

**STATEMENT OF  
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UNITED STATES DEPARTMENT OF TRANSPORTATION  
BEFORE THE  
COMMITTEE ON ENERGY AND COMMERCE  
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UNITED STATES HOUSE OF REPRESENTATIVES  
HEARING ON TRANSPORTATION AND AIR QUALITY  
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Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to discuss transportation conformity.

Meeting the dual challenges of congestion relief and air quality improvement is a high priority for all of us at the Department of Transportation, as I know it is for members of this Committee. In the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), you gave us new tools and authorities to assist us in achieving this goal, and we are proud of the progress that has been made. In reauthorization, the Department wants to continue to build upon the successes of TEA-21 and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Five key performance goals, including the protection of the human and natural environment, form the basis for the President's FY 2006 budget request. Under Secretary Mineta's leadership, these goals will help us develop a safer, simpler, and smarter national transportation system for a strong America.

The Department has articulated a set of core principles and values that have guided development of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003 (SAFETEA), the President's proposal for surface transportation reauthorization, introduced in the 108<sup>th</sup> Congress on May 15, 2003, as H.R. 2088. We plan to build on the successes and lessons of TEA-21. We seek to enhance the safety and security of all Americans, even as we increase their mobility, reduce congestion, and grow the economy. We want to ensure an efficient infrastructure while retaining environmental protections that enhance our quality of life.

In my testimony today, I will address two main points. First, I want to assure you that progress has been made in reducing transportation-related emissions of air pollutants, and that the Department of Transportation is committed to doing its part to ensure progress continues. Second, I want to restate the commitment of the Department to work with our transportation planning and air quality planning partners for effective coordination of the transportation and air quality planning processes.

### **CONTINUED FOCUS ON AIR QUALITY IMPROVEMENTS**

As a Nation, we have made remarkable improvements in reducing air pollution, especially pollution that comes from transportation sources. Where transportation is a significant source of pollutants, the Environmental Protection Agency (EPA) reports that ozone (formed by the reaction of volatile organic compounds (VOC) and oxides of nitrogen (NOx)), carbon monoxide (CO), and particulate matter (PM), have all decreased substantially since 1970. A

majority of the areas designated as nonattainment since 1990 now meet national air quality standards. Air quality monitoring data through 2003 shows that all of the original carbon monoxide nonattainment areas, and 66 out of 87 previously-designated coarse particulate matter (PM-10) nonattainment areas no longer show air pollution levels that exceed the national ambient air quality standards. In addition, considering the recently implemented 8-hour ozone and PM-2.5 standards, ozone levels nationwide are down 9% from 1990, and PM-2.5 concentrations have decreased 10% since 1999. And, while the Clean Air Act (CAA) has led to reduced pollutant emissions from all air pollution sources, the greatest success can be found in the reduction of motor vehicle emissions: CO emissions have been reduced by 62 percent since 1970, PM-10 emissions reduced by 50 percent, NOx emissions by 41 percent, and VOC emissions by 73 percent from motor vehicles (see Attachment). In 1970, motor vehicles contributed 69 percent of total emissions of carbon monoxide, NOx, VOCs, and PM-10. However, by 2002, the motor vehicle portion of emissions of these pollutants dropped to 43 percent. Most of these emissions reductions have resulted from stricter emissions standards, improved engine technology, and cleaner fuels. (The data cited in this paragraph can be found at the following websites: <http://www.epa.gov/ttn/chieftrends/> and <http://www.epa.gov/ttn/chieftrends/trends02/trendsreportallpollutants010505.xls>.)

It is especially important to note that these reductions in emissions were accomplished during a period of 41 percent increase in population, 167 percent growth in gross domestic product (GDP), and 157 percent increase in vehicle miles traveled. The automotive, fuels, highway, and transit communities have managed to achieve this success in improving air quality while at the same time working to address increasing demands to improve mobility.

