Air Quality Community of Practice Air Quality Interagency Coordination State-of-the-Practice

Requested by:

American Association of State Highway and Transportation Officials (AASHTO)

Center for Environmental Excellence

Prepared by:

James M. Shrouds AASHTO Consultant

June 2010

Acknowledgements

This State-of-the-Practice Report was requested by the Center for Environmental Excellence by the American Association of State Highway and Transportation Officials (AASHTO) as part of an Air Quality Community of Practice. The report was developed by James M. Shrouds who serves as a consultant to the AASHTO Center. The work was guided by the air quality community of practice members consisting of Mike Brady and Pete Conn from CALTRANS; Brad Beckham and Jill Schlaefer from CDOT; Mark Glaze, DelDOT; Phil Peevy from GADOT; Walt Zyznieuski from IDOT; Howard Simons and Gary Green from MDOT; Marilyn Jordahl-Larson from Mn/DOT; John Zamurs and Jonathan Bass from NYSDOT; Terry Arellano, NCDOT; Mike Baker from PennDOT; Jackie Ploch from TxDOT; Chris Voigt from VDOT; Tim Sexton from WSDOT; Patricia Trainer from WISDOT; Cecilia Ho, Karen Perritt, Bob O'Loughlin, and Mike Roberts from FHWA; Antoinette Quagliata and Faith Cole from FTA; and Kate Kurgan and Caroline Paulsen from AASHTO.

Disclaimer

This State-of-the-Practice Report summarizes the discussions of Air Quality Community of Practice members who spoke as individual members of the community and did not necessarily represent their agency's views or positions. In addition, the contents of the report do not necessarily represent the views or positions of AASHTO or the Center for Environmental Excellence.

Table of Contents

INTRODUCTION	1
EPA REGULATIONS/PROGRAMS	1
FHWA/FTA REGULATIONS/PROGRAMS	3
OVERVIEW OF THE STATE-OF-THE-PRACTICE ON AIR QUALITY	
INTERAGENCY COORDINATION EFFORTS	4
California DOT (Caltrans)	5
Colorado DOT (CDOT)	7
Georgia DOT (GDOT)	9
Maryland DOT (MDOT)	10
Minnesota DOT (Mn/DOT)	11
New York State DOT (NYSDOT)	12
North Carolina DOT (NCDOT)	13
Pennsylvania DOT (PennDOT)	14
Texas DOT (TxDOT)	15
Virginia DOT (VDOT)	16
Washington DOT (WSDOT)	19
Wisconsin DOT (WisDOT)	20
RESEARCH & REPORTS	20
SUMMARY	22
REFERENCES	23

INTRODUCTION

The Center for Environmental Excellence by AASHTO (Center) established an Air Quality Community of Practice (COP) in 2008. The purpose of the Air Quality COP is to assemble a group of State DOT practitioners to have a focused discussion on the state of the practice, emerging issues, and research data needs on particular issues, as well as on other air quality issues of interest. This effort has essentially two goals, the first of which is to extend the State DOT's networks and contacts, enabling them to share experiences and learn from each other. In this regard, this effort expands and supplements a November 2008 Air Quality Practitioner's Conference that was held in Albany, New York¹. The second goal is to develop State-of-the-Practice Reports on selected focus areas. To date, the Air Quality COP effort has produced the following reports:

- 1. State-of-the-Practice Report on Mobile Source Air Toxics in May 2009²; and
- 2. State-of-the-Practice Report on Short Term Impacts from Construction Equipment and Operations in May 2010.³

The Air Quality COP consists of representatives from fourteen State DOTs, FHWA, and FTA. The Air Quality COP members considered a range of possible topic areas for the next report and agreed on Air Quality Interagency Coordination with an emphasis on streamlined procedures. This topic was chosen because transportation agencies need to be aware of and involved in interagency coordination processes to more effectively integrate transportation and air quality planning and project development activities, and to help streamline these procedures.

This State-of-the-Practice Report discusses United States Environmental Protection Agency (EPA) air quality interagency coordination/consultation requirements and voluntary programs to improve transportation and air quality; FHWA/FTA interagency consultation requirements and programs; and current, on-going, and future research needs for developing more effective and streamlined coordination processes.

