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Air Quality and Transportation Enhancement Provisions in the Intermodal Surface Transportation Efficiency Act of 1991

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Summary

Federal funding to assist states in addressing the environmental impacts of surface transportation is a major issue for the second session of the 105th Congress. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 (P.L. 102-240) authorized a total of $155 billion for transportation projects from FY1992 to FY1997. Of this amount, it reserved $6 billion for the Congestion Mitigation and Air Quality Program (CMAQ) to assist states in complying with federal air quality standards by funding transportation projects that lower emissions, and it set aside $2.4 billion for transportation enhancements that are environmentally related. Funding authorized under ISTEA expired on September 30, 1997. The Surface Transportation Extension Act of 1997 (P.L. 105-130) provided interim funding through May 1, 1998, while Congress worked on a multiyear authorization. On May 22, 1998, the House and Senate passed the conference report on H.R. 2400 (H.Rept. 105-550), the Transportation Equity Act for the 21st Century (TEA 21). The President signed the bill on June 9, 1998 (P.L. 105-178), authorizing significant increases in funding for CMAQ projects and enhancements from FY1998 to FY2003. In addition to authorizing funding, the conference agreement revises the funding formula for apportioning CMAQ funds to states, allows states to transfer a limited portion of their funding for CMAQ projects and enhancements to other highway programs, alters the matching funds requirement for enhancements, and creates new categories of enhancement activities. It also includes numerous environmental provisions, including language to codify the Administration's schedule for implementing new air quality standards for ozone and fine particulates and regional haze requirements.

Introduction

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 (P.L. 102-240) established two programs that set aside funding for environmental activities. The Congestion Mitigation and Air Quality Program (CMAQ) funds transportation projects

that lower emissions to assist states in complying with federal air quality standards under the Clean Air Act. Under the Surface Transportation Program (STP), states have the flexibility to pursue various projects but must reserve 10% of their funding for transportation enhancements that are environmentally related. While CMAQ projects focus on air quality, enhancements are broader and may address bicycle and pedestrian travel, historic preservation, scenic easements, highway runoff, and other issues.[1]

ISTEA authorized a total of $155 billion from FY1992 to FY1997 to maintain and improve the nation's surface transportation network. Of this amount, it reserved $6 billion for the CMAQ program and $2.4 billion for enhancements.[2] Funding for most federal surface transportation programs, including CMAQ projects and enhancements, comes from the Federal Highway Trust Fund. Federal taxes on gasoline and diesel fuels generate most of the revenues for the trust fund. Each state receives an annual apportionment of these funds according to formulas defined in ISTEA.

This report describes how the CMAQ and enhancement programs function, examines the policy issues surrounding them, and summarizes relevant provisions in major legislation to reauthorize ISTEA in the 105th Congress.

Congestion Mitigation and Air Quality Program

The CMAQ program funds transportation projects that lower emissions to assist states in complying with federal air quality standards for carbon monoxide, ozone, and particulate matter.[3] The Clean Air Act requires the Environmental Protection Agency (EPA) to develop safe standards for these pollutants.[4] CMAQ projects attempt to lower emissions by providing alternatives to conventional highway travel. The CMAQ program is based on the concept that lowering the number of miles traveled by motor vehicles and reducing congestion to make vehicles operate more efficiently can reduce pollutants and assist states in complying with federal air quality standards.[5]

Most transportation control measures listed under Section 108 of the Clean Air Act are eligible for CMAQ funds. However, ISTEA excludes measures that reduce emissions in cold-start conditions and encourage the removal of pre-1980 vehicles. A CMAQ project generally falls into one of the eight following categories: 1) public transit; 2)

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[1]For a discussion of other programs authorized under ISTEA, refer to CRS Report 97-194 E, *Highway and Transit Program Reauthorization: ISTEA Revisited*, by John W. Fischer and William A. Lipford.

[2]For information on the amount of funding apportioned to each state under both programs and a discussion of major funding trends, refer to CRS Report 97-967 ENR, *Federal Highway Funding for Air Quality Projects and Transportation Enhancements: How Much, To Whom, and For What?*, by David M. Bearden.

[3]P.L. 102-240, Section 1008.

[4]For further discussion, refer to CRS Issue Brief 97007, *Clean Air Act Issues*, by James E. McCarthy.

[5]For a discussion of the role of the CMAQ program in helping states attain the new air quality standards, refer to CRS Report 97-1026 ENR, *Highway Funding, the States, and New Air Quality Standards*, by David M. Bearden.

traffic flow improvements; 3) rideshare programs; 4) traffic demand management programs; 5) bicycle and pedestrian projects; 6) public education; 7) vehicle inspection and maintenance programs; and 8) alternative fuel conversion programs.

ISTEA authorized approximately $1 billion annually for the CMAQ program from FY1992 to FY1997 for a total authorization of $6 billion over 6 years.[6] States with nonattainment and maintenance areas receive funding according to a formula based on the severity of air pollution in those areas and the population residing in them.[7] States without any nonattainment or maintenance areas receive 0.5% of the total annual CMAQ apportionment and have the flexibility to use this amount in any locality for transportation projects that are eligible under CMAQ or STP. Other sources of funding under ISTEA are also available for transportation projects with air quality benefits. States have the flexibility to spend funding under STP for most measures listed under Section 108 of the Clean Air Act, and the Federal Transit Administration's Capital Assistance Program is another source of funding.

