

DEPARTMENT OF TRANSPORTATION**Office of the Secretary**

14 CFR Parts 152 and 199

23 CFR Parts 420, 450, 630, and 1204

49 CFR Parts 258, 260, 266, and 622

[OST Docket No. 66]

Energy Conservation by Recipients of Federal Financial Assistance**AGENCY:** Department of Transportation (DOT).**ACTION:** Final rule.

SUMMARY: In compliance with a recent Executive Order, DOT issues regulations requiring conservation of petroleum and natural gas in programs receiving Federal financial assistance administered by DOT.

DATE: These regulations take effect on October 1, 1980, unless otherwise indicated.

FOR FURTHER INFORMATION CONTACT:

On the general DOT approach in this program—Angus Duncan, Director, Office of Energy Policy, P-6, Department of Transportation, Washington, D.C. 20590 (202) 426-4524. For further information on the proposed implementation of that approach by any of the involved DOT agencies, contact the person identified with that agency in the discussion below.

SUPPLEMENTARY INFORMATION: In the Federal Register of Thursday, May 7, 1980 (45 FR 30398), DOT published a notice of proposed rulemaking (NPRM) in which it invited public comment upon proposed rules for those of its financial assistance programs which are most likely to offer opportunities for significant conservation of petroleum and natural gas by the recipients of such assistance. The proposal responded to Executive Order 12185, Conservation of Petroleum and Natural Gas (December 17, 1979), which implements section 403(b) of the Powerplant and Industrial Fuel Use Act of 1979 (Pub. L. 95-620; 92 Stat. 3318). The Act and the Order require Federal agencies which administer programs of financial assistance to take actions which maximize the efficient use of energy and conserve natural gas and petroleum in programs funded by those agencies. Included among those actions are identification of those financial assistance programs which offer opportunities for significant conservation of petroleum and natural gas by recipients of the assistance and

issuance of regulations imposing conservation requirements as a condition of continuing to receive the assistance. Included in the NPRM were programs of the Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), National Highway Traffic Safety Administration (NHTSA), and Urban Mass Transportation Administration (UMTA).

General Discussion of Comments

DOT received more than 80 comments from agencies and individuals on the May 7 NPRM. The greatest number of comments concerned the need for more assistance—both technical and financial—to implement the rules, particularly financial assistance for transit and high-occupancy vehicle facilities. DOT recognizes the need to assist State and local agencies in their efforts to ensure that transportation programs contribute to the national goal of significantly reducing petroleum consumption.

With regard to providing technical assistance, the DOT agencies whose programs are covered by this rulemaking plan to expand training and information sharing activities to ensure that the latest state-of-the-art in energy conservation planning, practices, standards, and technology is made available to program constituents. These activities are further discussed in the subsequent sections of this notice, which cover individual agency actions.

On the question of financial assistance, DOT policies, budget requests, and legislative proposals in recent years have increasingly emphasized programs that will reduce the energy requirements of the transportation sector. DOT has requested \$24.5 billion in authorizations for public transportation grant programs for FY 81-85; this is well over double the funding levels for the past five-year period. As many comments acknowledged, these regulations focus on the planning process required by modal agencies as the best means of incorporating energy conservation concerns into the nation's transportation system. Recognizing the need for additional funding for energy-related planning, DOT has requested an additional \$15 million in FY 81 appropriations for UMTA-supported energy conservation and contingency planning. Given the number of State and local agencies which report transportation-energy planning activities already underway at the current funding level, DOT believes this increase should be sufficient to support implementation

of the new planning requirements in FY 81. DOT also has proposed a new incentive program to make more efficient use of the private automobile. The auto-use-management program, if enacted, would encourage States to use federal-aid highway funds for more energy efficient projects, such as ridesharing activities, public transportation, fuel-efficient driver education, and bicycle and pedestrian facilities. While these requests have not yet been approved by Congress, DOT expects that a substantial part, if not all, of these additional resources will be available for FY 1981. As with other actions being taken to implement Executive Order 12185, DOT will continue to review the adequacy of resources to meet program requirements during the coming year.

DOT also received a number of comments concerning a potential increase in the amount of paperwork required of grantees. In implementing Executive Order 12185, DOT has chosen, wherever possible, to use its existing processes and to strengthen current regulations rather than developing separate processes and monitoring requirements for energy assessments. The regulations being adopted with this publication will be the responsibility of those State and local agencies which currently comply with program regulations. In many DOT programs, consideration of energy conservation has been a stated goal or explicit requirement for the past several years. These regulations give more specific direction on the types of activities that will achieve the energy conservation goal and at what point in the planning or project development process these activities should take place. For some programs DOT also has clarified the actions to be taken if energy conservation is not adequately considered in transportation planning or project development. By amending existing regulations, DOT believes that the need for separate documentation and additional staff will be very limited.

In light of the comments received, however, DOT carefully reviewed the proposed regulations and made several revisions to further eliminate the possibility of requiring nonessential or redundant paperwork. In the case of FAA's loan guarantee program, the comments made a strong case against the proposed rule and this rule is being dropped in favor of technical assistance for loan applicants. These and other changes are discussed in the subsequent sections of this notice.

Several comments questioned the need for DOT-required assessments of

been deleted, because the provision for certification is already incorporated in § 152.7 of the regulation. In § 152.605 the definition of an energy assessment has been modified slightly to conform with the DOT-wide definition.

The \$50,000 cost figure for building construction and modification has been revised upward to \$200,000. This change was the result of further study and consideration by FAA. It was found that an insignificant number of buildings fall within the \$50,000-\$200,000 cost range. Additionally, it is not desirable to create a situation where the cost of an energy assessment represents a significant proportion of the cost of the building construction or modification itself. This could occur if the \$50,000 figure had prevailed. Thus, raising the cost minimum will result in an improved application of the rule. The change will be reflected in § 152.605 of Subpart G.

Guidelines to aid airport sponsors in making an energy assessment will be issued by January 1981. The criteria for judging the acceptability of an energy assessment will be based on its scope, content, and comprehensiveness. The energy assessment will include an analysis of alternatives for achieving the desired objectives and recommendations for selection of appropriate alternatives. The energy assessment will be submitted for FAA approval along with the plans and specifications.

Comments. The requirements for sponsors participating in ADAP were the subject of varied comments and suggestions. The comments indicated widespread public support for the concept of energy conservation. The commenters expressed differing views on how this concept should be applied through Federal regulation.

Assessment Requirement. One commenter pointed out that the wording of §§ 152.505 and 152.507 would have required an energy assessment on all buildings eligible for Federal assistance. It was suggested the wording be changed so that only buildings which actually received Federal assistance would be affected by the rule. Since the rule is intended to apply only to those buildings which receive funds from ADAP, the wording of those sections has been changed as suggested.

Equipment Eligibility. One commenter recommended that FAA establish a policy that clearly includes the eligibility of energy-saving equipment as part of terminal building utility systems. Under current regulations, such equipment is generally eligible if it is determined to be a reasonable and necessary part of an ADAP project. The regulation does not need further elaboration.

State v. Federal Regulations. Many commenters stated that the proposed rules would merely duplicate existing State regulations. This would cause redundancies, unnecessary delays, and extra costs. One commenter suggested that FAA waive requirements in States which have enacted their own energy legislation. The situation in which both State and Federal regulations apply to a project is not unique to the energy area. Sponsors are urged to comply with both State and Federal regulations simultaneously, whenever possible. As States become more proficient in writing this sort of regulation and the FAA gains more experience in administering the rule, the acceptance of State requirements in lieu of Federal requirements may be considered.

Limiting Federal Aid. One commenter suggested that ADAP funds be limited to airports serving commercial or commuter customers. Airports used mostly for pleasure or recreation should be excluded. The legislation which authorizes ADAP provides grant assistance for both general aviation and air carrier airports, therefore, no distinction is made in this rule.

Conservation Practices. One commenter stated that sponsors should be required to consider and, whenever feasible, abide by energy conservation practices and techniques. Section 152.609 of the regulation will accomplish this.

Simplicity. Several commenters felt that the rule and compliance procedures should be kept simple. For example, one commenter suggested replacing the required energy assessment for each project costing over \$50,000 with a letter from the airport manager. The letter would state that the airport manager has or will develop a total energy conservation program for his airport within a reasonable time. FAA agrees that rules and compliance procedures should be as simple as possible. We believe that this rule modification implements Executive Order 12185 in a simple, effective manner.

Airport Systems Planning. One commenter recommended that airport systems planning include an element which would assess the energy impact of growth alternatives. Consideration of energy factors during the planning process is already allowed under the existing regulation. An element of a systems plan covering energy impacts would be eligible for Federal assistance when it is found to be a reasonable and necessary part of a system plan. Such planning is not required under this regulation but is encouraged by FAA.

Airport Master Planning. An element of a master plan covering energy

impacts would also be eligible for Federal assistance when it is determined to be a reasonable and necessary part of a master plan or update of a master plan. Such planning is not required under the regulation, but is encouraged by FAA.

Airport Energy Plan. DOE recommended that each airport be required to submit a plan to FAA and DOE specifying fuel and energy conservation practices. An airport energy plan may become a requirement at a later date; however, the present level of experience and information now available in FAA indicates that such a requirement for all airports would probably not produce benefits commensurate with the cost and administrative burden to sponsors. Some airports, however, may benefit from an overall energy plan and FAA encourages these airport operators to develop such a plan. Such plans would be eligible for Federal assistance if accomplished within the scope and intent of an airport master plan project.

FAA is developing an energy-efficient ground operating plan for Washington National and Dulles International Airports. This plan may serve as a model for other airports in the future. It should be noted that this ground operating plan was described as a "policy" in the May 7, 1980, NPRM which was misleading. The distinction is that the language used in the NPRM is overly broad and could be construed to incorporate such activities as operations scheduling, and approach and departure procedures. This was not the intent of the plan.

Noncompliance. One commenter recommended that funds not be withheld if there is noncompliance with Part 152. Withholding project funds is an appropriate sanction for violation of any of the requirements in Part 152, and is the sanction called for in E.O. 12185.

Runways and Terminals. One commenter suggested that energy considerations should be utilized in the design and construction of runways and terminal facilities. Currently, the rule is limited to the design and construction of terminal buildings. FAA is not imposing energy conservation requirements on runways because a positive relationship among the costs, benefits, and consequences of such regulation does not exist at this time. The rule may be expanded to include runways and other facilities at a later date, if it is shown to be feasible.

Building Cost Level. Some commenters stated that the \$50,000 minimum building construction cost was too low. A \$500,000 minimum cost was recommended by one commenter since

buildings to be constructed with DOT financial assistance when the Department of Energy (DOE) is promulgating Building Energy Performance Standards (BEPS) that would require energy efficient building design. DOT does not intend that its required energy assessments duplicate DOE regulatory standards. However, BEPS is still under development within the Federal government. The final rulemaking is not expected to be issued for about a year, with implementation taking up to an additional year. Should BEPS be adopted in the future, DOT will review its energy assessment requirements to consider whether these requirements should be maintained, vacated, or considered satisfied by compliance with a BEPS-certified State building code.

