁵²For a list of exemptions, see *id.* at 62,233; 40 C.F.R. § 51.460.

³⁵³*Id.* at 62,223, 40 C.F.R. § 51.422.

³⁵⁴*Id.* at 62,223, 40 C.F.R. § 51.424.

³⁵⁵*Id.* at 62,230.

³⁵⁶*Id.* at 62,216.

³⁵⁷*Id.* at 62,231.

³⁵⁸*Id.* at 62,211, 62,230; 40 C.F.R. § 51.452.

³⁵⁹*Id.* at 62,190. Maintenance areas are former nonattainment areas that have attained the NAAQS for a criteria pollutant. CAA § 175A; 42 U.S.C. § 7505a.

³⁶⁰*Id.* at 62,218; 40 C.F.R. § 51.394(b).

³⁶¹*Id.* EPA has asked for comments concerning requiring conformity determinations in urbanized areas and the contiguous areas likely to become urbanized in the next 20 years that are in attainment but exceed 85 percent of the annual NAAQS for ozone, nitrogen oxide, particulates, or the

particulate hourly standard. *Id.* at 62,190.

³⁶²*Id.* at 62,191.

³⁶³*Id.* at 62,191.

³⁶⁴"Reasonable further progress" is required by §§ 182(b)(1) and 187(a)(7) and referenced by § 176(c)(3)(A)(iii) of the CAA.

³⁶⁵Transportation Conformity Final Rule, 58 Fed. Reg. at 62,191. The deadline for submitting a conformity SIP revision is Nov. 25, 1994. *Id.* at 62,218; 40 C.F.R. § 51.396.

³⁶⁶*Id.* at 62,228.

³⁶⁷*Id.* at 62,190.

³⁶⁸*Id.* at 62,222.

³⁶⁹*Id.* at 62,191.

³⁷⁰*Id.* at 62,217. The precise beginning and end of the transitional period is defined at 40 C.F.R. § 51.448.

³⁷¹*Id.* at 62,228; 40 CFR § 51.448.

³⁷²*Id.* at 62,191.

³⁷³*Id.* at 62,222; 40 C.F.R. § 51.418(a).

³⁷⁴*Id.* at 62,228; 40 C.F.R. § 51.448(b).

³⁷⁵*Id.* at 62,216; 40 C.F.R. § 51.392.

³⁷⁶*Id.* at 62,192.

³⁷⁷*Id.* at 62,222, 40 C.F.R. § 51.418(a).

³⁷⁸*Id.* at 62,217, 40 C.F.R. § 51.392.

³⁷⁹*Id.* at 62,222, 40 C.F.R. § 51.418(a).

³⁸⁰CAA § 176(c)(2)(A); 42 U.S.C. § 7506(c)(2)(A).

³⁸¹Transportation Conformity Final Rule, 58 Fed. Reg. at 62,193. The Motor Vehicle Emissions Budget is covered at *id.* 62,193-62,196. The SIP allocates emission reductions to highway and nonhighway sources. This creates an emissions budget for highway sources that acts as a ceiling on transportation plan and TIP emissions.

³⁸²*Id.* at 62,222; 40 C.F.R. § 51.418(a).

³⁸³*Id.* at 62,197.

³⁸⁴*Id.* at 62,198.

³⁸⁵*Id.* at 62,222; 40 C.F.R. § 51.418(c)(3).

³⁸⁸*Id.* at 62,199.

³⁸⁷CAA § 113; 42 U.S.C. § 7413.

³⁸⁸Transportation Conformity Final Rule, 58 Fed. Reg. at 62,199.

³⁸⁹*Id.* at 62,232; 40 C.F.R. § 51.458.

³⁹⁰*Id.* at 62,200, 62,219; 40 C.F.R. § 51.400(d).

³⁹¹*Id.* at 62,201.

³⁹²*Id.* at 62,201, 62,219. See 40 C.F.R. § 51.402.

³⁹³*Id.* at 62,201.

³⁹⁴*Id.*

³⁹⁵*Id.* at 62,220, 40 C.F.R. § 51.402(d).

³⁹⁶*Id.* at 62,201, 62,219.

³⁹⁷23 C.F.R. § 450.

³⁹⁸Transportation Conformity Final Rule, 58 Fed. Reg. at 62,219; 40 C.F.R. § 51.400.

³⁹⁹*Id.* SIP revisions also trigger conformity requirements. *Id.* at 62,202.

⁴⁰⁰*Id.*

⁴⁰¹*Id.*

⁴⁰²*Id.*

⁴⁰³*Id.* at 62,203.

⁴⁰⁴*Id.* at 62,204.

⁴⁰⁵CAA § 176(c)(2)(C); 42 U.S.C. § 7506(c)(2)(C); 40 C.F.R. § 51.450.

⁴⁰⁶Transportation Conformity Final Rule, 58 Fed. Reg. at 62,204.

⁴⁰⁷*Id.* at 62,217.

⁴⁰⁸*Id.* at 62,204.

⁴⁰⁹*Id.* at 62,205.

⁴¹⁰*Id.* at 62,206.

⁴¹¹*Id.* at 62,207.

⁴¹²*Id.* at 62,218; 40 C.F.R. § 51.396.

⁴¹³Pub. L. No. 102-240, § 1003(a)(4), 105 Stat. 1918 (Dec. 18, 1991).

⁴¹⁴Pub. L. No. 102-240, § 1012(b), 105 Stat. 1936.

⁴¹⁵Intermodal Surface Transportation Efficiency Act of 1991: Implementation Guidance—Part II, 58 Fed. Reg. 128, 146 (1993) [hereinafter Implementation Guidance]. This is the publication of a guidance memorandum of Oct. 16, 1992. The publication is intended as nonbinding guidance and should not be construed as a rule of general applicability and legal effect.

