Guidance for Implementing the Clean Air Act Section 176(c)(8) Transportation Control Measure Substitution and Addition Provision
Guidance for Implementing the Clean Air Act Section 176(c)(8) Transportation Control Measure Substitution and Addition Provision

Transportation and Regional Programs Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency
TABLE OF CONTENTS

Section 1: Introduction .................................................................................................................................1

1.1 What is the purpose of this guidance?  
1.2 What TCMs are addressed by Clean Air Act section 176(c)(8) and this guidance document?  
1.3 What are the transportation conformity rule’s requirements for timely implementation of TCMs?  
1.4 Is a conformity determination or a SIP revision required when a substitution is made or when a TCM is added to the SIP?  
1.5 Does this guidance create new requirements?  
1.6 Who can I contact for more information?  
1.7 Where can I find more information on the web?  

Section 2: Substituting Transportation Control Measures in an Approved SIP ...............5

2.1 When can states use the TCM substitution provision in the Clean Air Act?  
2.2 What does the Clean Air Act require in order for a TCM substitution to occur?  
2.3 What additional information should be provided to support a TCM substitution?  
2.4 How does a state air agency, MPO or other transportation agency demonstrate that a substitute TCM provides equivalent emissions reductions?  
2.5 If the SIP does not include any emissions reductions from a TCM, can it be substituted with another TCM without an analysis?  
2.6 Can the TCM substitution process be used to remove a TCM from the applicable SIP without providing a substitute measure?  
2.7 If a substitute TCM cannot be implemented on the same schedule as the original TCM, what is necessary in order to fulfill the Clean Air Act requirement that “the replacement TCM must be implemented as soon as practicable but not later than the date on which emissions reductions are necessary to achieve the purpose of the implementation plan?”  
2.8 Can the substitution process be used if the substitute TCM could not be implemented until after the date on which emissions reductions are necessary to achieve the purpose of the implementation plan?  
2.9 How would the TCM substitution process work in an area that is nonattainment and/or maintenance for two or more pollutants, where the original TCM is included in the SIP for only one pollutant?  
2.10 Can the TCM substitution process be used to replace a TCM in an approved SIP for an air quality standard that has been revoked if the area remains nonattainment and/or maintenance for other pollutants?  
2.11 When can an MPO make a conformity determination based on a substitution?  
2.12 What must a state air agency do if a substitute TCM provides greater emissions reductions than the original TCM and the agency wants to incorporate the additional reductions into its control strategy SIP or maintenance plan?
Section 3: Adding Transportation Control Measures to an Approved SIP

3.1 What is required in order for a new TCM to be added to an area’s approved SIP through the process established in Clean Air Act section 176(c)(8)?
3.2 What additional information should be provided to support the addition of a TCM to an approved SIP?
3.3 Can all nonattainment and maintenance areas add TCMs to their approved SIPs?
3.4 What must a state air agency do if it wants to incorporate the emissions reductions from an additional TCM into its control strategy SIP or maintenance plan?

Section 4: Process Requirements That Apply When Substituting or Adding Transportation Control Measures to an Approved SIP

4.1 What is necessary for an MPO or other implementing agency to show that it has adequate personnel and funding to implement the substitute or additional TCM?
4.2 What is necessary for an MPO or other implementing agency to demonstrate that there is adequate authority under state or local law to implement, monitor and enforce the substitute or additional TCM?
4.3 What agencies would be involved in developing substitute and additional TCMs in metropolitan areas?
4.4 What transportation agency would concur when a TCM substitution or addition is made in a donut area or isolated rural area?
4.5 What is necessary to demonstrate that the collaborative process used to develop substitute and additional TCMs included reasonable public notice and opportunity for comment?
4.6 How and when do the involved agencies indicate their concurrence on the substitution or addition?
4.7 Who must concur for EPA on the substitution or addition of TCMs?
4.8 What action will EPA take to incorporate the substitute or additional TCM into the codified SIP?

Appendix A: Clean Air Act Section 176(c)(8) -- Substitution and Addition of Transportation Control Measures in Approved SIPs

Appendix B: Clean Air Act Section 108 -- Transportation Control Measures

Appendix C: Example of How to Substitute a TCM Using Clean Air Act Section 176(c)(8)

Appendix D: Example of How to Add a TCM to an Approved SIP Using Clean Air Act Section 176(c)(8)
Section 1: Introduction

1.1 What is the purpose of this guidance?

The purpose of this document is to provide nonattainment and maintenance areas with guidance on implementing the transportation control measure (TCM) substitution and addition provision contained in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU, which was signed into law on August 10, 2005, revised a number of aspects of the Clean Air Act’s section 176(c) transportation conformity provisions. In addition to amendments to the transportation conformity provisions, SAFETEA-LU also added a provision to section 176(c) to allow states to substitute or add TCMs into approved state implementation plan (SIPs) without the standard SIP revision process. Under this Clean Air Act provision, states are no longer required to include a TCM substitution mechanism in their SIPs in order to expedite the process for making TCM substitutions. The provision also provides a streamlined process for adding TCMs to an approved SIP.

EPA revised the transportation conformity rule (40 CFR parts 51 and 93) on January 24, 2008 (73 FR 4419) to address the transportation conformity-related Clean Air Act amendments made by SAFETEA-LU. EPA determined that it was not necessary to promulgate regulations in order to successfully implement the TCM substitution and addition statutory provision. (73 FR 4432) We are issuing this guidance to assist areas in making TCM substitutions and additions. This guidance document supersedes the guidance on TCM substitutions and additions that was included in the guidance document titled, “Interim Guidance for Implementing the Transportation Conformity Provisions in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users” that was issued on February 14, 2006.

Areas are likely to use this statutory process either to make a TCM substitution in an approved SIP or to add a TCM to an approved SIP because the Clean Air Act process will take less time to complete than a standard SIP revision. A standard SIP revision requires rulemaking by both the state air agency and by EPA to complete either a TCM substitution or addition and therefore takes more time to complete than the streamlined Clean Air Act process.

For example, a metropolitan planning organization (MPO) that is beginning work on its next conformity determination may find that a TCM in the area’s approved SIP has become delayed. In order for the MPO to both comply with the transportation conformity rule’s requirements for timely implementation of TCMs (40 CFR 93.113) and to complete its conformity determination as scheduled, the MPO may use the Clean Air Act process to replace the delayed SIP TCM with a new TCM.

An area would also be interested in this guidance if it is considering adding a new TCM to the SIP through this more streamlined process.

---

1 The statutory text of Clean Air Act section 176(c)(8) is included in Appendix A of this guidance document.
2 The standard SIP revision process requires notice and comment rulemaking by both the state air agency and EPA in order for the state to revise its SIP and for EPA to approve the revision.
3 It should be noted that the original TCM substitution guidance that was issued on April 7, 2004 was previously withdrawn when EPA issued the SAFETEA-LU interim conformity guidance in February 2006.
There are limited cases where using either the TCM substitution or addition process would not be appropriate. For example, if a state needed to increase the amount of emissions reductions attributed to TCMs in a control strategy SIP or maintenance plan, it could not accomplish its goal solely through the Clean Air Act process to substitute or add TCMs to an approved SIP because the Clean Air Act process does not provide a streamlined process for revising control strategy SIPs or maintenance plans. The state could use the Clean Air Act process to substitute or add new TCMs to its SIP; however, as discussed in Questions 2.12 and 3.4, the state would also need to complete a standard SIP revision to revise the relevant control strategy SIP or maintenance plan and EPA would need to approve that revision in order to incorporate the additional emissions reductions from the substitute or additional TCM into the SIP in order to accomplish the state’s goal of increasing the amount of emissions reductions attributable to TCMs. Other situations where it would not be appropriate to use the TCM substitution process are discussed in Questions 2.6 and 2.8.

TCMs can still be substituted or added to an area’s SIP through the normal SIP revision process, if desired or when necessary.