Pursuant to the rules promulgated in this document, energy assessments, where required for building constructed or remodeled using DOT funding assistance, should consider the following:

1. Overall design of facility or modification and alternative designs;
2. Materials and techniques used in construction or rehabilitation;
3. Special or innovative conservation features that may be used.
4. Fuel requirements for heating, cooling, and operations essential to the function of the structure, projected over the life of the facility and including projected costs of this fuel; and
5. Kind of energy to be used, including:

(a) Consideration of opportunities for using fuels other than petroleum and natural gas; and

(b) Consideration of using alternative, renewable energy sources.

These energy assessments may use any accepted and recognized methodology appropriate to project needs. DOT recommends that applicants consider the DOE's Methodology and Procedures for Life Cycle Cost Analyses as set out in 10 CFR Part 436. The most recent methodology can be obtained by contacting Jack Vitullo, department of Energy, 1000 Independence Avenue, S.W., Washington, D.C. 20585. (202-252-9467).

A large number of comments also were received expressing concern about the relationship between DOE State gasoline consumption targets and the regulations proposed by DOT. There was some misunderstanding about how DOT intended to link the two, particularly given the generally long-term nature of much transportation planning and the short (three-month) life span of the DOE targets. DOT encourages the adoption of energy

conservation goals by State and local governments to support the broad national goal of significantly reducing the consumption of petroleum and natural gas. These conservation goals may be based on projections of the DOE-established State fuel consumption targets, or other targets adopted by States, by local governments, or by metropolitan-wide jurisdictions on their own initiative. This would allow State and local governments, including transportation agencies, to adopt goals that project greater savings of oil (and consequent savings to their citizens) than the DOE voluntary targets, and that address conservation of fuels other than petroleum, such as natural gas. DOT believes that such goals should encompass both long-term transportation energy savings, and savings that can contribute to achieving the three-month DOE-set targets.

Use of DOE quarterly State targets as one basis for establishing local goals or longer-term State goals helps provide State-to-State consistency, and links national energy conservation goals to national transportation concerns. For these reasons, the use of these targets to support conservation efforts is encouraged, but not required.

DOE is required under the Energy Security Act of 1980 to establish, by February 1, 1981, national end-use energy consumption targets for 1985, 1990, 1995, and 2000. These targets, where they can be disaggregated by fuel, mode, and State, can provide a necessary longer-term national framework for transportation energy use targets and conservation programs. DOT will provide all available information, including disaggregations, to agencies receiving assistance from DOT.

Specific reference to "established energy conservation targets" has been modified in several places to reflect a more encompassing reference to energy conservation targets. DOT assumes that DOE's and other targets will be a basic element of State and local energy conservation goals and objectives, and the reference to targets in the regulation should be viewed within this broader context.

Finally, several comments questioned how DOT intended recipients to consider the use of renewable energy sources in their energy conservation efforts. Executive Order 12185 is directed explicitly at conservation of petroleum and natural gas (nonrenewable sources). In accordance with the Executive Order, DOT defines "energy conservation" as the conserving of natural energy resources through both (1) more efficient use of nonrenewable

energy sources, and (2) use of renewable sources of energy.

Comments on specific programs of rules proposed by specific DOT agencies are discussed in the following sections; however, one final general point needs to be addressed. This rulemaking is significant, as that term is used in Executive Order 12044, Improving Government Regulations, as amended. Section 2(d)(6) of E.O. 12044 requires that a plan be developed for evaluating a significant regulation after its issuance. Executive Order 12185 meets this need very well. Section 1-105 of E.O. 12185 requires that the process which has resulted in these final rules be repeated annually. Consequently, the public should expect DOT to publish in the Federal Register, approximately one year after these rules take effect, an invitation for public comment on how well these rules have worked, what changes may be required, and what programs should be added or deleted. This does not mean that we do not want to be kept apprised during implementation of any problems that arise. It means simply that a structured review will take place next year.

Federal Aviation Administration

(For both FAA programs listed, contact Charles Hoch, 202-755-9717.)

Public Comments on Proposed Rule for Airport Development Aid Program

Background. The proposed change to Part 152 would have required that sponsors in the Airport Development Aid Program (ADAP) accomplish an energy assessment and a certification to comply with findings for each building construction or modification which exceeds \$50,000 in cost. It also would have required a sponsor to utilize fuel and energy conservation practices in the operation and maintenance of the airport and to encourage airport tenants to use these practices. The proposed change to Part 152 had originally been printed as Subpart F (§§ 152.501-152.509) in the May 7, 1980, Federal Register. These changes are now incorporated in Subpart G (§§ 152.601-152.609), because a new Subpart F has been added since the NPRM was published on May 7, 1980.

Some wording in Subpart G of Part 152 has been changed to clarify the rule. As defined in § 152.605, "Building Construction" and "Major Building Modification" will include only buildings which receive Federal assistance instead of buildings which are eligible for Federal assistance. In § 152.607, the requirement to furnish a certification to comply with energy assessment findings to the FAA has

this is the criterion used in the DOT Minority Business Enterprise (MBE) Program. Another commenter suggested a \$250,000 cost level. Energy requirements are completely unrelated to MBE requirements, so it does not follow that MBE cost levels should be used to justify energy conservation cost levels. However, after review and consideration of those comments, the cutoff is being raised to \$200,000. This level will not exclude those projects which would have a significant impact on energy, but will avoid unnecessary burdens on the recipients of small building grants.

Relevancy of Projects. One commenter recommended that energy assessments not be required for construction projects which have no bearing on energy consumption. FAA believes that any building construction or modification in excess of \$200,000 (using Federal assistance) would have an impact on energy consumption and thus should have an energy assessment. If a building has no impact on energy consumption, the assessment can simply show that fact.

Energy-Saving Suggestions. Many commenters sent in various suggestions on ways to conserve energy at airports. All of the feasible suggestions will be considered in the development of a related Advisory Circular concerning energy assessments at airports.

Cost of Assessments. Some commenters stated that the rule would only add cost and administrative burden upon sponsors seeking ADAP funds. It was suggested that the burden has become so great for small airport operators that some sponsors are inhibited from seeking funds.

It is true that the rule may add some cost for additional analysis and design. However, these costs should be recoverable over time through the reduced energy costs of operating buildings designed to be energy efficient. Also, FAA has raised the minimum cost level to \$200,000, which should lessen the proportion of added costs.

Review Procedures. One commenter stated that Subpart F, (now Subpart G) contained no provisions for review of administrative decisions concerning acceptance of the energy assessment by FAA. Subpart G is subject to the general compliance procedures which apply to all requirements of Part 152. The procedure is described in the new Subpart F.

Public Comments on Proposed Rule for Aircraft Loan Guarantee Program

Numerous comments were filed with respect to the proposed amendment of

14 CFR Part 199. The amendment provided that no loan which violated national policy with respect to energy conservation would be guaranteed; and required each applicant for a loan guarantee to submit an energy conservation plan "formulated by the carrier to whom the loan will be made." The amendment further provided that failure to submit an acceptable energy plan could be grounds for rejection of an application.

Several commenters have taken issue generally with the need for additional energy conservation regulations. One commenter has suggested that existing rules and regulations with respect to energy are more than sufficient, while another commented that new rules should be adopted only after present practices are determined to be insufficient.

FAA acknowledges that any regulation which imposes new requirements necessarily adds an additional burden on a regulated industry. The issue is whether the social benefit to be derived from the regulation, or its administrative necessity, offsets the burdens imposed. In analyzing this issue, the effect of existing Federal and State regulation must certainly be taken into account.

In the case of aircraft purchase loans, FAA recognizes that such loans are essentially commercial in nature, and that air carriers are subject to the discipline of the market place when selecting aircraft for use in their operations. One commenter has suggested that additional regulation of air carriers with respect to energy conservation is unnecessary, because the escalation in price of aviation fuels leads carriers to conserve as a matter of good business judgment. FAA agrees that such economic considerations are a powerful spur to conservation. The amendments to Part 199 proposed on May 7, 1980, were intended to assist rather than impede the operation of these natural market factors.

The bulk of the comments received dealt with the adequacy of specific provisions of the proposed amendment. Three general exceptions were taken to the amendatory language: that the proposed rule was not sufficiently specific to give fair notice of FAA's requirements; that the paperwork burden created by the proposed rule far outweighed any possible benefit from it; and that the proposed rule was potentially, if not actually, inflexible, and should be amended to allow implementation of projects which are not inherently conservative of energy.

Several commenters offered specific provisions which, they felt, ought to be

added to the rule to make it more definite. One suggested that the rule should provide minimum standards which must be met, including minimum requirements for fuel efficiency, and suggested the use of "on board RNAV" equipment. The same commenter also suggested that FAA should exempt aircraft engines from pollution standards which "degrade fuel efficiency." Another suggested that FAA should develop a procedure for monitoring a carrier's compliance with its plan.

(a) It is not clear that energy conservation would be significantly enhanced through the specification of minimum standards of fuel efficiency for those air carriers which participate in the FAA loan guarantee program. Due to the high cost of aviation fuel, such carriers are now under a strong incentive to select equipment of high fuel efficiency, and to deploy these aircraft in a fuel efficient manner in day-to-day operations. Additionally, it is not clear that meaningful general standards of efficiency could be developed. Many variables are involved in the fuel efficiency of an aircraft. These include aircraft weight, speed, and altitude of operations. These variables are a function of the type of market being served (i.e., vary with route, distance, cargo or passenger operations, and load factor). In this, the benchmark of "fuel efficiency" becomes a very difficult parameter to quantify. For example, one aircraft may be more efficient (in terms of pounds of fuel burned per nautical mile) than another at high altitude; while their order of efficiency may well be reversed at a lower altitude. Other variables which affect fuel use include seating capacity, cargo carrying space, and anticipated load factors in specific markets. Because load factors may change over time, the carrier must also be free to redeploy its fleet to optimize its efficiency. For these reasons adoption of general, quantified fuel use standards for the loan guarantee program would be premature at best.

(b) While RNAV navigation systems promise potential fuel savings as a result of more direct flight paths, mandatory installation of this equipment in guaranteed aircraft at this time would be premature. RNAV is useful on flights transiting medium and large hubs where present traffic flow patterns have resulted in substantial airway development and some circuitous flight paths to separate traffic. Before RNAV can be considered useful in this environment, FAA needs to establish acceptable RNAV routes that do not infringe on existing airways. While such

routes are presently being considered, a sufficient number of routes has not yet been found acceptable to merit mandatory installation of RNAV. Further, flights between small communities have always been accomplished in a direct route without RNAV equipment.

(c) It is not clear at this time whether, and to what extent, aircraft engine pollution standards within FAA's jurisdiction significantly impact energy use. The Environmental Protection Agency (EPA) is responsible under the Clean Air Act for assessing and, if necessary, for establishing aircraft engine emission standards. With regard to aircraft noise pollution, which is within FAA jurisdiction, the FAA recognizes that potential tradeoffs may exist between energy conservation and noise control objectives. This matter was considered in the development of existing standards and will be considered in all new noise standards or changes to existing standards.