EPA REGULATIONS/PROGRAMS

Transportation Conformity Rule: EPA's Transportation Conformity Regulation (Section 93.105) requires that conformity State Implementation Plans (SIPs) establish detailed interagency consultation procedures.⁴ The rule lists specific topics that the consultation procedures must address such as the roles and responsibilities of the various agencies involved in the SIP development process and the transportation planning process, frequency of meetings, etc. However, the States are given the flexibility to tailor their consultation process to address the specific topics so that they are effective in their own

State. The EPA recently finalized changes to the transportation conformity rule to make the rule consistent with the Clean Air Act (CAA) as amended by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the most recent transportation legislation.⁵ Among other things, these changes streamline the requirements for state conformity SIPs by requiring them to address only certain criteria, one of which is the interagency consultation procedures.

Voluntary Programs: The EPA promotes a number of voluntary programs which are aimed at improving transportation and air quality.⁶ State DOTs are involved in these programs to varying degrees. Below are some selected programs that State DOTs are involved with through coordination efforts with Federal, State, and local transportation and air quality agencies, and the private sector:

- <u>Best Workplaces for Commuters:</u> This program was established by EPA and U.S. Department of Transportation (DOT) to promote innovative solutions to commuting challenges faced by employers and employees. A number of State DOTs are involved in helping to identify and implement transportation demand management strategies to assist in this program.
- 2. <u>SmartWay Transport Partnership:</u> This program focuses on reducing transportation related emissions and fuel consumption from the ground freight transport industry. The program has four core components:
 - 1. The SmartWay Transport Partnership to establish partnerships between government and industry including freight shippers, carriers, and logistics companies;
 - The National Transportation Idle-Free Corridors Project to reduce unnecessary long-duration truck and locomotive idling at strategic locations;
 - 3. SmartWay Innovative Financing Program to create funding opportunities through creative financial mechanisms such as low-interest loans, or private activity bonds; and
 - 4. SmartWay Technologies Program to test and verify emission reductions and fuel savings.

Of these four programs, State DOTs have been most involved in cooperative efforts to reduce idling emissions from trucks, locomotives, and off-road construction equipment.

1. <u>National Clean Diesel Campaign:</u> This is a high priority program to reduce diesel emissions using a variety of control strategies with the continued involvement of national, state, and local partners. To accomplish this, the EPA has targeted five main sectors that provide the best opportunity to produce significant reductions. They include: school buses, ports, construction, freight, and agriculture. EPA will work with these sectors through Partnerships and Regional Collaboratives⁷ to

provide information on technologies and strategies for reducing diesel emissions and by providing funding incentives⁸.

2. <u>Clean School Bus Program:</u> This is a national partnership program aimed at reducing pollution from school buses and to reduce children's exposure to diesel exhaust. This program brings together partners from business, education, transportation, and public-health organizations to work toward: 1) eliminating unnecessary public school bus idling; 2) upgrading ("retrofitting") existing buses with better emission-control technologies and/or fueling them with cleaner fuels; and 3) replacing the oldest buses with new less-polluting buses.

FHWA/FTA REGULATIONS/PROGRAMS

Statewide Transportation Planning; Metropolitan Transportation Planning; Final **Rule:**⁹ The transportation planning regulations were revised in response to SAFETEA-LU and published in final form on February 14, 2007. The final rule requires States to have a documented process(es) for consulting with and considering the concerns of nonmetropolitan officials when making transportation decisions in their Statewide Transportation Planning and Programming processes. Section 23 CFR 450.208 specifically addresses "Coordination of Planning Process Activities" and lists the types of coordination efforts the statewide planning process must address. The one most relevant to air quality is the requirement for State air quality agencies to coordinate with the State DOT to develop the transportation portion of the SIP consistent with the CAA. The metropolitan planning provisions also contain coordination requirements. For example, Section 450.312(b) requires a written agreement between the State DOT, State air quality agency, affected local agencies, and the metropolitan planning organization (MPO) if the metropolitan planning area (MPA) does not include the entire air quality nonattainment or maintenance area. The agreement, among other things, needs to describe the cooperative planning process of all projects outside the MPA but within the nonattainment or maintenance area. In addition, Section 450.322(d) requires MPOs to coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in the SIP.