Transportation Enhancements

ISTEA requires each state to reserve 10% of its apportionment under STP for enhancements that are environmentally related.[8] Some categories of eligible activities do not provide direct environmental benefits (such as reducing pollutants) but still qualify as environmentally related. For example, a landscaping project could be eligible for funding if it restores natural surroundings altered in the construction of a highway. ISTEA requires an enhancement to fall into at least one of the 10 following categories to be eligible for funding: 1) facilities for bicycles and pedestrians; 2) acquisition of scenic easements and scenic or historic sites; 3) scenic or historic highway programs; 4) landscaping and other scenic beautification; 5) historic preservation; 6) rehabilitation and operation of historic transportation buildings, structures, or facilities; 7) preservation of abandoned railway corridors; 8) control and removal of outdoor advertising; 9) archaeological planning and research; and 10) mitigation of water pollution due to highway runoff.

ISTEA authorized roughly $24 billion for STP from FY1992 to FY1997 and reserved 10%, approximately $2.4 billion, for enhancements.[9] The formula for STP is based on percentages of funding apportioned to states in past years primarily for maintaining bridges, national highways, and the interstate system. While the CMAQ program apportions funding based on the level of air pollution in each state, funding for

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[6]P.L. 102-240, Section 1003(a)(4).

[7]Nonattainment areas are locations that have exceeded the federal air quality standards for one or more pollutants. Maintenance areas are locations that previously were in nonattainment status but have since met the federal standards. Under the Clean Air Act, states must submit plans to EPA that outline strategies to reduce emissions and comply with the federal standards in nonattainment areas and to control emissions and sustain air quality in maintenance areas. The National Highway System Designation Act of 1995 (P.L. 104-59) amended ISTEA to make maintenance areas eligible for CMAQ funds.

[8]P.L. 102-240, Section 1007.

[9]P.L. 102-240, Section 1003(a)(3).

enhancements is a fixed percentage of a state's STP funds and is not linked to environmental problems.

Selection Process

State and local authorities select CMAQ projects and enhancements subject to federal oversight. Local sponsors develop proposals and submit them to state departments of transportation and metropolitan planning organizations (MPOs) for evaluation.[10] Examples of sponsors include transit operators, municipal environmental or public works departments, and local transportation management agencies. States and MPOs select proposals according to federal guidelines and include them in their Transportation Improvement Plans (TIPs), which list all transportation projects selected for federal funding. DOT evaluates each project in a state's TIP for final approval and obligation of federal funding. EPA participates in the review of CMAQ projects to evaluate their air quality assessments.[11]

Matching Funds Requirement

Generally, the federal share of the cost to complete a CMAQ project or an enhancement is 80%, and the local sponsor must match the remaining 20%.[12] However, CMAQ projects conducted on the interstate system can qualify for a federal share of up to 90% of their costs, and certain types of CMAQ projects, such as traffic flow signalization and certain commuting options, can qualify for full federal funding in limited circumstances.[13] Some states assist local sponsors in meeting the matching funds requirement, while others require the sponsor to finance the full 20%. For both CMAQ projects and enhancements, DOT does not award the federal share as a conventional grant but provides the funds on a reimbursable basis. The department obligates funding after approving the proposal for a CMAQ project or an enhancement but does not disburse the obligated funding until the project is complete.

Policy Issues

Reserving revenues from the Federal Highway Trust Fund for environmental activities is controversial. Some highway interest groups believe that federal funding for surface transportation should be spent solely on maintaining infrastructure such as roads and bridges. However, some states with pollution problems, local governments, and

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[10]Metropolitan planning organizations are regional councils or associations of government that are responsible for coordinating programs and activities which benefit the public in areas with populations of 50,000 or more.

[11]The sponsor of a CMAQ project must conduct an air quality assessment to determine its potential for reducing emissions. Federal guidance requires a quantitative analysis when technically feasible but allows a qualitative analysis if the sponsor lacks the skills or equipment necessary to measure emissions. A qualitative analysis explains how the project would lower emissions without specifying the amount.

[12]P.L. 102-240, Section 1021.

[13]Department of Transportation. Federal Highway Administration and Federal Transit Administration. *Federal Register*. March 7, 1996. p. 50900.

environmental and community organizations disagree and claim that many localities would not be able to mitigate the environmental impacts of surface transportation without federal highway funding. Other critics also support the idea that environmental activities should be eligible for funding but believe that states should have the flexibility to decide whether to fund them rather than being required to set aside a specific amount. States with few air quality problems argue that the CMAQ program is unfair in that it makes states with clean air pay to reduce pollution in other states by awarding more highway revenues to states with the worst air quality. However, states with air quality problems claim that CMAQ funds are essential in helping them achieve and maintain federal air quality standards and that other states benefit from their transportation networks. Enhancements have received broad support from many states and local communities due to the availability of funding for unconventional projects that can diversify their transportation systems. However, some critics question whether certain projects funded under the enhancements program have met the necessary criteria established in ISTEA.