(d) Under the proposed amendment to Part 199, FAA did not propose to monitor a carrier's day-to-day compliance with its energy conservation plan, or otherwise to supervise the detailed operation of the carrier. Rather, the intent was to evaluate the feasibility of the plan submitted; to execute the loan guarantee only if the plan met FAA standards; and to exercise general oversight of the carrier as a part of administration of the loan guarantee. No new procedure was deemed necessary for this purpose.

Many commenters have argued that the proposed rule, with its required energy conservation plan, will impose a large, albeit vague, paperwork and reporting requirement on air carriers, but will lead to no significant, documentable energy savings beyond those which result from existing economic incentives.

The amendments to Part 199 were proposed to facilitate air carrier planning for energy conservation in the 1980's. A plan was required in order to focus the attention of a carrier's management on the need for energy conservation, and planning guidelines were added to facilitate consideration of the major planning issues. Appendix B contemplated submission of a detailed plan, but the sole purpose of requiring a plan was educational—i.e., to assist a carrier's management in developing a methodology for achieving energy conservation in its daily operations.

After consideration of all comments, it has become apparent that this purpose may well be achieved without imposition at this time of a formal planning requirement. Due to the

escalation in price of aviation fuels, carriers are under strong economic incentive to plan for energy conservation. Executive Order 12044, Improving Government Regulations, dated March 23, 1978, directs agencies to consider alternative approaches to proposed regulations in order to choose the "least burdensome of the acceptable alternatives," and to consider the "direct and indirect effects" of such regulation. Many commenters view the proposed regulation as creating a burdensome reporting requirement, which would not increase energy savings beyond those which would otherwise be achieved. FAA does not intend to add significantly to the documentation now required under the FAA Loan Guarantee program, if effective planning can be achieved without the imposition of a formal reporting requirement. On balance, it appears that the goal of effective energy planning may be achieved without the imposition of a formal reporting requirement, if FAA were to substitute instead a program of assistance to carriers in energy planning. This program will be educational in nature, and will offer to applicant carriers the most current information available for energy planning. For example, FAA is developing a compendium of fuel burn curves based on information provided by aircraft and engine manufacturers that depict the fuel efficiencies of various aircraft at specific speed, altitude, and weight configurations. This information, which will show the most energy efficient set of operating curves by aircraft type, will be updated and expanded to include additional aircraft types as such information becomes available. These data will be made available to loan applicants to assist them in their energy planning and selection of aircraft. Information and guidance of this type will be available to eligible carriers beginning no later than October 1, 1980.

Accordingly, the amendments to Part 199 proposed on May 7, 1980 (45 FR 30398), are withdrawn; and, in lieu thereof, FAA will implement an active test program of assistance in planning for energy conservation. The question of imposing a formal planning requirement will be reconsidered at a later date, after experience is gained with FAA's educational program. Further information with respect to the FAA program will be available to interested air carriers on an "on call" basis from the Chief of the Energy Division, AEE-200, 202/755-8717.

Federal Highway Administration

(For all FHWA Programs Listed, Contact Bruce Cannon, 202-426-1045; for the UMTA Program Listed, Contact Douglas Kerr, 202-472-5140).

FHWA has specifically identified four existing regulations for amendment: (1) The joint FHWA/UMTA Planning Assistance and Standards—Urban Transportation Planning regulations (23 CFR Part 450, Subpart A and 49 CFR Part 613, Subpart A); (2) FHWA's and Research and Development—Program Approval and Authorization regulations (23 CFR Part 420, Subpart A); (3) FHWA's Preconstruction Procedures Federal-Aid Programs Approval and Authorization regulations (23 CFR Part 630, Subpart A); and (4) the joint FHWA/NHTSA Uniform Standards for State Highway Safety Programs regulations (23 CFR Part 1204). The Proposal regarding the joint FHWA/UMTA Urban Transportation Planning regulations was, and continues to be, handled jointly by the two agencies but is published under the FHWA section of this rule. The joint FHWA/NHTSA Uniform Standard for State Highway Safety Programs was, and continues to be, handled jointly by the two agencies but is published under the NHTSA section of this overall DOT rule.

In addition to the proposed amendments referred to above, FHWA listed a number of further areas in which it is active in administratively promoting energy conservation and also solicited comments on these further actions.

Comments Received

FHWA has reviewed the comments received in response to DOT's May 7 request for public comment and found that over 80 interested groups and individuals commented on the FHWA proposal, the joint FHWA/UMTA proposal and the joint FHWA/NHTSA proposal. Commenters include State departments of transportation and highway agencies, cities, counties, Metropolitan Planning Organizations, transit operators, Federal agencies, individuals, and public interest groups. All comments were given full consideration, including those received after the July 7 closing date for comments. Some of the comments on the proposed amendments and administrative actions identified a number of areas that needed rethinking and revisions to the rules have been made accordingly.

In developing these rules and in keeping with FHWA's policy to reduce redtape, every effort has been made to eliminate any proposed requirements that are not essential to the main objective of conserving petroleum in the

Federal-aid highway program. At the same time, efforts have been made to provide as much flexibility as possible in responding to the requirements established by E.O. 12185 while remaining consistent with the overall objectives of the order.

In an attempt to address the comments in a clear and concise manner, they have been divided into three broad categories: (1) Comments that apply to FHWA's overall proposed rulemaking; (2) comments that apply to the individual amendments to the existing regulations proposed; and (3) comments concerned with the administrative actions FHWA is taking or intends to take in support of the Executive Order.

1. Overall Rulemaking.

A. Need for the Rule. Comments on the overall rulemaking were mixed. They range from unqualified support, total disagreement that any regulatory requirements are necessary. Many commenters supported the concept of actions to conserve petroleum followed by a qualifying "but" or "however" that addressed various parts of the proposed rules. Many commenters believed that the requirements being proposed were already being achieved in their programs and feared a proliferation of paperwork exercises that would severely affect their limited resources and not add to the energy conservation effort. The majority of commenters continued to stress simplicity and flexibility.

FHWA recognizes these concerns and has revised the proposed rules to provide as much flexibility as possible. The final rule builds on existing regulations and, to the extent possible, administrative actions. Agencies that are already achieving the requirements established here should not be significantly affected and those that are currently making progress in that direction should not be adversely affected. Further information on simplicity and flexibility is provided under the administrative actions section of this preamble.

B. Funding. A related concern expressed by many commenters was the limited resources and funds available to carry out the requirements of these rules. Since additional funding is not provided for energy analysis and evaluation within the Federal-Aid Highway Program, many believe the priorities would have to be established for transportation agencies to embark on expanded energy activities within existing budgets. This leads to the question of how energy relates to other well-established national, State, and local goals and objectives. The Question

of funding was addressed earlier, under General Discussion of Comments. We would, however, add that transportation energy planning and analysis activities and energy-related highway projects are eligible items for Federal-aid highway funding. In addition, DOT has requested in an additional \$15 million in FY 81 appropriations for UMTA-supported energy conservation and contingency planning activities which would be available to those agencies now responsible for urban transportation planning.

C. Targets. Many of the comments received addressed the issue of energy conservation targets. Commenters asked what targets were being referred to and by whom they were to be developed. Numerous comments advised against using DOE's voluntary State gasoline consumption targets. These issues are addressed in a previous section, General Discussion of Comments. FHWA has revised the amendments to Parts 420 and 450 proposed in the NPRM in concert with the clarification provided. The sections of this preamble dealing with the specific amendments to Parts 420 and 450 contain additional information on the targets issue.

D. Authority. One commenter, in raising the issue of FHWA's basic authority to issue these rules, cautioned that care must be taken to not infringe upon "the sovereign rights of the States to determine which projects shall be federally financed," as assured under section 145 of title 23, United States Code. Section 145 makes clear that the mere availability of Federal funds does not infringe upon the States' rights to select the projects for which they will seek Federal funding. Section 145 does not make available Federal funding for any and all projects for which States may seek Federal funding. It is well established that Federal agencies may condition funding upon compliance with requirements that are reasonably related to the program being administered. These rules establish such requirements. The rules themselves in no way dictate to the States the projects for which Federal funding may be sought.

E. Roles. A few commenters asked which of the various State and local transportation agencies would be responsible for implementing energy requirements. In an effort to incorporate energy consideration throughout the highway program, FHWA (FHWA and UMTA with respect to Part 450) energy rules were developed through amendments to existing regulations, with responsibility for compliance vested in those agencies having

responsibility for compliance with the regulation being amended. The final rules do not change existing roles. Flexibility for task assignments that previously existed continues under these rules. In general, it is important that agencies with overlapping responsibilities reach an understanding as to the sharing and coordination of roles and activities. The provisions of OMB Circular No. A-95 regarding State and local clearinghouse review of Federal and Federally-assisted programs and projects apply to this program.

F. Safety. Several commenters addressed the joint FHWA/NHTSA proposed rule, (23 CFR Part 1204) included under the NHTSA section. These comments are addressed in the NHTSA section below.

G. Timing. Many comments were received concerning the timing of the implementation date of the requirements and the effectiveness of requiring energy conservation activities or reviews at specific points. Some commenters were concerned that the authorization stage was too late in the process to require an energy analysis as the project had already passed through the environmental review process, public involvement process, and negotiations with many jurisdictions. They argued that reprioritizing projects on the basis of energy at this point in the process would cause serious political difficulty. Some commenters believed systems planning was too early in the process. Several commenters stated that the FY 1981 implementation time frame was too short since work programs were in the late stages of development.

FHWA believes that the several different stages in the planning and project development and approval process are appropriate for different levels of energy assessment. For example, the no-build alternative and modal choice considerations are best analyzed at the systems planning stage. The consideration of build alternatives on the other hand may best be handled in corridor studies. Finally, the consideration of different design and construction methods are most suited to the project planning stage. Since the projects reaching the authorization stage will have passed through these phases it is reasonable to expect that over time, projects will begin increasingly to reflect energy conservation considerations. The amended regulations add a requirement that FHWA approval of the State's 105 program submission be based on satisfactory progress being made in incorporating energy conservation into the entire planning and project development process. Such decisions

will not be made on project by project review but rather on the overall impact of the program being considered.

2. Comments Received on Specific Rules.

A. Part 420—Program Management and Coordination. The NPRM included proposed amendments to 23 CFR Part 420, Subpart A, to incorporate energy conservation planning activities as a required element of Statewide transportation planning programs funded with Highway Planning and Research (HP & R) funds. Specifically, a basic policy statement for consideration of energy conservation in Statewide planning programs was proposed under § 420.105(d) and three areas of required program coverage were proposed under new § 420.111. The proposed areas of program coverage were intended to provide considerable flexibility to the State Transportation (Highway) agencies in structuring a program to meet specific State energy conservation goals within the broader context of the national energy conservation goals reflected by E.O. 12185.

Very few comments were received on the specific activities proposed under § 420.111. Most comments on the proposed amendments to Part 420 focused on three areas: (1) Questions and concerns about energy conservation targets; (2) concerns about funding for the additional planning activities; and (3) requests for simple and flexible procedures.