The downward trend achieved in emissions is expected to continue into the future. Engines and fuels are to become even cleaner under recent EPA-issued regulations for emissions standards and cleaner fuel requirements. Between 2004 and 2007, more protective tailpipe emissions standards will be phased in for all passenger vehicles, including SUVs, minivans, vans, and pick-up trucks. This regulation marks the first time that larger SUVs and other light-duty trucks will be subject to the same national pollution standards as cars. In addition, the EPA tightened standards for sulfur in gasoline, which will ensure the effectiveness of low-emission control technologies in vehicles and reduce harmful air pollution. When the new tailpipe and sulfur standards are implemented, Americans will benefit from the clean-air equivalent of removing 164 million cars from the road. These new standards require all passenger vehicles sold after the phase-in period to be 77 to 95 percent cleaner than those on the road today, and will reduce the sulfur content of gasoline by up to 90 percent.

We expect that motor vehicle emissions will be reduced as new heavy-duty vehicles that meet the 2004 emissions standards for heavy-duty engines enter the fleet. Beginning with the 2007 model, heavy-duty engines for trucks and buses must meet even tighter emissions standards, and the level of sulfur in diesel fuel must be reduced by 97 percent from existing standards by mid-2006. As a result, after a phase-in period, each new truck and bus will be more than 90 percent cleaner than the models made before the 2004 standards were in effect. In addition to tighter standards, the Federal Transit Administration (FTA) has been working with industry to develop and demonstrate low- and zero-emissions advanced propulsion technologies for transit buses, including hybrid-electric, battery electric, and fuel cell-powered buses. Under FTA/DOT leadership, a national program is underway to accelerate the development and commercial viability of these advanced technologies.

However, the Nation as a whole, and the transportation community in particular, face additional challenges as new air quality standards are implemented. The new eight-hour ozone and fine particulate (PM-2.5) standards are more stringent, and many areas across the eastern U.S. and in California have been designated nonattainment under these standards. Some of these areas, including small urban and rural areas, were designated nonattainment for the first time. Other existing nonattainment areas become larger and involve more jurisdictions under the new standards. The Department and EPA are working with these areas to increase their capacity to deal with new nonattainment designations.

## **THE TRANSPORTATION CONFORMITY PROCESS: COORDINATING TRANSPORTATION AND AIR QUALITY PLANNING**

Conformity refers to a requirement of the CAA that is designed to ensure that Federally-funded or Federally-approved highway and transit projects conform to the air quality goals and priorities established in a State's implementation plan (SIP). For programs administered by the Federal Highway Administration and the Federal Transit Administration, we determine whether highway and transit projects conform to a State's SIP by comparing the total expected air quality emissions from the whole transportation system within the nonattainment or maintenance area, including the expected emissions that would result from projects contained in the transportation plan and transportation improvement program (TIP), with the emissions budget for motor vehicles in the SIP.

A failure or inability to make a conformity determination by the required deadline is referred to as a "conformity lapse." During a conformity lapse, the use of Federal-aid highway and transit funds may be restricted. Currently, most areas of the country are in conformity. But, as of March 1, 2005, six areas are in a conformity lapse.

Fulfilling the transportation conformity requirements has created stronger institutional links between two sets of agencies – transportation and air quality – that operated quite independently of each other prior to enactment of the Clean Air Act Amendments of 1990 (CAAA). This interagency consultation has played a crucial role in the development of more realistic and achievable transportation and air quality plans. In addition, the transportation conformity provisions have been instrumental in fostering improvements to the travel demand and emissions modeling processes, because of the specificity of data necessary to meet conformity requirements.

We now have more than a decade of experience in implementing the transportation conformity provisions of the CAAA and, despite successes, our stakeholders indicate that there remain opportunities to improve the transportation conformity process. Transportation conformity was intended to form strong linkages between the transportation and air quality planning processes. However, there is a concern among transportation agencies—and even some air quality agencies—that transportation plans and SIPs are not synchronized with one another due to different planning horizons and update frequencies. While transportation plans have very long planning horizons and have to be updated frequently, most air quality plans have comparatively shorter planning horizons and are updated less frequently.