Reauthorizing Legislation in the 105th Congress

Federal funding to assist states in addressing the environmental impacts of surface transportation is a major issue for the second session of the 105th Congress. Funding for CMAQ projects, enhancements, and other programs authorized under ISTEA expired on September 30, 1997. The Surface Transportation Extension Act of 1997 (P.L. 105-130) provided interim funding through May 1, 1998 while Congress worked on a multiyear authorization. On April 1, 1998, the House passed H.R. 2400 as amended, the Building Efficient Surface Transportation and Equity Act of 1998 (BESTEA), and on March 12, 1998, the Senate passed S. 1173 as amended, the Intermodal Surface Transportation Efficiency Act of 1998 (ISTEA II).[14] On May 22, 1998, the House and Senate passed the conference report on H.R. 2400 (H.Rept. 105-550), renamed as the Transportation Equity Act for the 21st Centruy (TEA 21). The President signed the bill on June 9, 1998 (P.L. 105-178), authorizing significant increases in the amount of funding for CMAQ projects, enhancements, and other highway programs over the next 6 years from FY1998 to FY2003. In addition, the House passed the TEA 21 Restoration Act (H.R. 3978) on June 3, 1998, which would correct technical errors in various provisions of the conference report on H.R. 2400. However, major corrections to provisions affecting CMAQ projects and enhancements were not necessary.

As signed by the President, the conference agreement authorizes an increase of $2.1 billion in funding for CMAQ projects from $6.0 billion to $8.1 billion over the next 6 years, roughly $1.9 billion less than the House's proposal of nearly $10.0 billion but about $300 million more than the Senate's level of $7.8 billion. The conference agreement includes the Senate's provision that revises the funding formula for the CMAQ program to reflect submarginal nonattainment areas for ozone and maintenance areas for carbon monoxide and ozone. However, it does not include the House's provision to add new funding factors for nonattainment and maintenance areas for particulate matter. The conference committee adopted the House's proposal that requires the National Academy of Sciences to study the extent to which CMAQ projects have helped to improve air

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[14]For a discussion of major provisions in each bill, refer to CRS Report 97-516 E, *ISTEA Reauthorization: Highway Related Legislative Proposals in the 105th Congress*, by John W. Fischer.

quality, and it modified a provision in the House bill that limits the amount of funding that a state could transfer from its CMAQ apportionment to another highway program. As proposed by both the House and Senate, the conference agreement allows measures that reduce emissions under cold-start conditions to be eligible for CMAQ funds, and it includes new language to clarify funding eligibility for alternative fuel projects and measures to reduce traffic congestion.

The conference agreement authorizes an increase of $900 million in funding for transportation enhancements from $2.4 billion to $3.3 billion over the next 6 years, approximately $700 million less than the House's proposal of nearly $4.0 billion and roughly $500 million less than the Senate's amount of $3.8 billion. As proposed by the Senate, the conference agreement codifies the Administration's policy on administering the matching funds requirement for enhancements, under which states have the flexibility to calculate the non-federal share of funding based on individual projects, multiple projects, or a programmatic level. However, the conference committee did not adopt the Senate's language to change the amount set aside for enhancements under the Surface Transportation Program from 10 to 8%. Similar to that for CMAQ projects, the conference agreement includes a modified version of the House's provision that limits the amount of funding that a state could transfer from the amount set aside for enhancements to another highway program. As proposed by the House, the conference agreement expands funding eligibility for enhancements to include measures that would reduce vehicle-caused wildlife mortality, and as proposed by both the House and Senate, tourist and welcome center facilities related to scenic or historic highway programs also are eligible for enhancements funding. The conference committee also included new language to make transportation museums eligible for funding. However, it rejected the House's provision that would have allowed the removal of graffiti to become an eligible activity.

The conference committee adopted several other environmental provisions as well. As proposed by the Senate, the conference agreement requires EPA to follow its schedule for implementing new air quality standards for ozone and fine particulates, but the conference committee modified the Senate's provision to require that EPA designate nonattainment areas under the new standard for fine particulates before requiring states to comply with regional haze requirements. The conference agreement also includes the Senate's proposal to authorize $150 million annually from FY1999 through FY2003 to assist mass transit systems in purchasing low emission buses that operate on alternative fuels, and it includes the Senate's proposal to authorize $50 million annually from FY1999 through FY2003 to encourage and promote advanced vehicle technologies, including environmental technologies. In addition, the conference committee adopted a provision in the Senate's bill that establishes a research program to study numerous aspects of environmental issues related to surface transportation. As proposed by the House, the conference agreement permits low-emission vehicles with only one occupant to operate in high occupancy vehicle (HOV) lanes. The conference committee also adopted the House's provision that requires the General Accounting Office to study various low and zero emission fuel technologies and recommend incentives to encourage the use of these technologies for mass transit vehicles. As proposed by both the House and Senate, the conference agreement establishes a coordinated environmental review process to reduce the time required to approve transportation projects prior to construction.