Earlier sections of this preamble (General Discussion of the Rules, and Overall Rulemaking (FHWA)) address the areas of conservation targets and funding. The reference to energy conservation targets in § 420.111(b) has been eliminated in favor of a single policy statement concerning energy conservation targets in § 420.105(d).

In response to the funding concerns, FHWA expects that energy conservation planning activities under Part 420 can be adequately funded through the existing HP & R program. Although some new planning activities are expected as a result of the energy conservation planning requirements, FHWA believes that some activities covered in the final rules are presently being undertaken to some degree by most State transportation agencies. Therefore, the requirements are not expected to significantly add to existing State planning programs. The level of effort and funding reflected in the State planning program in response to the energy conservation planning requirements will be carefully monitored and evaluated at the national level for consideration in formulating national funding policies and programs.

Changes have been made to the final rule to improve clarity and permit maximum flexibility in responding to the spirit and intent of E.O. 12185. Specific changes are:

(a) Section 420.111(a) has been revised to emphasize that the State planning program activity should support the development of the transportation component of State energy conservation and energy contingency plans and policies rather than merely being consistent with such plans and policies. The language in the final rule reflects the need for an active role by the State transportation agency in the development and the implementation of energy conservation policies, plans, and programs. FHWA recognizes that the combined efforts of DOT, DOE, and state counterparts are necessary to ensure early participation of the State transportation agencies in the development of state energy conservation and energy contingency plans and policies.

(b) Section 420.111(b) has also been revised to clarify FHWA's intent that States examine policy, program, and project options that offer the greatest opportunities for improved energy conservation. This is to ensure that planning information concerning energy conservation is available to assist in addressing specific transportation needs.

(c) Section 420.111(c) in the NPRM has been redesignated as § 420.111(d), in the final rule with minor revisions to improve clarity. A new § 420.111(c) has been added to ensure that State programs include monitoring and surveillance of energy consumption indicators. The data produced will assist the States in analyzing the travel-related impacts of fuel price changes, changes in the availability of fuel, and serve as a basis for projections of future travel and fuel consumption.

(d) Section 420.111(d), "Estimate current and future transportation demands on energy consumption," reflects a key output or "end product" of a continuous monitoring and surveillance program of energy consumption and travel indicators. These estimates can provide a measure of response to energy conservation goals and objectives and permit a comparison of anticipated future demands with longer-term energy conservation goals and estimates of fuel availability.

The planning program under Part 420 should consist of activities that will also provide meaningful input to the environmental assessment and the program of projects submitted by State transportation agencies under 23 U.S.C. 105.

Effective date. October 1, 1980, has been established as the effective date for implementation of the energy conservation planning requirements of Part 420. All Statewide HP & R planning work programs approved after the effective date must include activities responsive to the provisions of § 420.111. States with approved HP & R work programs are encouraged to review existing planning activities for consistency with the provision of § 420.111 and, where appropriate, amend existing work programs to incorporate the energy conservation planning requirements at the earliest possible opportunity.

B. Part 450 Planning Assistance and Standards. FHWA and UMTA believe that energy conservation in urban transportation planning should be integrated throughout the planning process. The final rules are designed to reflect the emphasis that must be placed on energy conservation and to be consistent with the ability to address energy conservation in the planning process. The enhanced consideration of energy conservation should ensure that decisions made are sensitive to the need for energy conservation. Comments received on this part were primarily concerned with energy conservation targets and the technical activities proposed.

Section 450.116(d) of the existing regulation requires that each urban transportation plan be consistent with the area's overall energy conservation goals and objectives. The NPRM had proposed to amend § 450.116(d) to require that plans also "reflect energy conservation targets." This proposed amendment has been deleted from the final rule. FHWA and UMTA still believe it is important that transportation planners take any established targets into consideration in formulating a transportation plan; however, they recognized that this objective could be more effectively accomplished by including a requirement that an element of the transportation planning process provide for consideration of any established energy conservation goals, objectives, and targets. Section 450.120(a)(6) has been so amended in this final rulemaking.

FHWA and UMTA believe that any relevant targets will be reflected in the plan because of the broader mandate of § 450.116(d) (unamended) that each urban transportation plan be consistent with the area's overall energy conservation goals and objectives. The General Discussion of Comments section should be consulted for a

discussion of the link between DOE State gasoline consumption targets and these rules.

Section 450.120(a)(8)—FHWA proposed to amend this section to add technical planning activities that would ensure that pertinent energy-related information is available to transportation decisionmakers. FHWA and UMTA continue to believe that the enhanced consideration of energy conservation should ensure that decisions made are sensitive to energy conservation and have retained the proposed amendments with some minor revisions.

Many State and local transportation agencies commented that they have already undertaken most of these activities. The commenters expressed the view that requiring specific energy-related activities would decrease flexibility and simplicity and further burden already stretched resources. Other commenters pointed out the futility of performing the required analyses based upon rudimentary state-of-the-art. The response to the comments on the need for funding and technical information is included in the general comments section of FHWA's portion of this preamble while a section-by-section response is provided here.

Section 450.120(a)(8)(i)—In the NPRM FHWA and UMTA proposed to amend § 450.120(a)(8)(ii) to require an analysis of vehicle fuel consumption. As part of (a)(8)(ii) such analysis would have required basing estimates of fuel consumption on land development and vehicle ownership. Commenters agreed that it was important to generate estimates of vehicle consumption, but pointed out that it is important not to limit unduly the methods by which to accomplish this task. Accordingly, FHWA and UMTA have decided not to require such analysis to be based upon land development and vehicle ownership, but to impose a general requirement that an analysis of vehicle consumption be conducted in § 450.120(a)(8)(i) of the final rule. The remaining sections in this final rulemaking now reflect the same numbering system as the existing regulations.

Section 450.120(a)(8)(ii)—FHWA and UMTA proposed to amend this section and in this final rule have revised the proposed amendment for clarity. FHWA and UMTA are currently revising Appendix A of Part 450, which provides guidance on the intent and scope of the Transportation System Management (TSM) element. Changes will be published separately in the Federal Register and are not part of this rulemaking.

Section 450.120(a)(8)(iii)—The proposed amendment to this section would have required estimating fuel consumption based solely on travel demand without any corresponding estimate of system supply. Several commenters pointed out that this process would not provide useful information unless possible future transportation investments or strategies are also analyzed. FHWA and UMTA agree and have therefore deleted the phrase "as well as an estimate of total vehicle fuel consumption required to satisfy the projected transportation demand" proposed in the NPRM.

Section 450.120(a)(8)(iv)—This section requires that fuel consumption projections be made during the analysis of alternative investments or strategies phase of the planning process. The majority of commenters on this section agreed with this approach. It is important to note that the phrase "or strategies" has been added in this rule to emphasize that transportation alternatives need not be confined to only high capital expenditures. Alternatives are expected to include such strategies as TSM-type improvements. The section remains unchanged from the NPRM.

Section 450.120(a)(8)(v)—This section was proposed to be amended to emphasize the need to investigate the energy impacts of transportation investments or strategies during the plan refinement stage of the planning process. This section remains unchanged from the NPRM.

Section 450.120(a)(8)(vi)—This section was proposed to be amended to emphasize the continuing nature of energy conservation technical activities. FHWA and UMTA anticipate that collection of energy information will be a continuing activity. This section remains unchanged from the NPRM.

Section 450.120(a)(8)(vii)—This section was not proposed to be amended in the NPRM and is not amended here. It is only included in this final rulemaking to complete the list of activities under § 450.120(a)(8).

Accountability. Several commenters were concerned about which agencies will be held accountable for the energy activities required. As indicated in § 450.112, FHWA and UMTA anticipate that these activities will be the responsibility of the Metropolitan Planning Organization (MPO) in cooperation with the State and operators of publicly owned mass transportation services.

Effective Date. In considering the administration of the amendments proposed in the NPRM, FHWA and UMTA determined that existing

certification reviews and approvals conducted under § 450.122 would represent the most logical mechanism to ensure compliance with the increased focus on energy in the urban transportation planning regulations. This would be consistent with the concept of an integrated approach to transportation and energy conservation planning and with the overall continuing, cooperative, and comprehensive (3C) planning concept. As part of the normal certification review, FHWA and UMTA would review all aspects of the process and evaluate the attention given to the activities called for by these amendments. FHWA and UMTA continue to believe this is the best approach. Beginning in fiscal year (FY) 1981, the FHWA/UMTA certification of urban transportation planning programs will require an explicit review of energy conservation planning activities.

Several commenters indicated that the effective date of this requirement would preclude any substantial modification to planning activities in FY 1981 to accomplish the activities described in § 450.120(a)(8). FHWA and UMTA encourage local and State agencies to review existing unified planning work programs (UPWP) and, where appropriate, amend existing UPWP's to incorporate energy conservation planning activities at the earliest possible opportunity. The comments on the NPRM indicated that many State and local transportation agencies have already undertaken these activities. Energy conservation activities will be phased in through FY 1982 in all areas. The certification actions taken in FY 1981 will reflect this transition period.

Level of Effort. FHWA and UMTA recognize that different size urbanized areas will require different levels of effort. Larger areas in general will have more complex transportation-related energy concerns and, therefore, will be expected to include specific energy conservation activities such as those listed in § 450.120(a)(8) in their UPWP's. An urbanized area population of 200,000 should be considered the threshold for this greater level of effort. This size is consistent with air quality planning efforts and FHWA and UMTA efforts to simplify the planning process in smaller urbanized areas. The level of effort appropriate for different size urban areas will be addressed in the technical guidance prepared to assist in implementing the requirements established in this rulemaking.

C. Part 630—Preconstruction Procedures. In the NPRM, FHWA proposed to include in § 630.106, a statement of policy on energy

conservation similar to that contained in FHWA's Notice N5520.4, March 21, 1980, (45 FR 28207). The proposed amendment elaborated on that policy by requiring specifically that energy conservation be considered throughout the process by which highway projects are developed.

The comments received on this section of the NPRM were almost unanimously opposed to the issuance of more regulations to implement policy which has been an FHWA program emphasis area for some time and which has been given high priority already. Several commenters objected to the specificity of the proposed rule and recommended that it be issued in the form of guidelines rather than regulations. Several commenters stated that there are sufficient regulations in existence to ensure adequate consideration of energy conservation in project development. Other commenters argued for the flexibility and generality offered by guidelines because energy factors and goals are still in the formulation stage. These comments are further discussed below.

In the NPRM, FHWA proposed to establish a requirement under a new section § 630.110(b), that State highway agencies give consideration to energy-conserving projects in the development of the State's annual program of highway projects. Further, in the program submission, States would be required to discuss the priority given to such projects and to address the consistency of those projects with efforts to achieve energy conservation goals or targets.