TEA-21 and the CAA require that transportation plans must cover at least 20 years and be found conforming for that entire time period. However, air quality plans have much shorter planning horizons, often only 5-10 years, resulting in a "mismatch" in which transportation plans

must consider emissions controls in the absence of comprehensive air quality planning. Without comprehensive air quality planning, there is no analysis of the most cost-effective emissions controls across all sources beyond the end of the SIP timeframe. If a metropolitan planning organization (MPO) has a conformity problem in the time frame beyond that covered by the SIP, it has limited options for achieving substantive emissions reductions with programs over which the transportation agencies have control. Traditional transportation control measures (TCMs) have little impact on regional emissions levels, and such strategies will provide even fewer reductions in the future, as technology continues to reduce total mobile source emissions. MPOs and State air agencies must work together during the SIP development and transportation conformity processes to ensure that both air quality and transportation needs are addressed. Although MPOs bear the responsibility of assuring that plans conform to air quality budgets, they do not have the authority under current law to establish more effective measures, like vehicle inspection and maintenance programs or reformulated fuels. That process of identifying future control strategies is the intended purpose of the SIP.

This “mismatch” can be further aggravated by differences in the frequency with which transportation plans and air quality plans are updated. Conformity determinations for transportation plans must be made at least every three years, must be based on the latest demographic and travel information, and must use the latest emissions estimation model. However, air quality plans are not updated on a regular cycle, and may reflect out-of-date assumptions or may have been developed using an outdated emissions estimation model. When a conformity analysis is performed in such a situation, it is impossible to determine whether the emissions associated with the transportation plan are truly consistent with the emissions budget in the air quality plan. This may be because the transportation plan emissions were estimated using one set of assumptions and model, while the emissions budget was developed under another. Our stakeholders have reported that such situations have occurred and are likely to happen again with recent and expected future releases of a new or updated emissions estimation models.

EPA, in coordination with the Department of Transportation, allows a grace period before States have to use a new emission model for conformity. EPA also requires that SIPs that are started after the official release use the new model. While the Clean Air Act does not require SIP updates in all cases, EPA guidance encourages States to evaluate the effects of a new model early to plan for any needed SIP updates to accommodate change.

Our stakeholders indicate that conformity lapses have occurred because areas could not complete the complex, comprehensive transportation planning and conformity processes within the required time frames, even though they met their emissions budgets. Data collection, model development, public outreach, and consensus building can all take a considerable amount of time and resources. MPOs also face other daily challenges of ever-increasing congestion, transportation needs due to economic growth, protection of water quality and other environmental resources, efficient freight management, safety, and security.

Many of our stakeholders have suggested bringing the planning horizons and frequency of updates of both the transportation plans and air quality plans much closer together. Some have suggested a shorter planning horizon, and less frequent updates, while others have suggested a longer air quality planning horizon. We note that some areas have opted to voluntarily extend their air quality planning horizons.

In any case, some stakeholders have suggested it is in the best interests of an effective, integrated process that the air quality plans and the transportation plans are both using the latest,

and most consistent, set of planning assumptions, and that the air quality plans include the necessary control measures to ensure timely attainment of the standards. Stakeholders have stated that this would also help anticipate air quality problems and correct them in a more proactive and coordinated transportation and air quality planning process.

## **TRANSPORTATION CONFORMITY PROVISIONS IN SAFETEA**

Over the years, the Department has worked closely with EPA and State and local stakeholders to improve the transportation conformity process, and we are committed to continuing to improve coordination of the transportation and air quality planning processes. We worked with EPA and transportation stakeholders to identify and develop the conformity proposals in SAFETEA, and we believe that enactment of the following provisions would contribute significantly to process improvements.