1.2 What TCMs are addressed by Clean Air Act section 176(c)(8) and this guidance document?

Clean Air Act section 176(c)(8) and this guidance document pertain to TCMs that apply, or will apply once included in the SIP, for conformity. TCMs that apply for conformity are those in approved SIPs that affect vehicle use or travel. Section 93.101 of the transportation conformity rule defines a TCM as:

any measure that is specifically identified and committed to in the applicable implementation plan, including a substitute or additional TCM that is incorporated into the applicable SIP through the process established in CAA section 176(c)(8), that is either one of the types listed in CAA section 108(f), or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the first sentence of this definition, vehicle technology-based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of this subpart.

We have included the list of measures from Clean Air Act section 108(f) in Appendix B of this guidance document.

Similar types of measures that are included only in an area’s transportation plan and transportation improvement program (TIP) and not in the area’s approved SIP are not considered TCMs for the purposes of conformity. Because they are not in the SIP, they can be changed without either a standard SIP revision or without using the process in Clean Air Act 176(c)(8). Furthermore, because vehicle technology-based measures (including diesel retrofit projects, vehicle fuel-related programs, and vehicle inspection and maintenance programs) are specifically excluded as TCMs under the transportation conformity rule’s TCM definition, these types of
programs cannot be substituted or added into a SIP using the process in Clean Air Act section 176(c)(8).

1.3 What are the transportation conformity rule’s requirements for timely implementation of TCMs?

Transportation conformity is required, under Clean Air Act section 176(c), to ensure that federally supported highway and transit project activities are consistent with (“conform to”) the purpose of the SIP. Conformity to the purpose of the SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the relevant national ambient air quality standards (NAAQS or “standards”).

Clean Air Act section 176(c)(2)(B) and section 93.113 of the transportation conformity rule (40 CFR) require that TCMs in an approved SIP that are eligible for federal funding under title 23 U.S.C. or under the Federal Transit Laws (Title 49 U.S.C.) must be implemented on the schedule established in the SIP. If a TCM falls behind schedule and the area still intends to implement it, the MPO must demonstrate that past obstacles to implementation have been identified and have been overcome and that state and local agencies with funding authority are giving the delayed TCM maximum priority, according to 40 CFR 93.113(c)(1). If the area no longer wants to implement a delayed TCM, the area can either use the standard SIP revision process to revise the SIP or use the Clean Air Act section 176(c)(8) TCM substitution process to remove the delayed TCM from the SIP and to replace it in the SIP with a new TCM. It should be noted that the original TCM remains in the approved SIP and subject to the conformity rule’s timely implementation requirements until either the replacement TCM is adopted through the Clean Air Act substitution process or EPA approves the SIP revision in cases where an area chooses that approach.4

1.4 Is a conformity determination or a SIP revision required when a substitution is made or when a TCM is added to the SIP?

No, neither a conformity determination nor a SIP revision is required when an area makes a substitution or adds a new TCM to the approved SIP using the Clean Air Act section 176(c)(8) process. Clean Air Act section 176(c)(8)(D) specifically states that the substitution or addition of a TCM does not require a new conformity determination or SIP revision. However, if the transportation plan and/or TIP need to be amended in order to implement the substitute or additional TCM, the applicable United States Department of Transportation (DOT) transportation planning requirements (23 CFR 450 and 49 CFR 613) would have to be met. If an MPO is making other changes to its transportation plan and/or TIP in addition to a TCM substitution or addition, and, if these other changes would require a plan and/or TIP amendment, a conformity determination would be required. In such situations the relevant EPA and DOT offices are available to assist the MPO to ensure that all transportation conformity and transportation planning requirements are met.

1.5 Does this guidance create new requirements?

4 The course of action to be taken if a TCM in an approved SIP falls behind schedule must be determined through interagency consultation, per 40 CFR 93.105(c)(1)(iv).
No, this guidance is based on the requirements for transportation control measure substitutions and additions contained in Clean Air Act section 176(c)(8) and does not create any new requirements. This guidance merely explains how to implement those TCM substitution and addition-related provisions and any other related requirements.

The statutory provisions and the US Environmental Protection Agency (EPA) regulations described in this document contain legally binding requirements. This document is not a substitute for those provisions or regulations, nor is it a regulation itself. Thus, it does not impose legally binding requirements on EPA, DOT, states, or the regulated community, and may not apply to a particular situation based upon the circumstances. EPA retains the discretion to adopt approaches on a case-by-case basis that may differ from this guidance, but still comply with the statute and SIP and conformity regulations. Any decisions regarding a particular TCM substitution or addition will be made based on the statute and regulations, after appropriate public input and rulemaking procedures where applicable. This guidance may be revised periodically without public notice.

1.6 Who can I contact for more information?

For specific questions concerning a particular nonattainment or maintenance area, please contact the SIP or transportation conformity staff person responsible for your state at the appropriate EPA regional office. A listing of EPA regional offices, the states they cover, and contact information for EPA regional conformity staff can be found at the following website:  

General questions about this guidance can be directed to:

Rudy Kapichak at EPA’s Office of Transportation and Air Quality,  
kapichak.rudolph@epa.gov or 734-214-4574.

1.7 Where can I find more information on the web?

Additional information on the transportation conformity rule and associated guidance can be found on EPA’s website at:  
Section 2: Substituting Transportation Control Measures in an Approved SIP

2.1 When can states use the TCM substitution provision in the Clean Air Act?

Nonattainment and maintenance areas that do not have TCM substitution mechanisms in their approved SIPs have been able to rely on this statutory mechanism to make TCM substitutions since August 10, 2005, when SAFETEA-LU was signed into law.

Several nonattainment and maintenance areas adopted TCM substitution mechanisms in their approved SIPs prior to SAFETEA-LU’s enactment.5 These areas must continue to use their SIP-approved TCM substitution mechanisms in addition to the new statutory provision as applicable to make substitutions. However, there may be conflicts between an already approved mechanism and Clean Air Act section 176(c)(8). In the event of such a conflict, the area would follow the Clean Air Act requirements. EPA will work with areas with approved mechanisms on a case-by-case basis to answer any questions. These areas may revise their SIPs to remove the approved TCM substitution mechanism, and rely solely on the federal statute for future actions once EPA approves the SIP revision.

2.2 What does the Clean Air Act require in order for a TCM substitution to occur?

For a TCM in an approved SIP to be removed and replaced with a substitute TCM, the Clean Air Act requires that:

- the substitute TCM(s) must achieve equal or greater emissions reductions;
- the substitute TCM(s) must be implemented on a schedule that is consistent with the schedule for the TCM(s) being removed from the SIP; or, if the implementation date has passed for the TCM(s) being replaced, the replacement TCM must be implemented as soon as practicable but not later than the date on which emissions reductions from the TCM(s) are necessary to achieve the purpose of the SIP;
- the substitute TCM(s) must be accompanied by evidence of adequate personnel, and funding and authority under state or local law to implement, monitor and enforce the TCM(s);
- the substitute TCM(s) must be developed through a collaborative process that includes participation by all affected jurisdictions (state and local air pollution control agencies and state and local transportation agencies such as the MPO, state DOT, and transit providers); consultation with EPA; and reasonable notice and opportunity for public comment; and
- the equivalency of the substitute TCM(s) must be concurred on by the state air pollution control agency, the MPO,6 and EPA. That is, EPA, the state air agency, and the MPO must all agree that on the estimated emissions reductions from the substitute TCM(s) and agree that the estimated emissions reductions equal or surpass those that would have resulted from the original TCM(s) in the approved SIP.

---

5 Portland, OR; Albuquerque, NM; and Texas; have TCM substitution mechanisms in their approved SIPs.
6 The state DOT would concur on TCM substitutions in isolated rural areas because these areas do not have MPOs. See question 4.4 for more information.
The remainder of this section and Section 4 below contain further details on how to comply with these specific requirements. Appendix C contains an example of how to carry out a TCM substitution using the process in Clean Air Act section 176(c)(8).