Comments on this section focused on the types of projects identified as energy conserving and the specific phrase "in lieu of major reconstruction." This section was, in part, intended to list examples of the types of projects to be considered as energy efficient. However, commenters noted that inclusion of the phrase "in lieu of major reconstruction" implied that all projects were to compete for program approval solely on the basis of energy considerations. This was not FHWA's intent. FHWA recognizes that highway projects are proposed to satisfy a number of objectives. FHWA intends that this section emphasize that energy conservation is now a very important national goal to be balanced against other priority objectives. The phrase "in lieu of major reconstruction" also implies that such energy-conserving projects are the only means of conserving energy in the Federal aid highway program. To eliminate this confusion, FHWA has decided to delete this phrase.

An additional change from the NPRM for clarification purposes was to eliminate the reference to "parking management techniques" under the list of energy conserving projects, and replace that term with "rides sharing activities and facilities, and bicycling and pedestrian facilities." FHWA believes that such a broad term as "techniques" would not adequately define projects eligible for Federal-aid highway funds as part of the highway construction program.

Section 630.112, as published in the NPRM, proposed a new requirement that FHWA Division Administrators review program submissions to assure that there has been an aggressive effort toward energy conservation in program development and that such an effort be reflected in the number and types of energy conserving projects included in the program. It also related such actions to State and national goals or targets. FHWA believes this is a fundamental component of its program to implement E.O. 12185 and this section is included in the final rule.

Finally, in the NPRM, FHWA proposed a new § 630.114 that required the Division Administrator to assure that the projects identified as energy-conserving were implemented at a rate consistent with other type projects identified in the State's program of projects. Further, it required the Division Administrator to assure that all projects (whether an energy-conserving type or other) are designed, planned, and constructed in an energy efficient manner.

Most of the comments on Part 630 focused on § 630.114 and contended that project authorization is an inappropriate point in the project development process for the Division Administrator to assure that each project is being designed, planned, and constructed in an energy efficient manner, because projects at this point are too far developed to incorporate energy concerns. In the NPRM, FHWA proposed under administrative actions to use the PS&E approval (a checkpoint in the project development process where FHWA ensures that requirements relative to planning, environment, and design have been met) to review the extent of energy conservation considerations in project development. Many comments noted that projects developed under certification acceptance procedures are authorized without a PS&E review and approval, and, hence, without sufficient detail to assess the energy conservation aspects of the projects. As a result of the comments received, FHWA has determined that the requirement for

review of energy conservation consideration is incorporated in § 630.114 and is not a separate administrative action.

While FHWA realizes that a decision at the project authorization stage is very late in the project development process, the information on which such decisions will be made can be generated much earlier in the process. The new planning requirements discussed previously are designed to make energy conservation an important consideration at the initial systems and project development stages. The Division Administrator will provide periodic review and comment on efforts aimed at energy conservation in the various phases of project development. The results of such reviews will be made available to the States in a timely manner long before projects are submitted for authorization. Reviews at the time of authorization then become a routine formality for those States that have incorporated consideration of energy conservation into the normal project development process. Under this approach, specific detailed documentation is not needed at the time of project authorization and should not adversely affect the certification acceptance program under which many State highway agencies (SHA's) are operating.

FHWA's intention in this final rule is explicitly to establish the Division Administrator's authority to require that energy conserving projects advance at a rate consistent with other projects and to utilize a formal decision/control point to assure that all projects proposed for Federal-aid highway funding are developed with consideration given to energy conservation regardless of whether projects are developed through PS&E stages or via the certification process.

Effective Date: Many of the comments on Part 630 arose from the concern that programs and projects currently under development would be rejected because of the new requirements. Projects being developed should include energy considerations to the extent practicable depending on the stage of their development. The FHWA Division Administrator will have to make some judgments on the extent the project has incorporated energy considerations versus the extent the project could accommodate energy conserving features. Similarly, programs for FY 1981, some of which have been approved, would not be expected to measure up to those developed in the future; however, SHAs are encouraged to implement Part 630 to the extent practicable as soon as possible.

Programs approved for FY 1982 could be expected to reflect the requirements of Part 630 as amended.

3. *Administrative Actions.* In the NPRM, FHWA identified a series of nonregulatory activities that would be taken to support energy-conservation in the Federal-aid highway program. Nearly all of the commenters on this section supported the nonregulatory approach but most commenters requested clarification of the proposed actions and requested more specific information about training and guidance FHWA is developing. In response to these comments, FHWA has decided to reiterate, clarify, and elaborate on the administrative actions it believes to be a vital component to the overall energy-conservation program.

A. *Environmental Impact Statement (EIS).* As noted in the NPRM, one of the primary ways in which FHWA attempts to ensure that full consideration is given to energy conserving alternatives and measures is in the context of the NEPA (National Environmental Policy Act of 1969) process. The need to conserve energy is well recognized in the environmental review process for highway projects. The Council on Environmental Quality (CEQ) has issued regulations implementing NEPA (40 CFR Parts 1500 to 1508) which specifically require the consideration of the direct and indirect energy requirements of various alternatives and mitigation measures to conserve energy (40 CFR 1502.16(e)). FHWA is already subject to these CEQ requirements and is in the final stages of revising its procedures for the preparation of environmental impact statements. This will ensure that energy considerations are incorporated into the existing Federal-aid highway program and receive proper attention during project development.

FHWA will be supplementing the CEQ regulations by the issuance of specific guidance on the consideration of energy and other potential impacts in the EIS process. This guidance will call for consideration of a broad range of alternatives including the alternative of no action, a limited construction alternative designed to maximize use of the present system, and proposed major construction alternatives. The guidance will outline the principal elements to be examined in an energy assessment, such as significant direct and indirect energy impacts resulting from construction, facility operations, and induced changes in land use and travel habits. Also, the guidance will call for a discussion of any energy conservation measures proposed as part of the project. Comments received concerning the

technical aspects of the EIS requirements will be considered in developing the needed guidance.

B. *Guidance.* Many commenters were concerned with the technical issues associated with the analysis, assessments, and evaluations called for by the proposed rule changes. Many commenters were uncertain about the use of terms such as net energy analysis, direct and indirect energy consumption, and life-cycle energy analysis. Most commenters expressed concern that the state-of-the-art was not consistent with the requirements imposed, while others stated that they look forward to reviewing technical guidance. Comments were also received that advocated additional energy research as well as comments that identified energy conservation activities. DOT has attempted to provide some guidance in this area as part of its overall preamble. Finally, many commenters requested that thresholds be established for the level of energy analysis required for different types of projects, including exemptions for certain types of projects (e.g., TSM, transit, rural projects, projects not requiring EIS, etc.).

FHWA and UMTA recognize the difficulties identified in these comments and found them consistent with comments received on the ANPRM. FHWA and UMTA have been developing technical guidance and evaluating the state-of-the-art to assure that requirements in the rule are consistent with the state-of-the-art in energy assessment. On July 7 and 8, 1980, FHWA, with UMTA support, convened an energy panel with representatives of State and local transportation agencies to evaluate preliminary proposals on technical guidance. The meeting was announced in the Federal Register (45 FR 44438, July 1, 1980) and the public was invited to attend. The meeting provided constructive information on the current state-of-the-art of energy analysis, which is being used to develop technical guidance for energy assessments. A summary report of that meeting has been prepared and filed in the public docket for this rulemaking (Docket No. 66).

FHWA and UMTA intends to have the technical guidance available within 60 days of publication of these rules. This guidance will be distributed through field offices to State and local agencies.

C. *Enhanced Coordination.* FHWA has been and will continue to work closely with DOE to strengthen channels of communication between transportation and energy staffs. In order for State and local transportation

planning agencies successfully to incorporate energy conservation in their planning, they must become more closely involved with energy conservation planning activities being conducted at the State level, usually by the State transportation agency working with the State energy office. Efforts in this area at the FHWA headquarters are further discussed below.

D. *Energy Council.* FHWA has established an agency-wide Energy Council to specifically coordinate energy activities and to foster increased emphasis on energy conservation within the agency. A major effort now underway is an evaluation of organization and training needs to enhance energy conservation in the Federal-aid highway program. A continuing function of the Energy Council is the development of Energy Policy and Program recommendations.

E. *Policy Statement and Emphasis Areas.* The FHWA policy statement on energy conservation, FHWA Notice N 5520.4 (March 21, 1980; 45 FR 26207) defines the broad FHWA policy on energy conservation and supports the efforts being undertaken here in response to E.O. 12185. FHWA Notice N 5520.4 states that it is FHWA policy that the planning, design, construction, management, and operation of the Federal-aid highway systems are to be conducted in a manner that conserves fuel, maintains the greatest degree of personal and economic mobility consistent with the availability of fuel, and maintains a state of emergency preparedness in the event of an abrupt fuel curtailment. This policy statement provides overall direction to the FHWA energy conservation and contingency planning efforts and affects areas of the program beyond those specifically identified in this rulemaking.

FHWA designated energy conservation as a program emphasis area in FY 80 (FHWA Order 1000.1E dated November 2, 1979) and it continues to be an emphasis area in FY 81 (FHWA Order 1000.1F, dated August 1, 1980). The FY 81 energy emphasis area statement references E.O. 12185 and identifies specific objectives related to energy conservation.

F. *Promotional Activities.* FHWA noted in the NPRM that it (in conjunction with UMTA for the urban transportation planning process) would give increased attention to promotional activities for a wide range of energy-conserving transportation actions including a variety of transportation system management actions. These TSM actions include ridesharing programs, high-occupancy vehicle (HOV) lanes, public transit, bicycle and pedestrian

facilities, fringe parking lots, freeway ramp metering, and traffic signalization improvements, as well as data collection and analysis to measure the effects of the conservation efforts. One commenter suggested that the promotion effort be expanded to consider promoting the DOE Driver Energy Conservation Awareness Training (DECAT) Program. The program is aimed at vehicle fleet drivers (those drivers who work in company motor pools or who do routine business driving for government agencies or private industry). Using techniques learned through driver awareness training, a vehicle fleet driver can achieve fuel economy improvements of from 10 to 20 percent in both city and highway driving. FHWA recognizes that this program has a very high potential for energy conservation. FHWA has met with representatives of DOE responsible for this program and is currently evaluating an appropriate method of supporting DOE's effort.

G. Value Engineering. Comments that addressed the FHWA's intention to encourage consideration of energy aspects through value engineering-type approaches, including the use of energy efficient materials such as sulfur-extended asphalt, asphaltic emulsions, and high pressure sodium luminaires, expressed concern that specific approaches would be mandated. Similar comments were received on the proposal to encourage the use of alternate construction methods, materials, and designs (e.g., pavement recycling, solar heating, and photovoltaic power generation) which are more energy efficient than those normally proposed. Here the concern was that specific construction methods or materials would be mandated. FHWA does not intend to mandate specific approaches, methods, or materials to be used, but rather that such alternatives be considered and encouraged where appropriate as part of FHWA's ongoing program of working closely with SHA's throughout project development.

H. Maintenance. Comments on the proposal to use maintenance certification as an administrative tool to encourage energy conservation reflect an apparent misunderstanding of FHWA's intentions in this area. Commenters were concerned that FHWA was establishing requirements in an area where there is no Federal financial involvement. FHWA is not establishing any regulatory requirements in this area.