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program: In 1991, Congress adopted the Intermodal Surface Transportation Efficiency Act (ISTEA) and authorized the CMAQ program to help fund transportation programs and projects that contribute to attainment of a National Ambient Air Quality Standard (NAAQS). The CMAQ program is jointly administered by FHWA and FTA and was reauthorized in 2005 under SAFETEA-LU. FHWA released its revised CMAQ guidance on November 17, 2008 to incorporate the SAFETEA-LU provisions.¹⁰

The guidance indicates that FHWA, FTA, and EPA field offices should establish and maintain a consultation and coordination process to review CMAQ funding proposals as needed and that the process provides for timely review and handling of CMAQ funding proposals. It also encourages States and MPOs to ensure that CMAQ funds are used appropriately and to maximize their effectiveness in meeting the CAA requirements. In

addition, the guidance encourages States and MPOs to consult: 1) on regional and local CMAQ priorities and to allocate funds accordingly; 2) with the private sector prior to using CMAQ funds to purchase vans so as not to supplant any definite plans by the private sector to provide such service; 3) with State and local air quality agencies about the estimated emission reductions from CMAQ proposals; 4) with relevant air agencies to weigh the net benefits of the project; and 5) with FHWA and FTA to resolve any questions about eligibility.

It All Adds Up to Cleaner Air: ¹¹ This is a public education and partnership-building initiative developed by FHWA, FTA and EPA for the purpose of educating the public regarding the impact of their transportation choices on traffic congestion and air quality. The initiative was developed in response to requests from state and local governments to help them meet mobility and clean air goals.

*Air Quality Planning for Transportation Officials:*¹² This FHWA guide provides an overview of the transportation-related air quality planning requirements of the CAA. The guide stresses the importance of transportation agencies participating in the air quality planning process to ensure decisions reflect community priorities including mobility. It also states that the transportation and air quality planning processes must be firmly integrated, and that transportation agencies need to be fully aware of interagency consultation requirements.

OVERVIEW OF THE STATE-OF-THE-PRACTICE ON AIR QUALITY INTERAGENCY COORDINATION EFFORTS

The State DOT's are using a variety of interagency coordination procedures and processes at the statewide, regional, and project level to better integrate the transportation and air quality planning processes and to streamline the project development process. These interagency processes include such efforts as forming regional planning groups and technical working groups, developing Memorandum of Agreements (MOAs), programmatic agreements and partnership agreements, and project level protocols and screening processes. The State DOTs have found that these efforts help: 1) foster positive interagency coordination, consultation, and cooperation, 2) create a framework for improving working relationships and for better understanding each others programs, 3) incorporate environmental concerns early in the process and resolve issues earlier in the project development process, 4) build trust among the agencies involved in the processes, 5) increase the credibility of the State DOTs and their programs and projects if health agencies and environmental groups are involved early in the process and agree on how a program or project should proceed, and 6) streamline the conformity analysis by getting early agreement by the interagency group on technical and procedural requirements.

This section contains an overview of selected State DOT's air quality interagency coordination and consultation practices and efforts to streamline such practices. The section is not intended to be an all inclusive listing of practices in the selected states, nor does it focus on a specific set of coordination/consultation procedures or processes such as

the conformity consultation process. Rather this section gives a broad cross section and representative sampling of statewide, regional, and project level coordination processes that have been developed by the State DOTs or in which they are heavily involved.

California DOT (Caltrans)

Statewide Process

*Statewide Conformity Working Group:*¹³ This statewide coordinating group was created for interagency coordination of transportation conformity-related issues in California. The public is welcome to participate with this group, as with regional conformity consultation groups. Actions taken by the group are usually informational in nature. The group meets twice a year by teleconference through regional call centers located at offices of regional transportation planning agencies, air pollution control or air quality management districts, or Caltrans.

Regional Processes

Regional Transportation Plan (RTP) Guidelines:¹⁴ California has general guidance for coordination and consultation in the planning process in their Transportation Commissionadopted Regional Transportation Guidelines. While this guideline does not apply specifically to transportation conformity consultation, the conformity consultation process fits within its general structure. The Guidelines: 1) promote an integrated, Statewide, multimodal, regional transportation planning process; 2) set forth a uniform transportation planning framework throughout California; 3) promote a continuous, comprehensive, and cooperative transportation planning process; and 4) promote a planning process that considers the views of all the stakeholders. The Guidelines stress the importance of involving interested parties in its development. They state that "RTPs are required to be developed in coordination with local and regional air quality planning authorities and shall reflect specific consultation activities with air quality agencies on the development of the RTP." In addition, they state that all MPOs/Regional Transportation Planning Agencies (RTPAs) in nonattainment and maintenance areas must coordinate development of their RTPs with the Air Quality Management District(s) located within the MPOs' region in order to ensure conformity with the SIP. Development of RTPs in non-MPO RTPAs needs to conform to the same coordination and consultation requirements as in MPO nonattainment and maintenance areas. To assist in the development of the RTP a check list must be submitted with the draft RTP to Caltrans.¹⁵