2.3 What additional information should be provided to support a TCM substitution?

The material prepared to support a substitution should clearly identify and describe the original TCM in the approved SIP and the substitute TCM. The substitute TCM should meet all of the requirements of Clean Air Act section 110 and EPA’s 1989 TCM SIP Guidance (EPA 450/2-89-020), which can be found at: http://www.epa.gov/otaq/stateresources/policy/transp/tcms/state_plan_guidance.pdf. The documentation for each TCM substitution must include all of the information necessary to demonstrate that the Clean Air Act requirements are met including the demonstration that the substitute TCM provides equivalent or greater emissions reductions. The documentation for each substitution should also include:

1) the name of the original TCM in the approved SIP that is proposed to be replaced;
2) the name of the proposed substitute TCM;
3) a brief but thorough description of both the original and substitute TCMs including their locations and implementing agencies;
4) the steps and schedule for completing and operating the substitute TCM; and
5) a brief explanation of why the substitution is necessary.

2.4 How does a state air agency, MPO or other transportation agency demonstrate that a substitute TCM provides equivalent emissions reductions?

In order to demonstrate that the new TCM provides equal or greater emissions reductions, the emissions benefits of the substitute TCM must be analyzed in a manner consistent with the planning assumptions and modeling used for analysis of the existing TCMs in the approved SIP, unless more recent planning assumptions and/or a newer emissions model are now available. If updated assumptions and/or a newer emissions model are available, the relevant state or local agency must recalculate the emissions benefits of the original TCM and use that emissions estimate in determining if the substitute TCM provides equivalent or greater emissions reductions as required by Clean Air Act section 176(c)(8)(A)(i). If the SIP relied upon emissions reductions from a TCM to address a localized violation, a new hot-spot analysis must be done to ensure that the SIP continues to fulfill its purpose and meet all applicable SIP requirements. If such a hot-spot analysis were necessary it would be completed for SIP purposes not to fulfill the transportation conformity rule’s project-level requirements.

In determining whether or not a substitute TCM provides equivalent or greater emissions reductions, the agency preparing the analysis should document that the substitute TCM provides emissions reductions that are:

---

7 Applicable requirements may include approved methodologies such as those specified in 40 CFR part 51, Appendix W (Guideline on Air Quality Models) for CO analyses or applicable requirements for PM$_{10}$ and PM$_{2.5}$ analyses.
• permanent for the time period relied upon in the applicable SIP;
• for the same time of year (e.g., during the winter carbon monoxide season) or during a specific time of day (e.g., the morning or evening rush hour) relied upon in the applicable SIP;
• for the same pollutant or precursor as the original SIP TCM, unless the area has a SIP-approved trading mechanism that would allow trading between precursors or between a pollutant and its precursor(s); and
• for the same geographic location, if such a location is identified as critical for the emissions reductions in the applicable SIP. For example, if a TCM was included in an approved SIP to address a specific local air quality problem such as a violation of the CO standard, the substitute TCM would have to be implemented in a location to address the same violation. Alternatively, if a facility such as a park-and-ride lot was included in the SIP to serve a particular community or development project, the substitute TCM would need to be located so that it serves the same community or development project.

In order to ensure equivalent or greater reductions in all cases, the agency doing the analysis must also consider whether or not the substitution will have an effect on any other SIPs for the area. For example, if a TCM is relied upon in more than one SIP (e.g., a TCM provides both VOC and NOx emissions reductions in an approved ozone attainment demonstration and provides carbon monoxide emissions reductions in an approved carbon monoxide maintenance plan), the emissions analysis that is performed for the substitution would need to demonstrate that the substitute TCM provides equivalent or greater emissions reductions of all of the same pollutants and precursors as the original TCM in the approved SIPs. Another example could occur if an area is nonattainment or maintenance for several pollutants and a TCM is included in an approved SIP for one pollutant but not explicitly included in the approved SIP or maintenance plan for other pollutants. This situation is discussed in Question 2.9.

Nonattainment and maintenance areas must meet all relevant Clean Air Act requirements. Nonattainment areas must continue to meet the Clean Air Act’s requirements for implementation of Reasonably Available Control Measures (RACM);\(^8\) and serious PM\(_{10}\) nonattainment areas must continue to meet requirements for implementation of Best Available Control Measures (BACM).\(^9\) Serious, severe and extreme ozone areas and moderate and serious carbon monoxide areas that have adopted TCMs to comply with Clean Air Act sections 182(c)(5), 182(d)(1)(A), 182(e)(4), 187(a)(2)(A) or 187(b)(2) may substitute TCMs through the Clean Air Act substitution process; however, they must continue to comply with the Clean Air Act requirements that apply in ozone and carbon monoxide nonattainment areas.

\(^8\) RACM requirements do not apply in maintenance areas.
\(^9\) Provided that all applicable RACM and BACM requirements are met, EPA believes that TCMs substituted through the use of the Clean Air Act TCM substitution mechanism would fulfill the requirements of Clean Air Act section 193 because the substitute TCMs provide equivalent emission reductions and therefore would not interfere with reasonable further progress or attainment. The requirements in Clean Air Act section 110(l) would not apply to substitutions made through this mechanism because section 110(l) only applies to control measures approved into the SIP by EPA and these substitutions do not require EPA SIP approval.
2.5 If the SIP does not include any emissions reductions from a TCM, can it be substituted with another TCM without an analysis?

No. Some approved SIPs include TCMs for which no emissions reduction credit was claimed. If such a TCM is to be replaced through a TCM substitution, an emissions analysis must be performed for both the existing SIP-approved TCM and the proposed substitute TCM in order to demonstrate that there will be an equivalent or greater reduction in emissions as a result of the substitution, as required by Clean Air Act section 176(c)(8)(A)(i).

2.6 Can the TCM substitution process be used to remove a TCM from the applicable SIP without providing a substitute measure?

No. The Clean Air Act section 176(c)(8) TCM substitution process only provides legal authority for an area to remove a TCM from the applicable SIP if it is replaced with a TCM that provides equivalent or greater emissions reductions, even if these reductions are not claimed in the SIP’s demonstration. TCMs can be removed from an applicable SIP without substitution through a standard SIP revision. Such a SIP revision would have to be shown to meet Clean Air Act section 110(l) requirements (e.g., the area would have to show that removal of the TCM would not interfere with any applicable requirement concerning attainment and reasonable further progress, or any other applicable Clean Air Act requirement).

2.7 If a substitute TCM cannot be implemented on the same schedule as the original TCM, what is necessary in order to fulfill the Clean Air Act requirement that “the replacement TCM must be implemented as soon as practicable but not later than the date on which emissions reductions are necessary to achieve the purpose of the implementation plan?”

If it is not possible for the substitute TCM to be implemented by the same deadline as the original TCM, the substitute TCM would have to be implemented as expeditiously as practicable so that emissions reductions can be achieved by the year required by the SIP. For example, 8-hour ozone nonattainment areas classified as moderate have an attainment date of June 2010. In such an area, if the TCM being replaced was to be implemented in 2008 and was included in the area’s 8-hour ozone attainment demonstration, the substitute TCM should be fully implemented no later than the beginning of the 2009 ozone season (i.e., the final complete ozone season before the June 2010 attainment date). In this example, the substitute TCM would be implemented by the time reductions are needed to support the SIP, in this case by the beginning of the 2009 ozone season.

2.8 Can the substitution process be used if the substitute TCM could not be implemented until after the date on which emissions reductions are necessary to achieve the purpose of the implementation plan?

No, reliance on the TCM substitution provision would not be appropriate in the case where both the implementation date for the original TCM and SIP milestone date have passed. The TCM substitution process cannot be used for a given substitution if it would interfere with any applicable requirement for reasonable further progress, timely attainment, or maintenance of any NAAQS. For example, if a TCM that was included in an attainment demonstration for a
moderate 8-hour ozone nonattainment area was to be in place at the beginning of 2009 and became delayed, it would not be appropriate to use the TCM substitution mechanism to replace it with a TCM that could not be implemented until 2011. In this case, a standard SIP revision would be required to address the attainment demonstration as well as the substitute TCM, to ensure that sufficient control measures are in place to demonstrate timely attainment.

2.9 How would the TCM substitution process work in an area that is nonattainment and/or maintenance for two or more pollutants, where the original TCM is included in the SIP for only one pollutant?