FHWA believes that highway maintenance activities offer opportunities for energy conservation and intends to establish an internal

program that will foster more attention to energy considerations in the area of highway maintenance. Such a program will focus on using energy-related information derived from the reviews of current State annual maintenance reports to encourage changes in the project development process to minimize the need for energy-inefficient maintenance requirements. The program will also be used to develop a compendium of energy-conserving maintenance practices for distribution to States as part of the information/technology transfer program.

FHWA intends to use the FHWA Division Administrator's annual maintenance report as a vehicle for establishing this program. While FHWA will conduct a management review of State maintenance practices, including a detailed review of selected maintenance activities and detailed physical inspections of selected Federal-aid projects, it will be up to the States to take advantage of the information generated.

I. Relocation Assistance. An additional area in which FHWA is fostering energy conservation, not noted in the NPRM, is relocation assistance. FHWA provides assistance to individuals and businesses that are relocated as a result of construction of a Federal-aid highway project. FHWA's program, developed under the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, mandates that decent, safe, and sanitary (DSS) dwellings be made available to displaced persons. While FHWA regulations on relocation assistance do not incorporate explicit energy conservation requirements in the definition of DSS housing, FHWA allows expenditure of funds for energy conservation measures that are required by State or local law.

The current FHWA standards provide maximum flexibility for the application of energy conservation measures without modifying Federal regulations and creating an area where the Uniform Relocation Act is not implemented uniformly. A uniform definition of the term "decent, safe and sanitary" is provided in government-wide guidelines for implementing the Uniform Act at 41 CFR 101.6-102.3. If an energy conservation requirement is part of a State or local code, its use is mandatory, and it is eligible for Federal participation. FHWA has and will continue to encourage State and local governments to incorporate energy conservation requirements in their housing codes.

Urban Mass Transportation Administration

(For All UMTA Programs Listed Contact Douglas Kerr, 202/472-5140).

UMTA is adopting two regulatory changes to further energy conservation by recipients of Federal financial assistance for public transportation capital or operating costs:

1. Changes to existing Joint UMTA/FHWA rules pertaining to the planning process for such projects, which are discussed in the FHWA section of this document; and

2. A rule requiring energy assessments of building construction or reconstruction projects proposed for UMTA assistance, which is described below.

System Planning and Major Transit Project Design

The Joint UMTA/FHWA planning and programming regulations (23 CFR Part 450) prescribe the planning process and programming requirements that are conditions for Federal assistance in urbanized areas under all UMTA and FHWA programs. These planning requirements are being amended to ensure local identification and consideration of energy impacts in transportation system planning and the programming of Federal financial assistance available to local areas. UMTA's response to the various comments received on the NPRM and discussion of the specific changes being adopted are contained in the FHWA portion of this preamble.

As potential major transit project proposals emerge during the systems planning process they become subject to UMTA's requirement to conduct an "alternatives analysis" precedent to UMTA's considering a major investment proposal (i.e., for a new fixed-guideway transit system or major extension to an existing system). This analysis subjects the corridors and alternatives identified in system planning to rigorous assessment of costs and impacts, including both energy and other environmental impacts as required under guidelines and regulations providing for Environmental Impact Assessments and Statements. UMTA's Final Regulation governing the environmental review process will be issued shortly and will reflect new CEQ regulations for environmental impact statements, including required identification and consideration of the direct and indirect energy requirements of various alternatives and mitigation measures to conserve energy. Energy impacts may be subject to further refinement and consideration during

preliminary engineering on major investment proposals and will be a significant consideration in final project design and selection of construction methods.

These planning and environmental analysis requirements will ensure that the energy impacts of major transit projects and their alternatives will be identified and considered in local system planning and that this information will be available for consideration in both the local and the Federal project decisionmaking process.

Project Selection—Major Investment Projects

Applicants for Federal assistance for major mass transit projects are advised that their comparative assessment of the energy-saving potential of a proposed project and of each alternative (developed in the alternatives analysis/draft environmental impact statement) is given strong weight in Federal consideration of the merits of the alternatives and in determining the relative priority of the proposed project for funding by UMTA. Particular attention is given to the relative balance of construction energy consumption versus direct energy savings over the life of the project, including energy savings during operations due to diversion from other modes, increased capacities, changed travel patterns, and other factors. Recognition is also given to energy consumption from different energy sources (e.g., oil vs. coal).

In its reviews of preliminary engineering and final design specifications UMTA will pay particular attention to factors that would affect energy efficiency of the project, including vertical alignment, vehicle specifications, station design, modal interfaces, and construction methods. UMTA does not believe that it is feasible or appropriate to express these considerations as rules and no public comments were received suggesting this.

Project Selection—Building or Facility Construction

The NPRM stated that UMTA was considering a rule requiring an energy assessment for any UMTA-assisted building, similar to the FAA proposed rule. This statement drew a number of comments—some supporting this as a reasonable requirement and others opposing it as unnecessary because such an assessment is a normal part of good project design and engineering. UMTA agrees that such analysis is a part of good project design and will normally be documented as part of the environmental analysis requirements. However, some UMTA-assisted

construction or reconstruction of buildings are exempt from the requirement for completion of an environmental assessment or EIS, and a new regulation is being adopted requiring applicants for such projects to submit an energy assessment of the proposed project with their application for construction funding. This will assure that adequate energy assessments will be made for all UMTA-assisted facilities.

Energy Conservation in Internal Operations of Grantees

Comments received from transit operators and State transportation agencies confirmed UMTA's belief that there is a variety of opportunities for energy conservation in the internal operations of UMTA grantees—in their selection, deployment, operation, and maintenance of public transportation equipment and services—and that expanded mass transit programs are increasingly being planned and implemented as part of explicit strategies to conserve energy and preserve mobility options. UMTA's position, which was strongly supported by public comments, is that financial constraints tend to assure that local decisions involving existing or expanded services are made with due consideration of both cost effectiveness and energy efficiency. UMTA believes that explicit administrative or regulatory action is not necessary at this time to assure that such energy conservation opportunities in internal operations are being met. UMTA grant recipients are expected to implement programs to assure that every aspect of their operations is fuel-efficient, consistent with other objectives. Such programs should include, but not be limited to, such factors as vehicle specifications, selection of vehicle types for various services, intermodal coordination, maintenance standards and practices, weatherization standards, heat and power sources and fuels, cogeneration or other energy recapture techniques, operations scheduling, trade-offs between deadheading and vehicle storage locations, vehicle operating practices, driver training, employee information and incentives for ridesharing, flexitime, and any other factors or actions which could affect the fuel efficiency of transit operations or facilities.

Technical Assistance

Activities are underway to accelerate the development and dissemination of supplementary guidance to assist State and local agencies and the public in complying with the energy assessment

requirements discussed in this document. Instructions to UMTA's field staff concerning implementation of the new planning and project requirements and guidance for applicants on methodology for the assessment of energy impacts and on the scope and content of building energy assessments are to be issued at the same time as this Notice. Guidance on the planning process is being developed jointly with FHWA and is described in more detail in the FHWA portion of this preamble. UMTA will participate in on-going research or methodology development to refine or advance the ability to predict and evaluate energy impacts of projects, transportation system plans, or urban development patterns and the relationship of energy impacts to other impacts of local or national interest.

In addition, UMTA is participating in the development of a revised Appendix to the joint planning regulations concerning Transportation System Management (TSM) and a program for more active stimulation of local TSM program planning and implementation action. A joint program of local seminars to increase knowledge of TSM projects and strategies is already underway, and further mechanisms will be developed to provide additional technical assistance for local officials, planning authorities, and transit operating professionals.

The American Public Transit Association submitted a list of recommended local actions to assure energy efficient transit operations. We consider this list an example of the type of information which we would expect to gather and disseminate to assist local areas in assuring the energy efficiency of their internal operations.

National Highway Traffic Safety Administration

(For All NHTSA Programs Listed, Contact John Tartaglino, 202-426-0837)

NHTSA proposed three areas in which energy savings could be achieved: the Innovative Grant Program, 55 mph speed limit enforcement, and the Highway Safety Grant Program. Since the Innovative Grant Program is contingent on appropriations approval and implementation of the 55-mph speed limit is already well under way, NHTSA's short-term energy saving proposals focused on the Highway Safety Grant Program. NHTSA proposed requiring each State to certify in its Highway Safety Plan for that program that energy conservation was considered in development of the Plan. Under the proposal the NHTSA Regional Administrator and the FHWA

Division Administrator would not approve a plan unless satisfied that due consideration had been given to energy conservation measures.

Comments from several State agencies indicated approval of NHTSA's Highway Safety Grant Program approach. These agencies stated their commitment to energy conservation and noted programs already in operation which combine the objectives of safety and fuel economy. Among these are Colorado's Driver Energy Conservation Awareness Training program and the Safe and Fuel Efficient driving program established by the Maryland State Police.

However, comments from the States suggested that new initiatives by NHTSA are unnecessary in view of the State energy saving programs already in operation. Other State agencies expressed concern that NHTSA's proposal will create a new regulatory burden on the States, which will divert scarce manpower and financial resources away from the pursuit of safety goals, or will interfere with normal law enforcement operations. One commenter stated that energy savings are not attainable in most highway safety programs.

NHTSA believes that the experience of States that have achieved energy savings in their highway safety programs indicates that fuel conservation can be practiced without jeopardizing safety or law enforcement objectives. For those States which have already undertaken energy conservation programs, no significant new burdens would be created by NHTSA's proposal. These States are already considering energy savings in their planning processes and would need only to provide a succinct description of their conservation measures in their Highway Safety Plans.

In the case of States which have yet to consider energy savings measures, NHTSA considers the national interest in fuel conservation to be of sufficient importance that it is not unreasonable to require these States to take some action in this area. Although some State transportation agencies have contended that they lack the technical expertise to deal with energy questions, NHTSA feels that a common sense approach will in most cases be all that is necessary. In those instances where technical support is needed, other State and Federal agencies can be consulted. In order to minimize paperwork work, the proposal has been modified to require discussion of energy conservation measures only in the summary section of the Highway Safety Plan, rather than in individual program module descriptions.

Certain commenters suggested that State energy agencies should be assigned primary responsibility for conservation initiatives in view of their greater expertise and overall planning functions. One commenter recommended NHTSA rely on a general grant stipulation concerning energy conservation, which could be implemented as the State saw fit.

Apart from the fact that many States may not have energy agencies, NHTSA considers agencies assigned specific transportation related functions such as motor vehicle regulation to be in the best position to identify areas where energy savings are possible and to implement programs to achieve these savings. State energy agencies and bodies with overall planning responsibility could function in a coordination role with respect to these programs. Given the overriding national interest in energy conservation, the Federal government must retain a supervisory function to assure the consideration of energy conservation in Federally financed programs.