San Francisco Bay Area Transportation Air Quality Conformity Interagency

*Consultation Procedures:*¹⁶ The Bay area conformity SIP is the only one currently approved by EPA in California and implements the conformity interagency consultation process for the nine-county San Francisco Bay Area. It includes procedures to be used by the Metropolitan Transportation Commission (MTC), Caltrans, State and local air quality agencies, FHWA/FTA, and EPA when making conformity determinations. Staff members from the various agencies that are involved in the conformity process participate in a Task Force of the Bay Area Partnership. This "Conformity Task Force" is open to all interested

parties and at a minimum includes staff from Federal, State and local transportation and air quality agencies, regional planning agencies, and transit operators. The document covers consultation procedures for the RTP and transportation improvement program (TIP), general consultation structure and process; circulation of materials and receiving of comments; agency roles and responsibilities; and consultation on conformity analyses. The document also covers consultation for SIP development; model assumptions, design, and data collection; monitoring of TCMs; project and program procedures; conflict resolution; and public involvement.

Southern California Association of Governments (SCAG) Interagency Coordination Process: SCAG's Transportation Conformity Working Group (TCWG) provides interagency coordination for transportation conformity in Southern California. The group meets monthly to help resolve regional issues pertaining to transportation conformity, including project-level hot spot consultation for PM₁₀ and PM_{2.5} nonattainment areas within SCAG. TCWG members include Federal, State, regional, and sub-regional agencies and other stakeholders. The TCWG has developed a "PM Conformity Hot Spot Analysis-Project Summary Form for Interagency Consultation"¹⁷ to help provide sufficient information to the group to determine whether or not a project needs detailed PM hot spot analysis.

San Diego Association of Governments (SANDAG) Conformity Working Group: The San Diego Conformity Working Group provides interagency coordination for the transportation conformity process. The group includes staff from SANDAG, the Air Pollution Control District, Caltrans, the California Air Resources Board, U.S. DOT, and EPA. The purpose and responsibilities of the working group are defined in a group charter that was adopted in May 2005.¹⁸

Most of the 18 MPOs in California, and many rural RTPAs, have consultation processes similar to those in MTC, SCAG, and SANDAG related to conformity, planning, or both with varying degrees of documentation.¹⁹

*California Regional Blueprint Program:*²⁰ California's "Blueprint" program promotes the development of alternative regional growth scenarios and smart-growth oriented approaches to regional transportation planning in order to achieve sustainable regional growth patterns. A collaborative approach is used among the various planning jurisdictions that integrates land use and infrastructure planning to meet the community's needs while addressing environmental protection and other Federal, State, and local goals. Several grant programs have been used to promote the "blueprint" approach, and the State's climate change program now requires by State law (SB 375 and 391) blueprint-like regional transportation planning approaches.

Project-Level Processes

*Partnership Agreement "Mare Island Accord":*²¹ This partnership agreement, called the "Mare Island Accord," is between Caltrans; EPA, Region 9; and the FHWA California Division Office and is intended to foster the development of positive interagency

communication and to create a framework for improved working relationships. The agreement stresses early coordination, cooperation, and an effective environmental process that incorporates environmental concerns, multi-agency participation, increased funding flexibility, and early issue resolution in the project delivery process. Among other things the partnership activities consist of management meetings, training and outreach, rotational assignments, funding coordination, National Environmental Policy Act (NEPA)/404 integration process, guidance development, and a metropolitan planning organization pilot project.

*Transportation Project-Level Carbon Monoxide Protocol (CO Protocol):*²² California developed a CO protocol in the late 1990s with UC Davis, the California Air Resources Board, and EPA as an alternative to the CO modeling required by the EPA Transportation Conformity Rule. The protocol was ratified through affected MPOs' interagency consultation processes, and provides a basic screening process and modeling guidance for cases where a project doesn't screen out. The Protocol is also used statewide for project-level NEPA and California Environmental Quality Act documents.