An area could use the TCM substitution process to replace a TCM that is included in an approved SIP for one pollutant but not explicitly included in the approved SIP or maintenance plan for other pollutants if certain conditions are met. The substitution must meet all of the requirements of Clean Air Act section 176(c)(8). The documentation for the substitution must include an emissions analysis that demonstrates that the substitute TCM provides equivalent or greater emissions reductions for the same pollutants and precursors that original TCM provided in the applicable SIP. The material must also document that the substitution will not result in increased emissions of the other pollutants and precursors for which the area is designated nonattainment or maintenance. This additional information for the other pollutants and/or precursors is necessary to demonstrate that the substitution will not interfere with any applicable requirement concerning attainment, reasonable further progress, maintenance or any other applicable Clean Air Act requirement that applies to the other pollutants for which the area is designated nonattainment or maintenance. If the substitution does not include information to document that it provides equivalent or greater emissions reductions for all pollutants for which the area is designated nonattainment or maintenance, the net effect of the substitution could be an increase in emissions for the pollutants and/or precursors not addressed in the demonstration, and call into question the air quality demonstrations supporting the SIPs for those pollutants.

2.10 Can the TCM substitution process be used to replace a TCM in an approved SIP for an air quality standard that has been revoked if the area remains nonattainment and/or maintenance for other pollutants?

Yes, a nonattainment or maintenance area could use the TCM substitution process to replace a TCM in an approved SIP for an air quality standard that has been revoked if certain conditions are met. First, the substitution would have to meet any applicable anti-backsliding requirements associated with the revoked air quality standard. Second, the substitution must meet all of the requirements of Clean Air Act section 176(c)(8). The documentation for the substitution must include an emissions analysis that demonstrates that the substitute TCM provides equivalent or greater emissions reductions for the same pollutants and precursors that original TCM provided in the applicable SIP. The material must also document that the substitution will not result in increased emissions of the other pollutants and precursors for which the area is designated nonattainment or maintenance. This additional information for the other pollutants and/or precursors is necessary to demonstrate that the substitution would not interfere with any applicable requirement concerning attainment and reasonable further progress, or any other applicable Clean Air Act requirement that applies to the other pollutant(s) for which the area is designated nonattainment or maintenance. If the substitution does not include information to
document that it provides equivalent or greater emissions reductions for all pollutants for which the area is designated nonattainment or maintenance, the net effect of the substitution could be an increase in emissions for the pollutants and/or precursors not addressed in the demonstration, and call into question any air quality demonstrations supporting the SIPs for those pollutants.

EPA addressed this situation as it pertains to requirements for the timely implementation of TCMs contained in 1-hour ozone SIPs in areas that are now designated as nonattainment or maintenance for the 8-hour ozone standard in the July 1, 2004 new standards rulemaking. Specifically, EPA stated that:

Section 93.113 of the existing conformity rule requires that transportation plans, TIPs, and projects which are not from a conforming plan and TIP must provide for the timely implementation of TCMs from an approved SIP. EPA notes that today's final rule does not change the implementation of these requirements for any existing or new nonattainment or maintenance area, including 8-hour nonattainment areas that have approved 1-hour SIPs that contain TCMs.

Clean Air Act section 176(c) requires that TCMs in approved SIPs be implemented in a timely manner according to the schedules in the SIP. This requirement is not contingent on what type of SIP, pollutant, or standard for which the approved TCM was established. Conformity determinations for any pollutant and standard must provide for the timely implementation of TCMs in approved SIPs, including TCMs in approved SIPs for the 1-hour ozone standard after that standard is revoked. (69 FR 40013)

Any area considering such changes should consult with the EPA regional office in order to determine how best to meet the requirements described above.

2.11 When can an MPO make a conformity determination based on a substitution?

An MPO can make a conformity determination as soon as the state air pollution control agency, the MPO and EPA have concurred on the substitution. The MPO does not have to wait until after the state air agency has submitted the substitute TCM to EPA for incorporation into the codified applicable SIP before it makes a conformity determination. At this point the MPO would rely on the substitute TCM to meet the transportation conformity rule’s requirements for timely implementation and may include the emissions reductions benefits of the substitute TCM in the regional emissions analysis for the area. If the substitute TCM provides greater emissions reductions than the original SIP-approved TCM, the MPO would be able to use those extra emissions reductions in its regional emissions analysis. Once all of these agencies have concurred, the substitute TCM is considered to be adopted. Once adopted under this process, the substitute TCM becomes part of the federally enforceable SIP for the area. The adoption of the substitute TCM also serves to remove the original TCM from the federally enforceable SIP.

However, it should be noted that substituting a TCM in a SIP does not require a new conformity determination – see Question 1.4 for more information.
Therefore, once the adoption occurs, the original TCM is no longer subject to Clean Air Act SIP and transportation conformity rule requirements for timely implementation of TCMs in approved SIPs. Subsequent to adoption, EPA will incorporate the substitute or new TCM(s) into the federal codification of the SIP to clarify for the public which TCMs are part of the federally enforceable SIP.

If the transportation plan and/or TIP need to be amended in order to implement the substitute TCM, DOT’s transportation planning requirements (23 CFR 450 and 49 CFR 613) would have to be met. Additionally, if the MPO is making other changes to its transportation plan and/or TIP in addition to a TCM substitution or addition, and, if these other changes would require a plan and/or TIP amendment, a conformity determination would be required. In such situations the relevant EPA and DOT offices are available to assist the MPO to ensure that all transportation conformity and transportation planning requirements are met.

2.12 What must a state air agency do if a substitute TCM provides greater emissions reductions than the original TCM and the agency wants to incorporate the additional reductions into its control strategy SIP or maintenance plan?

A state air agency is not required to revise a SIP to incorporate any additional reductions beyond those accounted for in the existing SIP. However, if such a situation occurs, the state air agency would need to revise its control strategy SIP or maintenance plan and associated motor vehicle emissions budgets, and EPA would need to approve such a SIP revision in order for the state to incorporate these additional emissions reductions in the area’s control strategy SIP or maintenance plan. This would also apply if the SIP did not include any emissions reductions from the original TCM, but the state now wants to include the emissions reductions from the substitute TCM in the relevant control strategy SIP or maintenance plan. These actions would be separate from and in addition to the TCM substitution process.
Section 3: Adding Transportation Control Measures to an Approved SIP

3.1 What is required in order for a new TCM to be added to an area’s approved SIP through the process established in Clean Air Act section 176(c)(8)?

In order for an area to add a new TCM to an approved SIP through the process established in Clean Air Act section 176(c)(8):

- the new TCM must be accompanied by evidence of adequate personnel, and funding and authority under state or local law to implement, monitor and enforce the TCM;
- the new TCM must be developed through a collaborative process that includes participation by all affected jurisdictions and agencies (e.g., state and local air pollution control agencies and state and local transportation agencies); consultation with EPA; and reasonable notice and opportunity for public comment; and
- the MPO, the state air pollution control agency, and EPA must concur on the addition of the new TCM to the SIP.

Section 4 of this guidance document below contains further details on how to comply with these specific requirements. Appendix D contains an example of how to carry out a TCM addition using the statutory process.

It should be noted that TCMs can still be added to an area’s SIP through the standard SIP process, if desired.

3.2 What additional information should be provided to support the addition of a TCM to an approved SIP?

The material prepared to support a TCM addition should clearly identify and describe the new TCM to be added to the approved SIP. The additional TCM should meet all of the requirements of Clean Air Act section 110 and EPA’s 1989 TCM SIP Guidance (EPA 450/2-89-020). The documentation for each TCM addition must include all of the information necessary to demonstrate that the Clean Air Act requirements for TCM additions are met. The documentation for each TCM to be added to the approved SIP should also include:

1) the name of the proposed additional TCM;
2) a brief but thorough description of the additional TCM including its location and implementing agency;
3) the steps and schedule for completing and operating the additional TCM; and
4) a brief explanation of why the addition is being made.