An earlier interim guidance memorandum dated Feb. 20, 1992, was published at 57 Fed. Reg. 14,880, 14,922 (Apr. 23, 1992).

⁴¹⁶58 Fed. Reg. at 146.

⁴¹⁷For details on funding for particulate nonattainment areas, see *id.* at 148.

⁴¹⁸*Id.*

⁴¹⁹*Id.* at 149.

⁴²⁰23 U.S.C. § 217.

⁴²¹Implementation Guidance, 58 Fed. Reg. at 149, 150.

⁴²²*Id.*

⁴²³*Id.*

⁴²⁴*Id.*

⁴²⁵*Id.*

⁴²⁶*Id.*

⁴²⁷*Id.* at 151.

⁴²⁸*Id.* at 152.

⁴²⁹*Id.*

⁴³⁰*Id.* at 153.

⁴³¹Implementation Guidance, 58 Fed. Reg. at 148.

⁴³²23 U.S.C. § 303(a)(g). The six management systems are (1) highway pavement of federal-aid highways, (2) bridges on and off federal-aid highways; (3) highway safety, (4) traffic congestion, (5) public transportation facilities and equipment, and (6) intermodal transportation facilities and systems.

⁴³³Implementation Guidance, 58 Fed. Reg. at 149.

⁴³⁴23 U.S.C. § 303(b), (g).

⁴³⁵Implementation Guidance, 58 Fed. Reg. at 149.

⁴³⁶*Id.*

⁴³⁷*Id.* at 150.

⁴³⁸*Id.*

⁴³⁹*Id.*

⁴⁴⁰For funding of initiatives that are privately owned, see *supra* notes 424–26 and the accompanying text. A private-sector activity that is eligible for funding under the CAA is one (1) that is normally is a public-sector responsibility (such as facility development for enhanced LM programs in test-only networks), (2) where private

ownership or operation is shown to be cost-effective, and (3) where the state is responsible for protecting the public interest and public investment inherent in the use of federal funds.

⁴⁴¹Implementation Guidance, 58 Fed. Reg. at 150.

⁴⁴²ISTEA requires the secretary of transportation to “designate as transportation management areas all urbanized areas over 200,000 population.” 23 U.S.C. § 134(i)(1) (Supp. 1993).

⁴⁴³23 U.S.C. § 134(i)(3) (Supp. 1993).

⁴⁴⁴Interim Guidance on ISTEA Metropolitan Planning Requirements, 57 Fed. Reg. 14,880, 14,943 (Apr. 23, 1992).

⁴⁴⁵Metropolitan Planning NPRM, 58 Fed. Reg. at 12,065 (amending 23 C.F.R. pt. 450 and 49 C.F.R. pt. 613) (Mar. 2, 1993).

⁴⁴⁶*Id.* at 12,070

⁴⁴⁷23 U.S.C. § 303(a); Metropolitan Planning NPRM, 58 Fed. Reg. at 12,069 (Mar. 2, 1993) (amending 23 C.F.R. pt. 450 and 49 C.F.R. pt. 613).

⁴⁴⁸23 U.S.C. § 134(i)(3) and the Federal Transit Act § 8(i)(3). Metropolitan Planning NPRM, 58 Fed. Reg. at 12,069.

⁴⁴⁹23 C.F.R. § 450.120; 58 Fed. Reg. 12,070, 12,078.

⁴⁵⁰23 C.F.R. § 500.509(b); 58 Fed. Reg. 63,482.

⁴⁵¹This material is drawn from U.S. DOT, Environmental Programs and Provisions, Intermodal Surface Transportation Efficiency Act of 1991 (1992) [Pub. No. FHWA-PD-92-012] [hereinafter DOT 1992].

⁴⁵²Pub. L. No. 102-240; 105 Stat. 1914 (1991).

⁴⁵³DOT 1992, *supra* note 451, at 1.

⁴⁵⁴CAA § 176; 42 U.S.C. § 7506.

⁴⁵⁵DOT 1992, *supra* note 451, at 3.

⁴⁵⁶*Id.* at 4.

⁴⁵⁷*Id.*

APPENDIX A

GLOSSARY OF ACRONYMS

CAA	Clean Air Act, 42 U.S.C. § 7401 <i>et seq.</i>
CAAA	Clean Air Act Amendments of 1990, Pub. L. No. 101-549 (Nov. 15, 1990)
CMAAQ	Congestion Mitigation and Air Quality Improvement, 23 U.S.C. § 149
CO	Carbon monoxide, CAA § 302(w).
DOT	Department of Transportation
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FIP	Federal Implementation Plan, CAA § 302(y)
FTA	Federal Transit Administration
GAO	U.S. General Accounting Office.
HOV	High-occupancy vehicle, 23 U.S.C. § 102
I/M	Inspection and maintenance, CAA § 182(a)(2)
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991, Pub. L. No. 102-290 (Dec. 18, 1991)
MPO	Metropolitan planning organization, 23 U.S.C. § 134(b)
NAAQS	National Ambient Air Quality Standard, CAA § 302(u)
NEPA	National Environmental Policy Act, 42 U.S.C. §§ 4321-4370c.
NPRM	Notice of proposed rulemaking
SIP	State implementation plan, CAA § 110.
SOV	Single-occupant vehicle, 23 U.S.C. § 102.
STIP	Statewide transportation improvement program, 23 U.S.C. § 135.
TCM	Transportation control measure, CAA § 108.
TIP	Transportation improvement program, 23 U.S.C. § 134(h).
VMT	Vehicle miles traveled, CAA § 182(d)(1).
VOC	Volatile organic compounds, CAA § 302(s).

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