1. SAFETEA would combine metropolitan long-range transportation plans and transportation improvement programs into a single transportation plan. A primary objective is to ensure better consistency between what has been known as the metropolitan long-range transportation plan and the identification/prioritization of specific transportation projects/project phases into what has been known as the TIP. Since current law requires the TIP to be consistent with the long-range transportation plan, the rationale behind this proposed change is to reduce the number of actions or products generated by the metropolitan transportation planning process such as those related to plan/program development or revision, public involvement, fiscal constraint. This will require only one conformity determination for the plan, instead of separate conformity determinations for transportation plans and TIPs.
2. SAFETEA would limit transportation conformity to the first ten years of the transportation plan, the latest year in which the SIP contains a motor vehicle emissions budget, or the completion date of a regionally significant project, if the project requires approval before the subsequent conformity determination, whichever is longer. In practice, this means that for areas with SIP planning horizons of less than 10 years (which is the case for most areas), transportation conformity determinations would cover a minimum of 10 years. In cases where air quality agencies develop a longer-term SIP with emissions budgets that extend beyond 10 years, the conformity determination would cover the corresponding, longer time period. This provision would be added to better integrate the transportation planning and air quality planning processes, and to ensure that the most cost-effective mitigation strategies are incorporated into these processes. This proposal would more closely align the transportation and air quality planning horizons for purposes of transportation conformity. Currently, transportation conformity must be determined for the entire 20-year planning horizon of metropolitan long-range transportation plans. On the other hand, air quality SIPs usually cover a much shorter time frame (10 years or less). Nevertheless, long-range transportation plans must conform to these SIPs for the full 20 years of the plan. This mismatch in timeframes does not provide for an integrated planning process in the out-years to select the most cost-

effective strategies for controlling emissions, nor does it allow for the consideration of emissions reduction strategies across different sources of emissions.

3. SAFETEA would require a regional emissions analysis for the last year of the transportation plan, for informational purposes only. SAFETEA includes a proposal for regional emissions analysis to be performed for the last year of the metropolitan Transportation Plan, assuming the conformity analysis is not performed for the entirety of the Transportation Plan. These analyses are intended to be informational only and serve as input into future updates of the air quality SIP or the Transportation Plan. If the analysis indicates that there are potential long-term air quality issues, such issues could be more effectively addressed through an integrated transportation and air quality planning process and future updates of the air quality SIP and/or metropolitan Transportation Plan.
4. SAFETEA would revise the required frequency of transportation plan updates and conformity determinations from three to five years, except when the MPO chooses to update the plan more frequently or changes to the SIP trigger a new conformity determination as provided for in the conformity rule. The Administration's proposed legislation would encourage (and provide sufficient time to develop) comprehensive Transportation Plans that consider a diverse array of issues, while giving the MPOs and State DOTs discretion in updating Transportation Plans more frequently than the proposed five-year timeframe, if dictated by changing regional or State issues. Any major change to the transportation plan within the 5-year update cycle, however, would result in a new conformity determination. In addition, SAFETEA would retain the 18-month conformity “triggers” of the current transportation conformity rule associated with SIP actions, i.e., a conformity determination on the transportation plan is required if a related SIP action occurs. Together these factors would ensure that transportation plans remain in conformity with air quality plans, thereby not compromising air quality goals.

## CONCLUSION

In conclusion, the Department of Transportation is committed to continuing the progress made over the last thirty-five years in reducing motor vehicle emissions and strongly supports the goals of the Clean Air Act's transportation conformity provisions. Improving transportation safety and mobility, while protecting the environment and enhancing the quality of life for all of our communities, are compatible goals. The Department is proud of the successes that have been achieved through flexible funding for innovative transportation projects that improve air quality and through improved cooperation between transportation and air quality agencies. However, we also recognize that additional improvement in the coordination of transportation and air quality planning processes can be achieved.

We believe that the Administration's SAFETEA conformity proposals would lead to better integrating transportation and environmental decision-making and would effectively advance environmental stewardship while improving our efficiency in meeting our nation's mobility needs.

The American public demands and deserves both mobility and clean air, and we must remain focused on providing the highest level of service and environmental protection that we can provide.

Mr. Chairman and members of the Subcommittee, this concludes my statement. I again thank you for the opportunity to testify today and I look forward to working with you for reauthorization of the surface transportation programs.

I will be pleased to answer any questions you may have.