*NEPA Delegation/Assignment:*²³ NEPA responsibilities have been assigned by FHWA to Caltrans under Sections 6004 and 6005 of SAFETEA-LU. For "6004" projects Caltrans approves the NEPA Categorical Exclusions (CE) and any necessary conformity determination (usually but not always a conformity exemption). For "6005" projects FHWA must make a project-level conformity determination before Caltrans can approve the NEPA document. Streamlined processing procedures for the conformity analysis are based on a set of checklists and an "Air Quality Conformity Analysis" template.

Colorado DOT (CDOT)

The following are some of CDOTs interagency coordination programs. Although many of these efforts address a broader environmental scope than just air quality, they are often instrumental in focusing attention on air quality issues and expediting conformity processes.

Statewide Process

*Statewide Transportation Advisory Committee (STAC):*²⁴ STAC members include representatives from five metropolitan and ten rural Transportation Planning Regions throughout the state. It also includes non-voting representatives from the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe in southwest Colorado. STAC members provide advice to the CDOT and the Transportation Commission on the needs of the transportation system in Colorado. They also review and comment on all regional transportation plans submitted by the transportation planning regions and/or CDOT. Additional information on the roles and responsibilities of STAC are included in their bylaws.

Regional Processes

Strategic Transportation, Environmental, and Planning Process for Urban Places (STEP-UP) Program:²⁵ The STEP-UP program consists of a partnership between CDOT, EPA, FHWA, and the North Front Range Metropolitan Planning Organization (NFRMPO) and is intended to integrate environmental considerations into the transportation planning process. The program, which is an environmental streamlining pilot project, will also provide for better regional air quality conformity coordination. STEP-UP will result in "a model planning process for identifying environmental issues early in development of the long-range regional transportation plan; ensuring early and continued involvement by resource agencies; creating a better link between transportation, environmental, and land use planning; and implementing transportation improvements that protect the environment, enhance quality of life, and promote community values". In addition, the program improves the local project prioritization process and initiates a regional cumulative environmental assessment framework.

*Memorandum of Agreement (MOA) for Transportation Conformity Evaluations Conducted Under the Eight Hour Ozone Standard:*²⁶ An MOA among the Colorado Department of Public Health and Environment, CDOT, Regional Air Quality Council (RAQC), Denver Regional Council of Governments (DRCOG), NFRMPO and Upper Front Range Transportation Planning Region guides the joint cooperative interagency coordination processes associated with conformity determinations for the eight hour ozone SIP. The MOA provides guidance for making conformity determinations prior to or in lieu of established motor vehicle emissions budgets (MVEB). It also establishes the agency responsibilities and coordination procedures for the establishment of MVEB for the 8-hour ozone nonattainment or maintenance areas and subareas. In addition, it includes interagency consultation procedures and agency responsibilities for the conformity review process and for dispute resolution.

*Memorandum of Agreement for Air Quality and Transportation Integration:*²⁷ This MOA defines the specific roles and responsibilities of the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE) and the Division of Transportation Development of CDOT in the performance of air quality and transportation planning and modeling for the nonattainment and maintenance areas in the State. The MOU includes the agencies' responsibilities for evaluating the models and input parameters such as population and population growth rates, employment, number of households, daily VMT, speeds by roadway type, etc. for the conformity process. It also includes agency responsibilities for development of the SIPs.

*Regulation 10, Criteria for Analysis of Conformity:*²⁸ Regulation 10, which is currently under revision, defines the roles and responsibilities of agencies involved with conformity determinations including the Air Quality Control Commission (AQCC), APCD, CDOT, RAQC, and MPOs. It also pertains to state edifications of the regulatory definitions in EPA's Transportation Conformity Regulations (40 CFR 93).

*Interagency Consultation Group (ICG):*²⁹ This has historically been an informally developed consortium, but it is being formalized through the developed of a pending MOA between the Regional Air Quality Council and DRCOG (the Denver area MPO). The ICG is hosted by DRCOG, and provides a monthly communication forum with EPA, FHWA, CDOT, RAQC, Regional Transit District (Denver regional transit organization) and other regional MPOs. The group consults on conformity issues and planning assumptions, determination of regionally significant and exempt projects, development and implementation of SIP TCMs, and general information exchange on pertinent air quality issues.