3.3 Can all nonattainment and maintenance areas add TCMs to their approved SIPs?

Yes, any nonattainment or maintenance area can add new TCMs to its approved SIP by following the criteria contained in Clean Air Act section 176(c)(8)(A)(iii)-(v) and described in Question 3.1 above. It is not necessary for a given area to already have TCMs in its approved SIP in order to add new TCMs through this statutory process. However, if the transportation plan and/or TIP need to be amended in order to implement the additional TCM, DOT’s
transportation planning requirements (23 CFR 450 and 49 CFR 613) would have to be met. Additionally, if the MPO is making other changes to its transportation plan and/or TIP in addition to a TCM substitution or addition, and, if these other changes would require a plan and/or TIP amendment, a conformity determination would be required. In such situations the relevant EPA and DOT offices are available to assist the MPO to ensure that all transportation conformity and transportation planning requirements are met.

3.4 What must a state air agency do if it wants to incorporate the emissions reductions from an additional TCM into its control strategy SIP or maintenance plan?

If the state air agency wants to incorporate the emissions reductions from the additional TCM into the applicable SIP, the agency would need to revise its control strategy SIP or maintenance plan and associated motor vehicle emissions budgets, and EPA would need to approve such a SIP revision in order for the state to incorporate the emissions reductions from the additional TCM into the area’s control strategy SIP or maintenance plan. These actions would be separate from and in addition to the TCM addition process.
Section 4: Process Requirements That Apply When Substituting or Adding Transportation Control Measures to an Approved SIP

4.1 What is necessary for an MPO or other implementing agency to show that it has adequate personnel and funding to implement the substitute or additional TCM?

TCMs that are included in a metropolitan area’s transportation plan and TIP need to meet all applicable requirements in DOT’s transportation planning regulations, including the transportation plan and TIP fiscal constraint requirement (23 CFR 450 and 49 CFR 613). Therefore, inclusion of the substitute or additional TCM in a fiscally constrained transportation plan and TIP generally would serve as sufficient evidence that adequate resources are available to implement the TCM. In the case of an isolated rural area\(^\text{11}\) or donut area\(^\text{12}\), inclusion of the substitute or additional TCM in the Statewide Transportation Improvement Program (STIP) would indicate that the implementing agency had resources to carry out the project. It is possible that situations will arise where an MPO would need to make a TCM substitution and revise its TIP to remove the original TCM and add the substitute TCM simultaneously. In such situations, the MPO should use the interagency consultation process to reach agreement on the details of these simultaneous actions.

However, if the substitute or additional TCM is not federally funded or is not part of the transportation plan and TIP or STIP, the implementing agency must provide additional information on the availability and commitment of adequate resources as necessary to implement the new TCM in order to meet the requirements of Clean Air Act section 176(c)(8)(A)(iii). For example, the implementing agency could provide documentation that funding has been authorized to implement the substitute or additional TCM, and/or information describing the agency’s plan for providing staff to implement the TCM as planned.

4.2 What is necessary for an MPO or other implementing agency to demonstrate that there is adequate authority under state or local law to implement, monitor and enforce the substitute or additional TCM?

Generally, inclusion of the substitute or additional TCM in a metropolitan area’s transportation plan and TIP, or in the case of an isolated rural area or donut area, inclusion of the substitute or additional TCM in the STIP, would indicate that the implementing agency had legal authority to carry out the project. However, if the TCM is not federally funded or is not part of the transportation plan and TIP or STIP, the implementing agency must provide additional information on its legal authority to implement the substitute or additional TCM in order to meet the requirements of Clean Air Act section 176(c)(8)(A)(iii). For example, the implementing agency could provide documentation that the substitute or additional TCM is included in the state plan or authorizing legislation.

\(^{11}\) Isolated rural nonattainment and maintenance areas are areas that do not contain or are not part of any metropolitan planning area as designated under the transportation planning regulations. Isolated rural areas do not have Federally required metropolitan transportation plans or TIPs and do not have projects that are part of the emissions analysis of any MPO's metropolitan transportation plan or TIP. Projects in such areas are instead included in statewide transportation improvement programs. These areas are not donut areas. (40 CFR 93.101)

\(^{12}\) Donut areas are geographic areas outside a metropolitan planning area boundary, but inside the boundary of a nonattainment or maintenance area that contains any part of a metropolitan area(s). These areas are not isolated rural nonattainment and maintenance areas. (40 CFR 93.101)
agency could provide a citation to the applicable state or local law that authorizes it to implement such projects, or discuss how implementing such a TCM would fall within its general authority.

Because the substitute or additional TCM becomes part of the approved SIP for the area, Clean Air Act sections 113 and 179(a) grant EPA the authority to enforce the implementation of such a TCM. Implementation of substitute and additional TCMs may also be enforced by citizen suits under Clean Air Act section 304.

4.3 What agencies would be involved in developing substitute and additional TCMs in metropolitan areas?

The agencies involved in the collaborative process used to develop substitute and additional TCMs would be similar to the group that participates in the area’s conformity interagency consultation process. The involved agencies must include the state air agency, the MPO, and the EPA regional office because Clean Air Act section 176(c)(8)(B)(i) requires their concurrence. Other agencies that may be involved include the state and local transportation agencies and local air quality agencies. Additionally, all of the jurisdictions affected by the substitution or addition that is being considered should be involved. The process should also include relevant FHWA and FTA field offices. Early consultation with federal agencies is essential to facilitate subsequent concurrence on each substitution by EPA, and conformity determinations based in part on timely implementation of substituted TCMs by FHWA and FTA. Please refer to Question 4.4 for additional information on which transportation agencies must concur on TCM substitutions and additions in donut areas and in isolated rural areas.

4.4 What transportation agency would concur when a TCM substitution or addition is made in a donut area or isolated rural area?

For donut areas (i.e., those areas within a nonattainment or maintenance area but outside the metropolitan planning area), the TCM substitution process should be implemented as above and the MPO associated with the donut area should concur in any substitution or addition of a TCM to an approved SIP.13

For isolated rural areas (i.e., those nonattainment or maintenance areas that do not contain any metropolitan area), this provision should be implemented as above, except the state DOT should concur on the substitution or addition because there is no MPO associated with such an area.

In either case the state air agency and EPA regional office would concur on any TCM substitution or addition as described in Question 4.3 and elsewhere in this document.

13 It would also be acceptable for the state DOT to concur on a TCM substitution or addition in a donut area instead of the MPO, if that is consistent with local process for determining conformity in the relevant nonattainment or maintenance area.
4.5 What is necessary to demonstrate that the collaborative process used to develop substitute and additional TCMs included reasonable public notice and opportunity for comment?

Reasonable public notice and a public comment period must be provided when a TCM substitution or addition is made. Because EPA’s concurrence on a specific substitution or addition would be based on EPA’s conclusion that the substitution or addition complies with the requirements set forth in Clean Air Act section 176(c)(8), commenters should be made aware through the announcement that they may submit comments not only on whether the state should concur on the substitution or addition but also on whether EPA should concur with that substitution or addition. The public must be provided access to all material relevant to the substitution or addition. The public comment process could be carried out either by the state or local air quality agency or by the MPO using their existing process for soliciting public comment on other documents. The state and/or local air agency should ensure that the TCM substitution or addition process complies with all applicable laws and regulations for public participation including state or local sunshine laws. Copies of any prepared supporting documentation should be provided to the state and local air quality agencies, the MPO, the EPA regional office, the FHWA division office, the FTA regional office, and any other relevant state and local agencies. All public comments received would be considered and responses documented before proceeding with the substitution or addition. Copies of the public comments and responses should be provided to the state and local air quality agencies, the MPO, the EPA regional office, the FHWA division office, the FTA regional office, and any other relevant state and local agencies.

4.6 How and when do the involved agencies indicate their concurrence on the substitution or addition?

A substitution or addition cannot go into effect unless EPA, the state air agency and the MPO have all concurred on the substitution. If the substitution or addition fulfills all of the requirements specified in Clean Air Act section 176(c)(8), the state air agency and EPA would each indicate its concurrence by sending a letter to the MPO and each other (i.e., the state air agency would send its letter to the EPA and vice versa). The MPO would indicate its concurrence by resolution of the MPO’s policy board that is made available to the state air agency and EPA through the MPO’s routine process. Within 90 days of its concurrence, the state air agency must submit the substitute or additional control measure and all supporting information to the EPA regional office so that the TCM can be incorporated in the codified applicable SIP.