Among the specific comments regarding NHTSA's proposed regulatory action, two State agencies criticized the plan as being too vague and assigning too much discretion to NHTSA and FHWA regional personnel in the review of State energy saving plans. While NHTSA believes that regional administrators are in the best position to evaluate State programs within their areas of responsibility, the agency agrees that additional guidance is in order. Thus, the language of the amendment has been modified to require NHTSA Regional Administrators and FHWA Division Administrators to find that each State Highway Safety Plan contains a description of specific program areas in which energy conservation has been considered and evaluates the prospects for energy conservation in those areas.

One State law enforcement agency expressed concern that the use of fuel efficient vehicles in local law enforcement would be required under the proposal and could interfere with legitimate law enforcement activities. Another State agency requested examples of fuel saving methods which could be applied to 55-mph speed limit enforcement programs.

The use of fuel efficient vehicles is only one available option for States wishing to conserve fuel in their speed limit enforcement programs. NHTSA does not plan to require that States implement particular energy saving techniques. If a State concludes that use of fuel-efficient vehicles would be inconsistent with the needs of its law

enforcement program, there are numerous other options by which savings may be attained. Among these are fuel saving maintenance practices, such as periodic tune-ups and tire pressure checks; and the elimination of unnecessary cruising and idling.

Finally, one commenter noted that the August 1, 1980, deadline for submission of fiscal year 1981 Highway Safety Plans precludes implementation of any new requirements in this year's Highway Safety Plans. NHTSA recognizes that the timing of this amendment makes implementation for fiscal year 1981 impractical. The amendment is, therefore, made effective with regard to State Highway Safety Plans submitted after January 1, 1981. Except as noted above, the amendment to Part 1204 (23 CFR Part 1204) is adopted as proposed.

Federal Railroad Administration

(For All FRA Programs Listed, Contact Marilyn Klein, 202-426-2608.)

FRA has reviewed the public comments received, most of which were favorable. The only change made from the NPRM was to clarify language in 49 CFR 266.15(c)(11); in addition, an unrelated revision of Part 266 is being prepared which will require renumbering of provision. In the revision, it will appear as subparagraph (c)(12); in this final rule, it is being designated (c)(11A).

Comments and FRA Responses

The State of Alabama Highway Department recommended that energy workshops that were offered in 1979 should be continued and expanded. Several commenters suggested that FRA provide technical assistance with respect to energy analyses. FRA, with the cooperation and support of DOE, has scheduled a second annual Energy Management Workshop for the fall of 1980. This workshop will provide a forum for FRA and the rail industry to exchange information and discuss technical assistance. As a result of the first workshop, FRA and an eastern railroad company have initiated a cooperative research project to determine the company's total energy use and the conservation measures it could undertake. In addition, the FRA Office of Research and Development is developing performance-related criteria for rolling stock to enable the industry to incorporate energy-efficient designs into its equipment-purchasing plans. Cooperative Government and industry testing is also underway to conserve energy in operating practices. The Office of Federal Assistance will publish a revised State Rail Planning Manual early in 1981. The manual will include a

chapter on energy conservation, which will provide technical assistance to States.

Several commenters suggested that DOT and FRA should increase intermodal planning and analysis. FRA notes that a freight intermodal transfer facility may be eligible for FRA financial assistance, in accordance with the various program regulations (49 CFR Parts 258, 260, and 266, respectively). FRA funded a demonstration project that began in 1978 to develop improvements in trailer-on-flatcar service on the Milwaukee Road between Chicago and St. Paul. Under a loss-sharing arrangement during the startup period, a group of dedicated, fast intermodal trains operate on eight daily schedules. Traffic on these trains has climbed to as much as 1,700 trailers per week, reducing fuel consumption by approximately 50 percent compared with their movement on the highway. This successful service should encourage other efforts in intermodal transfer facilities and services. With regard to passenger service, the FRA Northeast Corridor Improvement Project includes plans to rehabilitate 15 passenger stations between Washington, D.C., and Boston to make them efficient and attractive intermodal passenger transfer facilities.

Several cities and States suggested that alternatives to petroleum-based energy should be further explored through DOT's Research and Development program. In 1978, FRA's Office of Research and Development issued an interim report on its research into alternative fuels for diesel locomotives. The research, jointly sponsored with DOE and the Association of American Railroads, is an attempt to determine whether less expensive distillate fuels, residual fuels or nondiesel fuel such as alcohol or coal-derived products, can be used in place of conventional diesel fuel for locomotives. The next phase will test various alternative fuels in test engines.

DOE suggested that DOT encourage its grant recipients to invite State energy offices to participate in the transportation planning, programming, and design processes. FRA's State Rail Planning Manual stresses coordination of planning with local, State, and Federal agencies. The Wisconsin DOT and North Carolina DOT commented that the only proposed energy requirement for the Local Rail Service Assistance program is that the State Rail Plan describe how the State planning process considers energy conservation. The Wisconsin DOT believes that an energy assessment

should be required as part of a project application. FRA believes that the appropriate place for consideration of energy impacts and potential benefits and costs of various alternatives is in the planning process. Determinations made by the State as part of the planning process can subsequently be used to determine which projects to fund. FRA has revised language in the energy-related regulation for the Local Rail Service Assistance program, as noted above.

The Northeast Indiana Coordinating Council stated that freight planning should be incorporated into the transportation planning process at the local level. With respect to rail freight planning, the FRA regulations governing development of State Rail Plans already require that the State permit local and regional governmental bodies to review and comment on appropriate elements in the State Rail Plan. Further, the Secretary has recently directed FHWA and UMTA to revise the joint UMTA-FHWA urban planning regulations to, among other things, give more direction and emphasis to planning for urban goods movement.

Actions Taken Since Publication of the NPRM

FRA has requested Amtrak to describe what action Amtrak has taken or plans to take to conserve petroleum and natural gas and the savings that are expected to result. Controls in operations, as opposed to the energy efficiencies that might normally be expected to result from the acquisition of new vehicles, are of particular interest.

A reference to Executive Order 12185 has been added to FRA's final Procedures for Considering Environmental Impacts (45 FR 40654, June 16, 1980). Environmental assessments for FRA projects are required to consider the use of energy resources resulting from the proposed action and from reasonable alternatives. If an environmental impact statement is required, it must include detailed assessments of energy resources likely to result from each alternative, as well as any potential energy conservation opportunities, especially those alternatives likely to reduce the use of petroleum and natural gas. Mitigation measures, including those intended to conserve energy, are also to be described. Where appropriate, the FRA program office will include appropriate mitigation measures as a condition to financial assistance and as a provision of contracts.

Final Rules for Each Program

In consideration of the foregoing, the Code of Federal Regulations is amended as follows:

**A. Title 14—Aeronautics and Space
FEDERAL AVIATION
ADMINISTRATION**

PART 152—AIRPORT AID PROGRAM

Part 152 is amended by adding a new table of contents for Subpart G, amending the authority citation for Part 152, and adding a new Subpart G, to read as follows:

PART 152—AIRPORT AID PROGRAM

Subpart G—Energy Conservation in Airport Aid Program

- Sec. 152.601 Purpose.
- 152.603 Applicability.
- 152.605 Definitions.
- 152.607 Building design requirements.
- 152.609 Energy conservation practices.

Authority: Secs. 1-27, 84 Stat. 220-233 (49 U.S.C. 1711-1727); Sec. 1.47(g), Regulations of the Office of the Secretary of Transportation; 35 FR 17044, Sec. 403(b), 52 Stat. 3518; E.O. 12185, unless otherwise noted.

Subpart G—Energy Conservation in Airport Aid Program

§ 152.601 Purpose.

This subpart implements Section 403 of the Powerplant and Industrial Fuel Use Act of 1978 (92 Stat. 3318; Pub. L. 95-620) in order to encourage conservation of petroleum and natural gas by recipients of Federal financial assistance.

§ 152.603 Applicability.

This subpart applies to each recipient of Federal financial assistance from the Federal Aviation Administration through the Airport Development Aid Program (ADAP) unless otherwise excluded by definition.

§ 152.605 Definitions.

As used in this subpart—
“Building construction” means construction of any building which receives Federal assistance under the program, which will exceed \$200,000 in construction cost.

“Energy Assessment” means an analysis of total energy requirements of a building, which, within the scope of the proposed construction activity, and at a level of detail appropriate to that scope, considers the following:

- (a) Overall design of the facility or modification, and alternative design;

(b) Materials and techniques used in construction or rehabilitation;

(c) Special or innovative conservation features that may be used;

(d) Fuel requirements for heating, cooling, and operations essential to the function of the structure, projected over the life of the facility and including projected costs of this fuel; and

(e) Kind of energy to be used, including—

(1) Consideration of opportunities for using fuels other than petroleum and natural gas, and

(2) Consideration of using alternative, renewable energy sources.

"Major Building Modification" means modification of any building which receives Federal assistance under the program, which will exceed \$200,000 in construction cost.

§ 152.607 Building design requirements.

Each sponsor shall perform an energy assessment for each Federally-assisted building construction or major building modification project proposed at the airport. The building design, construction, and operation shall incorporate, to the extent consistent with good engineering practice, the most cost-effective energy conservation features identified in the energy assessment.

§ 152.609 Energy conservation practices.

Each sponsor shall require fuel and energy conservation practices in the operation and maintenance of the airport and shall encourage airport tenants to use these practices.

B. Title 23—Highways

FEDERAL HIGHWAY ADMINISTRATION

PART 420—PROGRAM MANAGEMENT AND COORDINATION

1. Part 420 is amended by adding a new paragraph (d) to § 420.105 and adding a new § 420.111, to read as follows:

§ 420.105 Policy.

(d) Highway planning activities shall be consistent with State energy conservation goals and objectives and, where established, reflect energy conservation targets.

§ 420.111 Planning program coverage.

In support of the planning of future highway programs and local public transportation systems under 23 U.S.C. 307(c), State planning work programs shall include activities to:

(a) Support the development of the transportation component of State energy conservation and energy contingency plans and policies.

(b) Identify and evaluate policy, program, and project options that offer the greatest opportunities for energy conservation in addressing transportation needs.

(c) Monitor transportation-related energy consumption indicators, and

(d) Estimate current and future transportation demands on energy consumption.

FEDERAL HIGHWAY ADMINISTRATION AND URBAN MASS TRANSPORTATION ADMINISTRATION

PART 450—PLANNING AND ASSISTANCE STANDARDS

2. Part 450 is amended by revising § 450.120(a)(6) and § 450.120(a)(8), to read as follows:

§ 450.120 Urban transportation planning process: Elements.

(a) * * *

(6) Provide for the consideration of energy conservation goals, objectives, and, where established, energy conservation targets.