*Travel Demand Management (TDM) Program:*³⁰ TDM strategies are one of the tools State and local officials use to help reduce congestion and improve air quality by addressing the demand for transportation, and by focusing on partnerships between both public and private sector stakeholders. CDOT has developed a TDM program that encompasses alternatives to the single occupant vehicle such as carpooling, vanpooling, teleworking, flexplace, flextime, intelligent transportation systems (ITS), guaranteed ride home programs, walking, bicycling, parking management, and TDM-friendly site design considerations.

Project-Level Process

Procedures for Determining Project Level Conformity (MOA):³¹ This MOA is a programmatic agreement between CDOT and the APCD. The MOA identifies procedures and thresholds to be employed by CDOT for federally funded transportation projects with federal transportation conformity requirements and NEPA. It also outlines a project consultation process, hotspot project modeling procedures, and identifies the circumstances under which CDOT may accomplish project level conformity without APCD oversight. The MOA establishes the procedures for CDOT to determine whether the project conforms to federal standards and sets forth the conditions which require APCD's concurrence on the conformity analysis. In addition, the MOA addresses the actions exempt from project level conformity requirements, and conformity analysis requirements for the different levels of NEPA actions.

Georgia DOT (GDOT)

Statewide Process

State Air Quality Partners Statewide CMAQ Project Selection Process: ³² Georgia's CMAQ funds are used in both ozone and PM_{2.5} nonattainment areas. To provide consistency across the State of Georgia, GDOT, EPD, the Georgia Regional Transportation Authority (GRTA), and the Georgia Environmental Facilities Authority (GEFA), together known as the State Air Quality Partners, developed a statewide CMAQ project selection process. The process includes the following steps: 1) GDOT issues a statewide call for projects every other year; 2) the MPOs actively participate with the State in the review and rating process; 3) final project ratings are based on group consensus; 4) project ratings and comments are reviewed by all parties; 5) the State and MPOs participate in the joint final

selection process through group consensus; 6) final project selections are fiscally constrained, and 7) project selections are drawn from the highly recommended group of projects in order for project funds to be authorized. The process recognizes that limited CMAQ funds need to be invested based on the air quality benefit and the State's efforts to attain air quality standards; consequently, less beneficial projects in one nonattainment area are not funded if the funds are needed for more beneficial projects in another nonattainment area. CMAQ funds in Georgia are made available for projects located in each nonattainment area, but they are not sub-allocated to each nonattainment area.

Maryland DOT (MDOT)

Regional Processes

Interagency Consultation Procedures for Transportation Conformity in Baltimore, *Maryland*:³³ The Maryland Department of Environment (MDE) developed interagency consultation procedures, pursuant to EPA regulations, for both transportation conformity determinations and SIP development in the Baltimore Region. These procedures were developed in consultation with state and local air quality and transportation agencies, the Baltimore Region Transportation Board (BRTB) (previously referred to as the Transportation Steering Committee), EPA, FHWA, and FTA. The BRTB is the federally designated MPO for the Baltimore region and includes members from each of the metropolitan counties, the Cities of Annapolis and Baltimore, MDE, MDOT and the Maryland Department of Planning. The procedures are based on the premise that the "Consultation Agencies" be afforded the opportunity to participate in each step of the transportation planning process. In accordance with the procedures, the consultation agencies invite representatives from the FHWA Division Office, and FTA and EPA Regional offices to participate in consultation meetings. The procedures include schedules for the preparation of the region's TIP and updates of the long range transportation plan and all major steps where consultation is required. The procedures include both general and specific consultation procedures that respond to the specific requirements of the EPA conformity regulations. For example, the procedures outline the roles and responsibilities of BRTB, MDE, and MDOT for both the conformity and SIP development processes. In addition the procedures include conflict resolution and public consultation procedures. MDOT notes that these procedures have been working smoothly in the Baltimore region for many years.

The status of projects for conformity needs are reviewed by the Interagency Consultation Group (ICG) of the BRTB, and a determination is made of the projects conformity requirements. The ICG developed Meeting Bylaws³⁴ to provide structure, clarity, and expediency to the meeting process. In situations where a timely review of conformity status is helpful, there is an effort to ensure that members are informed about projects prior to meetings of the ICG and/or BRTB's Technical Committee. This is performed through different measures, including email exchanges

*Revised Interagency Consultation Procedures in Response to SAFETEA-LU:*³⁵ The MDE submitted an updated SIP to EPA in 2006 in response to the enactment of

SAFETEA-LU and subsequent changes to the conformity regulations. Among other things, the amendments provide: 1) a legal platform for the various consultation procedures that have been developed between MDE, MDOT, and MPOs; 2) increased flexibility to set performance measures used to determine conformity, develop the SIP, and handle unique planning situations in a manner beneficial to the environment and economic development; and 3) for consultation to occur through a variety of processes that are tailored to fit the resources and planning style of the area.