The consultation process should be used to establish the exact point in the process that concurrence will be given so that it meets Clean Air Act requirements. The Clean Air Act requires that concurrence by the air agency and EPA occur after equivalency of the substitute measure(s) is demonstrated and the SAFETEA-LU conference report clarifies that “adoption occurs when the MPO, state air agency and EPA concur that all four of the general requirements in subparagraph (A) of the provision have been fulfilled.” Therefore, concurrence would have

to occur sufficiently late in the process so that the agencies are sure that all four criteria have been met.

4.7 Who must concur for EPA on the substitution or addition of TCMs?

Clean Air Act section 176(c)(8) requires concurrence by the Administrator of EPA. However, concurrence has been delegated to the EPA Regional Administrator. The concurrence may be further delegated to the regional air division director.

4.8 What action will EPA take to incorporate the substitute or additional TCM into the codified SIP?

Once a state has submitted the substitute or additional TCM to EPA for incorporation in the codified applicable SIP, EPA will update the Code of Federal Regulations (CFR) to reflect the changes to the SIP. This would be done through the publication of a notice in the Federal Register. When a state that has been converted to the “SIP notebook system” substitutes or adds a non-regulatory TCM, EPA will publish an informational notice in the rules section of the Federal Register to update the CFR. In states that have not yet been converted to the notebook system, or for TCMs that require regulations to be implemented, EPA would need to take a final action in the Federal Register to incorporate the substitute or additional TCM into the CFR.

When EPA takes a final action to incorporate the specific substitute or additional TCM into the CFR, it will do so without additional notice-and-comment rulemaking. EPA believes that it would have good cause under the Administrative Procedure Act to take these actions without additional opportunity for public comment because the substitution or addition was made through the process included in Clean Air Act section 176(c)(8), and because the public would have had the opportunity to comment on the specific substitution or addition during the public comment period on the specific substitution or addition.

---

15 On September 29, 2006 the EPA Administrator delegated the authority for concurring on TCM substitutions and additions to the Regional Administrators (Delegation of Authority 7-158: Transportation Control Measure Substitutions and Additions).

16 The notebook system for compiling SIPs is a process through which EPA revises 40 CFR Part 52 by: 1) revising charts listed in the Identification of Plan section; 2) submitting State regulatory revisions for incorporation by reference into the SIP by means of a revised annual compilation (generally in a looseleaf notebook) of all State regulations listed in these Identification of Plan charts rather than by piecemeal regulation updates; and 3) updating the list of non-regulatory measures in the State’s SIP through the use of an informational notice in the rules section of the Federal Register. Non-regulatory measures are not incorporated by reference into the Code of Federal Regulations; therefore, these materials are maintained in the notebook for the State at the EPA regional office and in a notebook maintained in the Office of the Federal Register.
APPENDIX A

Clean Air Act Section 176(c)(8) Substitution and Addition of Transportation Control Measures in Approved SIPs

This appendix includes Clean Air Act section 176(c)(8) which was added to the Clean Air Act by SAFETEA-LU. EPA is providing this text for informational purposes only.

SECTION 176(c) (8) SUBSTITUTION OF TRANSPORTATION CONTROL MEASURES.—
(A) IN GENERAL.—Transportation control measures that are specified in an implementation plan may be replaced or added to the implementation plan with alternate or additional transportation control measures
   (i) if the substitute measures achieve equivalent or greater emissions reductions than the control measure to be replaced, as demonstrated with an emissions impact analysis that is consistent with the current methodology used for evaluating the replaced control measure in the implementation plan;
   (ii) if the substitute control measures are implemented—
      (I) in accordance with a schedule that is consistent with the schedule provided for control measures in the implementation plan; or
      (II) if the implementation plan date for implementation of the control measure to be replaced has passed, as soon as practicable after the implementation plan date but not later than the date on which emission reductions are necessary to achieve the purpose of the implementation plan;
   (iii) if the substitute and additional control measures are accompanied with evidence of adequate personnel and funding and authority under State or local law to implement, monitor, and enforce the control measures;
   (iv) if the substitute and additional control measures were developed through a collaborative process that included—
      (I) participation by representatives of all affected jurisdictions (including local air pollution control agencies, the State air pollution control agency, and State and local transportation agencies);
      (II) consultation with the Administrator; and
      (III) reasonable public notice and opportunity for comment; and
   (v) if the metropolitan planning organization, State air pollution control agency, and the Administrator concur with the equivalency of the substitute or additional control measures.
(B) ADOPTION.—
   (i) Concurrence by the metropolitan planning organization, State air pollution control agency and the Administrator as required by subparagraph (A)(v) shall constitute adoption of the substitute or additional control measures so long as the requirements of subparagraphs (A)(i), (A)(ii), (A)(iii) and (A)(iv) are met.
   (ii) Once adopted, the substitute or additional control measures become, by operation of law, part of the State implementation plan and become federally enforceable.
   (iii) Within 90 days of its concurrence under subparagraph (A)(v), the State air pollution control agency shall submit the substitute or additional control measure to the Administrator for incorporation in the codification of the applicable implementation plan. Notwithstanding any
other provision of this Act, no additional State process shall be necessary to support such
revision to the applicable plan.

(C) NO REQUIREMENT FOR EXPRESS PERMISSION.—The substitution or addition of a
transportation control measure in accordance with this paragraph and the funding or approval of
such a control measure shall not be contingent on the existence of any provision in the applicable
implementation plan that expressly permits such a substitution or addition.

(D) NO REQUIREMENT FOR NEW CONFORMITY DETERMINATION.—The
substitution or addition of a transportation control measure in accordance with this paragraph
shall not require—

(i) a new conformity determination for the transportation plan; or
(ii) a revision of the implementation plan.

(E) CONTINUATION OF CONTROL MEASURE BEING REPLACED.—A control
measure that is being replaced by a substitute control measure under this paragraph shall remain
in effect until the substitute control measure is adopted by the State pursuant to subparagraph
(B).

(F) EFFECT OF ADOPTION.—Adoption of a substitute control measure shall constitute
rescission of the previously applicable control measure.
APPENDIX B

Clean Air Act Section 108
Transportation Control Measures

This appendix includes a list of the types of measures included in Clean Air Act section 108(f)(1) that meet the transportation conformity rule’s definition of a TCM. This is not an exhaustive list of all of the types of measures that meet the transportation conformity rule’s definition of a TCM.

EPA is providing this list of measures for informational purposes only.

The following types of measures listed in Clean Air Act section 108(f) meet the transportation conformity rule’s definition of a TCM:

- programs for improved public transit;
- restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
- employer-based transportation management plans, including incentives;
- trip-reduction ordinances;
- traffic flow improvement programs that achieve emission reductions;
- fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;
- programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;
- programs for the provision of all forms of high-occupancy, shared-ride services;
- programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
- programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
- programs to control extended idling of vehicles;
- programs to reduce motor vehicle emissions, consistent with title II, which are caused by extreme cold start conditions;
- employer-sponsored programs to permit flexible work schedules;
- programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
- programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest; and
- programs to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.
APPENDIX C

Example of How to Substitute a TCM Using Clean Air Act Section 176(c)(8)

This appendix provides an example of how a nonattainment or maintenance area could use the Clean Air Act process to substitute a new TCM for an existing SIP-approved TCM that has become delayed.

C.1 Why would a nonattainment or maintenance area need to quickly remove a TCM from the approved SIP and replace it with a new one?