(8) Include the following technical activities to the degree appropriate for the size of the metropolitan area and the complexity of its transportation problems:

(i) An analysis of existing conditions of travel, transportation facilities, vehicle fuel consumption, and systems management;

(ii) An evaluation of alternative transportation systems management (TSM) improvements and the development of the TSM element of the transportation plan to:

(A) Make more efficient use of existing transportation resources;

(B) Reduce energy consumption for transportation overall; and

(C) Respond to short-term disruptions in the energy supply;

(iii) Projections of urban area economic, demographic, and land use activities consistent with urban development goals, and projections of potential transportation demands based on these levels of activity;

(iv) Analysis of alternative transportation investments or strategies to meet area-wide needs for transportation facilities and to aid in the development of the long-range element of the transportation plan, such analysis to include estimates of the energy consumption of each alternative;

(v) Refinement of the transportation plan through the conduct of corridor, transit technology, and staging studies; and sub-area, feasibility, location, legislative, fiscal, functional classification, institutional, and energy impact studies;

(vi) Monitoring and reporting of urban development, transportation, and energy consumption indicators and a regular program of reappraisal of the transportation plan; and

(vii) Implementation programming which merges the results of plan refinement of the long-range element and the improvements recommended in the transportation systems management element of the transportation plan to produce a transportation improvement program (TIP) as specified in Subpart C of this part.

FEDERAL HIGHWAY ADMINISTRATION

PART 630—PRECONSTRUCTION PROCEDURES

3. Part 630 is amended by—

1. In § 630.106, redesignating paragraph (b) as paragraph (c) and adding a new paragraph (b), to read as follows:

§ 630.106 Policy.

(b) In recognition of the national concern that this country practice rigorous energy conservation, and in further recognition that highway transportation is a major consumer of petroleum-based fuels, the planning, design, construction, management, and operation of the Federal-aid highway system shall be conducted in a manner that conserves fuel, maintains the greatest degree of personal and economic mobility consistent with the availability of fuel, and maintains a state of emergency preparedness in the event of an abrupt fuel curtailment. Energy conservation is a national goal of utmost importance which must be supported by, and incorporated into, the processes for the programming and authorization of Federal-aid projects.

(ii) In § 630.110, redesignating paragraphs (b) through (g) as paragraphs (c) through (h), respectively, and adding a new paragraph (b), to read as follows:

§ 630.110 General requirements.

(b) In preparing the program the SHA shall give consideration to projects identified as energy conserving, such as, but not limited to, public transportation, ridesharing activities and facilities, bicycle and pedestrian facilities, traffic

signalization and control, HOV facilities, and resurfacing, restoration, and rehabilitation (3-R) work. The program shall include a discussion of the priority to be given to such projects, consistent with energy conservation aspects of Statewide and urban comprehensive transportation planning, and the contribution toward achieving energy conservation goals or targets.

iii. In § 630.112, redesignating paragraphs (a) through (f) as paragraphs (b) through (g), respectively, and adding a new paragraph (a), to read as follows:

§ 630.112 Approval of programs.

(a) The FHWA Division Administrator will first review the program to assure that it provides adequate consideration of and represents an aggressive effort toward energy conservation in the number and types of projects which offer high potential for conserving energy in accordance with State and national goals or targets.

iv. In § 630.114, redesignating paragraphs (a) through (g) as paragraphs (b) through (h), respectively, and inserting a new paragraph (a), to read as follows:

§ 630.114 Authorization to proceed.

(a) With each authorization, the FHWA Division Administrator shall review the level of program implementation to assure that the energy conservation projects are proceeding at a rate consistent with implementation of other categories of projects. The FHWA Division Administrator shall also assure that energy efficiency is a basic objective in the design and construction of projects.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION AND FEDERAL HIGHWAY ADMINISTRATION

PART 1204—UNIFORM STANDARDS FOR STATE HIGHWAY SAFETY PROGRAMS

4. Supplement B to § 1204.4 of Part 1204 is amended by—

i. In Chapter I, adding a new paragraph at the end of Section 3; substituting “, 92 Stat. 3318 section 403(b), and E.O. 12185 impose” for “imposes” in Section 5; and adding a new paragraph c. to Section 6, all to read as follows:

Chapter I—Introduction

3. Authority.

Section 403(b) of the Powerplant and Industrial Fuel Use Act of 1976 (92 Stat. 3318; Pub. L. 95-620) and Executive Order 12185 direct each Federal agency to take such actions as lie within its authority to maximize the efficient use of energy and the conservation of petroleum and natural gas in programs funded by the agency.

5. **General Requirements.** 23 U.S.C. 402(b)(1), 92 Stat. 3318 section 403(b), and E.O. 12185 impose certain requirements which must be met as a prerequisite to program approval.

6. Policy.

c. With reference to the energy conservation requirements of section 403(b) of the Powerplant and Industrial Fuel Use Act of 1976 and E.O. 12185, each State receiving funds under 23 U.S.C. 402 shall consider, in the formulation of a Highway Safety Plan, measures by which the efficient use of energy and conservation of energy resources can be maximized in the implementation of the State's highway safety program.

b. In Chapter II, Section 3, paragraph a, adding the words “Energy Conservation Measures Considered;” following “Statewide Program Goals,” to read as follows:

Chapter II—Content of HSP

3. Preparation of the Highway Safety Plan.

c. Highway Safety Plan Summary (Part I).

This part should consist of the Certificate of Compliance (Appendix B), a HSP Cost Summary and an Executive Summary which provides a brief multi-year overview of the State's program status, planned activities and anticipated accomplishments, to include: Accident Trends; Significant Statewide Problems Identified; Program Emphasis and Priorities; Statewide Program Goals; Energy Conservation Measures Considered; Key Legislative Needs and Planned Actions; Planned Administrative Actions.

c. In Chapter III, a new sentence is added at the end of paragraph a(1) in Section 4, to read as follows:

Chapter III—Submission and Approval

4. Approval of the Highway Safety Plan.
a. Program Approval.

The HSP shall not be approved unless it contains a statement, signed by an authorized State official, certifying that the efficient use of energy and the conservation of energy resources were considered in planning the State's highway safety program and the FHWA Division Administrator and the NHTSA Regional Administrator determine that the HSP describes specific program areas in which energy conservation has been considered and evaluates the prospects for

energy conservation in those areas through implementation of the plan.

d. In Appendix B to Supplement B, “23 U.S.C. 402(b)(1), 92 STAT. 3318, AND EXECUTIVE ORDER 12185” is inserted in the title after “23 U.S.C. 402(b)(1)” and a new paragraph (g) is added at the end, to read as follows:

Appendix B—State of _____

Certificate of compliance with 23 U.S.C. 402(b)(1), 92 Stat. 3318, and Executive Order 12185.

I hereby certify that:

(g) The efficient use of energy and the conservation of energy resources have been considered in planning the State's highway safety program.

C. Title 49—Transportation

FEDERAL RAILROAD ADMINISTRATION

PART 258—REGULATIONS GOVERNING SECTION 505 OF THE RAILROAD REVITALIZATION AND REGULATORY REFORM ACT OF 1976, AS AMENDED

1. Part 258 is amended by adding a new subdivision (vii) to § 258.7(a)(4) and by revising paragraphs (b) and (c) of § 258.29, all to read as follows:

§ 258.7 Form and content of application.

(a) Each application shall include, in the order indicated and identified by applicable section numbers and letters corresponding to those used in this part, the following information:

(4) Detailed description of the amount and timing or purposes, including—

(vii) A description of the project's effect on national energy consumption (over the life of the project) by the applicant and other parties (as applicable) with particular emphasis on increases and decreases in the national use of petroleum, natural gas, and coal.

§ 258.29 Order of funding.

(b) Where appropriated funds are adequate to finance some but not all projects which are eligible for Federal assistance within any one of the categories described in paragraph (a) of this section, priority for funding will be given first to projects that provide safety improvements and signals, including underpasses or overpasses at railroad crossings at which injury or loss of life has frequently occurred or is likely to occur and then to projects which significantly reduce national energy consumption.

(c) As between two projects within the same category, as described in paragraph (a) of this section, which both either provide or do not provide safety improvements and signals or which significantly reduce national energy consumption, priority for funding will be given to the project which was first proposed in a completed application.

PART 260—REGULATIONS GOVERNING SECTION 511 OF THE RAILROAD REVITALIZATION AND REGULATORY REFORM ACT OF 1976, AS AMENDED

2. In Part 260, a new subdivision (iv), is added to § 260.7(a)(7), to read as follows:

§ 260.7 Form and content of application.

(a) Each application shall include, in the order indicated and identified by applicable section numbers and letters corresponding to those used in this part, the following information:

(7) Statement, together with supporting evidence, that the facilities or equipment being acquired, rehabilitated, or improved will be efficiently and economically utilized, including:

(iv) A description of the project's effect on national energy consumption (over the life of the project and in light of the information provided in response to § 260.8) by the applicant and other parties (as applicable) with particular emphasis on increases and decreases in national use of petroleum, natural gas, and coal.

PART 266—ASSISTANCE TO STATES FOR LOCAL RAIL SERVICE UNDER SECTION 5 OF THE DEPARTMENT OF TRANSPORTATION ACT

3. In Part 266, a new subdivision (11A) is added to § 266.15(c) to read as follows:

§ 266.15 Requirements for State Rail Plan.

(c) *Contents of the State Rail Plan.* Each State Rail Plan shall:

(11A) Indicate how the overall planning process in the State addresses the need to improve national energy efficiency, reduce the national use of petroleum and natural gas, and increase the national use of coal.

Urban Mass Transportation Administration

4. Title 49 is further amended by adding a new Part 622 consisting of Subparts A and B—Reserved and Subpart C to read as follows:

PART 622—ENVIRONMENTAL IMPACT AND RELATED PROCEDURES

Subpart A—Reserved

Subpart B—Reserved

Subpart C—Requirements for Energy Assessments

§ 622.301 Buildings.

(a) UMTA assistance for the construction, reconstruction, or modification of buildings for which applications are submitted to UMTA after October 1, 1980, will be approved only after the completion of an energy assessment. An energy assessment shall consist of an analysis of the total energy requirements of a building, within the scope of the proposed construction activity and at a level of detail appropriate to that scope, which considers:

- (1) Overall design of the facility or modification, and alternative designs;
- (2) Materials and techniques used in construction or rehabilitation;
- (3) Special or innovative conservation features that may be used;
- (4) Fuel requirements for heating, cooling, and operations essential to the function of the structure, projected over the life of the facility and including projected costs of this fuel; and
- (5) Kind of energy to be used, including—
 - (i) Consideration of opportunities for using fuels other than petroleum and natural gas, and
 - (ii) Consideration of using alternative, renewable energy sources.

(b) Compliance with the requirements of paragraph (a) of this section shall be documented as part of the Environmental Assessment or Environmental Impact Statement for projects which are subject to a requirement for one. Projects for which there is no environmental assessment or EIS shall document compliance by submission of appropriate material with the application for UMTA assistance for actual construction.

(c) The cost of undertaking and documenting an energy assessment may be eligible for UMTA participation if the requirements of Federal Management Circular 74-4 (A-E7) are met.

(d) This requirement shall not apply to projects for which the final project application or environmental assessment have been submitted to UMTA prior to October 1, 1980.

(Sec. 403(b), Pub. L. 96-520; E.O. 12188)

Issued in Washington, D.C., on August 21, 1980.

William J. Beckham, Jr.,
Acting Secretary of Transportation.

[FR Doc. 80-25710 Filed 8-29-80; 9:45 am]
BILLING CODE 4910-22-01