For example, an MPO in a moderate 8-hour ozone nonattainment area begins work on a conformity determination that needs to be completed in six months. The 8-hour area is not currently nonattainment or maintenance for any other pollutant, since EPA revoked the 1-hour ozone standard. To comply with the conformity regulation at 40 CFR 93.113, the MPO reviews the status of the four TCMs that were included in the area’s approved 8-hour ozone attainment demonstration. During the review, the MPO determines that one of the TCMs is significantly behind schedule. The delayed TCM involves the implementation of a high occupancy toll lane (“HOT lane”). According to the schedule in the 8-hour attainment demonstration, the HOT lane was to open in 2008. However, the MPO determines that the opening will be delayed until 2011, which is after the area’s 8-hour ozone attainment date of 2010.

As required by the transportation conformity rule (40 CFR 93.105(c)(1)(iv)), the MPO and the rest of the area’s interagency consultation group discuss the issue at their next meeting. The interagency consultation group concludes that it would be impossible to overcome the issues that are delaying the implementation of the HOT lane and therefore the best course of action is to remove it from the SIP and replace it with a substitute TCM(s). They also decide that because the MPO needs to complete the conformity determination in six months, there is not enough time to use the standard SIP revision process. Therefore, they will use the Clean Air Act section 176(c)(8) TCM substitution process, which can be completed in time to allow the MPO to make the conformity determination as planned, while ensuring that the SIP continues to achieve its intended purpose.

C.2 How would the area proceed to make the TCM substitution?

In order to complete the TCM substitution in a timely manner, the MPO and state air agency take the following steps.

Review of the TCM to be removed from the approved SIP
Because the area had previously been a 1-hour ozone maintenance area, the state air agency verifies that the HOT lane had not also been included in the 1-hour ozone maintenance plan. Therefore, there are no backsliding issues that would need to be addressed.\footnote{If the HOT lane had been included in the area’s 1-hour ozone maintenance plan, the state air agency would have to ensure that 8-hour ozone anti-backsliding requirements are met, (69 FR 40013) and that equivalent emissions reductions are obtained for all pollutants. Refer to Question 2.10 for additional information.}

\footnotetext[17]{If the HOT lane had been included in the area’s 1-hour ozone maintenance plan, the state air agency would have to ensure that 8-hour ozone anti-backsliding requirements are met, (69 FR 40013) and that equivalent emissions reductions are obtained for all pollutants. Refer to Question 2.10 for additional information.}
The state air agency also confirms that the 8-hour attainment demonstration’s emissions inventory for a typical summer day indicates that the HOT lane was to provide 0.35 tons per day of nitrogen oxide (NOx) emissions reductions and 0.2 tons per day of volatile organic compound (VOC) emissions reductions in 2009, which is the year modeled in the attainment demonstration. Therefore, based upon the requirement of Clean Air Act section 176(c)(8)(A)(i), the substitute TCM(s) will need to reduce NOx emissions by at least 0.35 tons per day and VOC emissions by 0.2 tons per day in 2009.

Collaborative process to develop the substitute TCM(s)
Based on the requirements of Clean Air Act section 176(c)(8)(A)(iv)(I), staff from the state air agency, MPO, state department of transportation, and the local transit provider meet to review projects that could be used as the substitute TCM(s).

Based on their review, the agencies conclude that there are three projects in the MPO’s current long range transportation plan and transportation improvement program (TIP) that they would consider as viable substitute TCMs. The three projects are: implementation of express bus service to the city’s downtown area, implementation of express bus service from the city’s downtown area to the airport, and construction of a 1,000-space park-and-ride lot.

These projects meet the transportation conformity rule’s definition of a TCM (40 CFR 93.101), are scheduled to be completed by 2008, and have the potential to provide emissions reductions equivalent or greater to the TCM to be removed from the SIP.

**Determination of equivalent emissions reductions**
The state air agency and MPO agree to work together to calculate the emissions reductions attributable to each of the three projects that are being considered as substitutes for the delayed HOT lane. The state air agency and MPO use the MPO’s transportation modeling tools, the latest emission factor model (in this example MOBILE6.2), and the latest available planning assumptions to calculate the emissions reductions from the projects that are being considered as substitutes. They determine that each of the projects would provide the following emissions reductions:

<table>
<thead>
<tr>
<th>Project</th>
<th>NOx Reductions (tons per day)</th>
<th>VOC Reductions (tons per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express bus service to city’s downtown area</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Express bus service between the city’s downtown area and the airport</td>
<td>0.15</td>
<td>0.1</td>
</tr>
<tr>
<td>1,000-space park-and-ride lot</td>
<td>0.15</td>
<td>0.1</td>
</tr>
</tbody>
</table>

The state air agency and the MPO agree to present the modeling results to the state department of transportation and the local transit provider and recommend substituting the express bus service to the city’s downtown area and the 1,000-space park-and-ride lot for the HOT lane. No single TCM would provide sufficient emissions reductions to serve as a substitute, but these two substitute TCMs together provide NOx and VOC reductions that are equivalent to the original...
HOT lane. The state air agency and the MPO share the results with the EPA regional office, the FHWA division office and the FTA regional office.

Collaborative process for TCM substitution
The state air agency, MPO, state department of transportation, local transit provider, EPA regional office, the FHWA division office, and the FTA regional office meet by conference call. They discuss the modeling results, verify that the two projects that will serve as substitutes are in the area’s transportation plan and TIP, verify that the two projects are to be completed in 2008, and discuss next steps.

During the call, all of the agencies agree that:
- the two projects taken together meet the criteria that the substitute TCM(s) provide equivalent emissions reductions, as required by Clean Air Act section 176(c)(8)(A)(i);
- the two projects will be completed in 2008, which allows them to comply with Clean Air Act section 176(c)(8)(A)(ii)(I);
- because the two projects are included in the area’s transportation plan and TIP, there is evidence of adequate personnel and funding and legal authority to implement the two projects as required by Clean Air Act section 176(c)(8)(A)(iii); and
- for the purposes of this substitution the MPO should start a public comment period to fulfill the requirement of Clean Air Act section 176(c)(8)(A)(iv)(III).

Public notice and opportunity to comment
In this example, the MPO uses its established processes to provide notice to the public that a 30-day comment period on the TCM substitution is beginning. The MPO makes all of the relevant supporting information for the substitution available on its website. The supporting information includes:
- a description of the HOT lane being removed from the SIP;
- descriptions of the TCMs that will substitute for the HOT lane;
- the modeling done to demonstrate equivalent emissions reductions;
- a brief explanation as to why the substitution is necessary; and
- a schedule for implementing the substitute TCMs.

The public notice also informs the public that because the Clean Air Act TCM substitution process is being used, EPA will not be conducting a separate public comment period prior to the substitute TCMs being incorporated into the SIP; therefore, the public should make all relevant comments during the MPO’s comment period.

The MPO receives several comments during the comment period, one supporting the planned substitution, and two others suggesting alternate TCMs to be used as substitutes. The state air agency and MPO consider the suggestions and decide that neither of the suggested alternatives could be implemented prior to the area’s attainment date and therefore these could not be used as

---
18 Inclusion of the EPA regional office in this collaborative process fulfills the requirements of Clean Air Act section 176(c)(8)(A)(iv)(II), which requires consultation with EPA during the development of substitute TCMs.
19 The agencies could have also agreed that the state air agency would carry out the public comment period using the established process for soliciting public comments on SIP revisions.
substitute TCMs. The MPO shares the comments and the responses with the other agencies involved in the substitution.

State air agency, MPO, and EPA regional office concurrence
Following the close of the public comment period, staff from all of the involved agencies meet by conference call. In this example, all agencies agree that the Clean Air Act requirements had been met. The state air agency, MPO, and EPA regional office staff all indicate that their agencies intend to concur.

Following this conference call, the MPO policy board adopts a resolution indicating its concurrence on the substitution. The MPO distributes the adopted resolution to all of the agencies involved in the substitution. The state air agency and EPA Regional Administrator send concurrence letters to each other and the MPO with copies to all of the other agencies involved in the substitution. These actions by the state air agency, MPO, and EPA regional office fulfill the requirement that these agencies concur on the substitution, per Clean Air Act section 176(c)(8)(A)(v).

Adoption of the substitute TCMs
Immediately following the concurrence of the state air agency, MPO, and EPA regional office, the substitute TCMs are considered to be adopted and therefore are incorporated into the federally enforceable SIP as indicated in Clean Air Act section 176(c)(8)(B)(i) and (ii). Additionally, immediately following the adoption of the substitute TCMs, the delayed HOT lane is no longer in effect for SIP and transportation conformity purposes and is removed from the approved SIP as indicated in Clean Air Act section 176(c)(8)(E) and (F). Removing the delayed TCM from the approved SIP and adding the two substitute TCMs that provide equivalent emissions reductions allow the MPO’s upcoming conformity determination to meet the transportation conformity rule’s requirements for timely implementation of approved SIP TCMs. (40 CFR 93.113) The MPO would include the emissions reductions benefits of the two substitute TCMs in the regional emissions analysis for the area, and the MPO would include these TCMs in its discussion of timely implementation of TCMs in this and subsequent conformity determinations. The substitution also preserves the emissions reductions that were relied on in the SIP attainment demonstration.

Final steps
Because the substitution is complete in less than six months, the MPO is able to make its conformity determination as planned.

As required by Clean Air Act section 176(c)(8)(B)(iii), within 90 days after the adoption of the substitute TCMs the state air agency submits the substitute TCMs and the supporting documentation to the EPA regional office so that EPA can keep the list of SIP-approved TCMs up to date.

The state where this example occurs is not yet on the “SIP notebook system;” therefore, the EPA regional office publishes a final action notice in the Federal Register to remove the HOT lane from the list of SIP-approved TCMs for the nonattainment area and to add the two substitute TCMs to the list of SIP-approved TCMs. The Federal Register notice indicates that there is
“good cause” under the Administrative Procedure Act to take a final action without additional notice and comment rulemaking. The good cause is based on the two elements. First, the substitution was made according to the Clean Air Act section 176(c)(8) procedures. Second, the public was made aware during the MPO’s comment period that if EPA concurred on the substitution, it would not be conducting a public comment period prior to incorporating the substitute TCMs into the SIP.
[Page Intentionally Left Blank]
APPENDIX D

Example of How to Add a TCM to an Approved SIP Using Clean Air Act Section 176(c)(8)

This appendix provides an example of how a nonattainment or maintenance area could use the Clean Air Act section 176(c)(8) TCM substitution process to add a new TCM(s) to the area’s approved SIP.

D.1 Why would a nonattainment or maintenance area want to quickly add a new TCM to a SIP?

For example, a state air quality agency, MPO, and state department of transportation for an area that is currently designated as nonattainment for the 1997 8-hour ozone standard decide to expeditiously add a particular TCM to the area’s SIP as a way to ensure that the project will move forward as currently scheduled and planned. The area is expecting to be designated nonattainment for the 2008 8-hour ozone standard and they would like to ensure that this project will be completed in time to provide emissions reductions that will help the area attain or maintain the 2008 ozone standard. The TCM that they are considering adding to the approved SIP is a light rail project connecting two cities and their suburbs.

D.2 How would the area proceed to add a TCM(s) to the approved SIP?

Collaborative process to develop the TCM(s) to be added to the approved SIP
Based on the requirements of Clean Air Act section 176(c)(8)(A)(iv)(I), staff from the state air agency, MPO, state department of transportation, and the local transit provider meet to discuss the light rail project that they are considering adding to the approved SIP as a TCM.

During their meeting they verify that the light rail project is included in the area’s transportation plan and that preliminary design of the project is being funded in the area’s current TIP. They conclude that it is in the best interest of the area to add the TCM to the SIP now to ensure that it is completed as currently planned in 2015 and will be in operation in time to provide emissions reductions toward attainment or maintenance of the 2008 8-hour ozone standard.20

The agencies agree to discuss their decision with the EPA regional office, the FHWA division office and the FTA regional office.

Collaborative process for the TCM addition
The state air agency, MPO, state department of transportation, local transit provider, EPA regional office,21 the FHWA division office, and the FTA regional office meet by conference

---

20 EPA revised the 8-hour ozone air quality standard in March 2008. EPA intends to designate nonattainment areas in 2010. SIPs for these areas will be due in 2013 and it is likely that many of these areas will have attainment dates in the range of 2013 to 2019. Therefore, a light rail project that is to begin operation in 2015 would provide emissions reductions that would help the area either attain or maintain the 2008 8-hour ozone standard.

21 Inclusion of the EPA regional office in this collaborative process fulfills the requirements of Clean Air Act section 176(c)(8)(A)(iv)(II), which requires consultation with EPA during the development of additional TCMs.
call. They discuss the decision to add the light rail project to the approved SIP, verify that the project is in the area’s transportation plan and TIP, and discuss next steps.

During the call, all of the agencies agree that:
- because the project is included in the area’s transportation plan and TIP, there is evidence of adequate personnel and funding and legal authority to implement the project as required by Clean Air Act section 176(c)(8)(A)(iii); and
- the state air agency should start a public comment period, to fulfill the requirement of Clean Air Act section 176(c)(8)(A)(iv)(III).  

Public notice and opportunity to comment
The state air agency uses its established process to provide notice to the public that a 30-day comment period on the TCM addition is beginning. The state air agency makes all of the relevant supporting information for the addition available on its website. The supporting information includes:
- a description of the light rail project that is to be added to the approved SIP;
- a brief explanation as to why the addition is being made;
- an estimate of the emissions reductions expected when the project opens in 2015; and
- a schedule for implementing the additional TCM.

The public notice also informs the public that because the Clean Air Act section 176(c)(8) TCM addition process is being used, EPA will not be conducting a separate public comment period prior to the additional TCM being incorporated into the SIP; therefore, the public should make all relevant comments during this comment period.

The state air agency receives several comments during the comment period, one supporting the planned addition, and two others suggesting other TCMs that could be added to the SIP. The state air agency and MPO consider the suggestions and decide that none of the other suggested TCMs are good candidates to be added to the SIP at this time. The state air agency shares the comments and the responses with the other agencies involved in the TCM addition.

State air agency, MPO, and EPA regional office concurrence
Following the close of the public comment period, staff from all of the involved agencies meet by conference call. In this example, all agencies agree that the Clean Air Act requirements had been met. The state air agency, MPO, and EPA regional office staff all indicate that their agencies intend to concur.

Following this conference call, the MPO policy board adopts a resolution indicating its concurrence on the addition. They distribute the adopted resolution to all of the agencies involved in the addition. The state air agency and EPA Regional Administrator send concurrence letters to each other and the MPO with copies to all of the other agencies involved in the addition. These actions by the MPO, state air agency and EPA regional office fulfill the

---

22 The agencies could have also agreed that the MPO would carry out the public comment period using the established process for soliciting public comments on conformity determinations.
requirement that these agencies concur on the addition, per Clean Air Act section 176(c)(8)(A)(v).

Adoption of the additional TCMs
Immediately following the concurrence of the state air agency, MPO, and EPA regional office, the additional TCM is considered to be adopted and therefore are incorporated into the federally enforceable SIP as indicated in Clean Air Act section 176(c)(8)(B)(i) and (ii). At this point the MPO would include the emissions reductions benefits of the light rail line in the regional emissions analysis for the area and the MPO would include this TCM in its discussion of timely implementation of TCMs in subsequent conformity determinations.

Final steps
As required by Clean Air Act section 176(c)(8)(B)(iii), within 90 days after the adoption of the additional TCMs the state air agency submits the additional TCM and the supporting documentation to the EPA regional office so that EPA can keep the list of SIP-approved TCMs up to date.

The state where this example occurs is not yet on the “SIP notebook system;” therefore, the EPA regional office publishes a final action notice in the Federal Register to add the light rail project to the list of SIP-approved TCMs. The Federal Register notice indicates that there is “good cause” under the Administrative Procedure Act to take a final action without additional notice and comment rulemaking. The good cause is based on the two elements. First, the addition was made according to the Clean Air Act section 176(c)(8) procedures. Second, the public was made aware during the state air agency and MPO comment period on the addition that if EPA concurred on the addition, it would not be conducting a public comment period prior to incorporating the additional TCMs into the SIP.