Minnesota DOT (Mn/DOT)

Regional Process

DRAFT Joint Powers Agreement on "Transportation Conformity Procedures for Minnesota: A Handbook for Transportation and Air Quality Professionals":³⁶ This draft Joint Powers Agreement between FHWA, FTA, Metropolitan Council, Metropolitan Interstate Council, St. Cloud Area Planning Organization, Mn/DOT, and the Minnesota Pollution Control Agency (MPCA) provides a means for the parties involved to formally adopt and implement the "Transportation Conformity Procedures for Minnesota: A Handbook for Transportation and Air Quality Professionals", which was prepared by the Minnesota Interagency Air Quality and Transportation Planning Committee. The Joint Powers Agreement, together with the Handbook which is attached to the Joint Powers Agreement, constitutes the Transportation Conformity SIP for the State of Minnesota. These documents are currently being reviewed by the different agencies' lawyers, and therefore are subject to change. These documents define the practices and procedures the parties intend to follow in determining transportation conformity, and spell out the roles and responsibilities, and interagency consultation procedures among the parties involved in the transportation conformity process.

Project-Level Process

CO Hotspot Screening Method:³⁷ This EPA approved screening process was developed by an Interagency Air Quality and Transportation Planning Committee consisting of representatives from FHWA, Mn/DOT, MPCA, Metropolitan Council, Metropolitan Interstate Council, and the St. Cloud Planning Organization. The CO Hotspot Screening Method is approved for use in Minnesota's three CO maintenance areas and follows a fourstep process. The first step, was to develop an annual average daily traffic (AADT) ranking. In this step Mn/DOT developed a list of the top thirty intersections. Three of the intersections which had past CO violations were identified by the MPCA and were included in the final list of ten intersections. The second step involved projecting future AADT levels and ranking intersections for each forecast year based on a point system. This step resulted in the selection of twenty intersections, which again included the three identified by the MPCA. The third step involved calculating the level of service (LOS) and assigning points for each forecast year. The fourth step involved examining congestion-reducing projects. Under this step, the top twenty projects from the previous steps were reviewed for possible upcoming improvements. Then two points were subtracted for each forecast year that a congestion reducing measure was in place. The

resulting top ten intersections, which included the three intersections identified by MPCA, were then modeled. The modeling results showed that all of the top ten intersections were below the NAAQS for CO; therefore they assumed other intersections would also not violate the standards. Mn/DOT has received EPA approval for this screening process. As a result, as long as new projects are below the AADTs and LOS benchmarks established in the screening process, and do not involve or affect the top ten intersections, no hotspot analyses are required.

Mn/DOT has submitted an update to the screening process to the MPCA for submittal to, and approval by, EPA.³⁸ The updated procedure, which was reviewed by the Minnesota Interagency Air Quality and Transportation Planning Committee, includes: 1) an updated analysis of the top ten intersections; 2) an updated benchmark AADT volume for which hot-spot analysis is required for the top ten intersections; and 3) proposes five year updates to the hot-spot screening protocol rather than three year updates.

New York State DOT (NYSDOT)

Regional Process

*Clean Air NY (CANY) Public Education Campaign:*³⁹ CANY is a marketing and outreach program, managed and funded by NYSDOT, in the NYC metropolitan area that educates New Yorkers about small changes they can make in their transportation choices to reduce vehicular miles traveled and to improve air quality. Such choices include trip chaining; taking mass transit, a carpool or vanpool to work a few times a week; or refueling a car in the evening during the summer months. The CANY program includes Air Quality Action Day notifications by NYSDOT when particulate matter and/or ozone levels are predicted by NYS Department of Environmental Conservation (DEC) to be in the unhealthy range for sensitive groups in part or all of the New York metropolitan area. The program has an interagency Program Advisory Committee that includes members from the following agencies: 1) DEC; 2) NYS Department of Health; 3) NY Metropolitan Transportation Council; 4) NYCDOT; 5) FHWA; 6) EPA; 7) FTA; 8) Orange County Transportation Council; 9) Poughkeepsie-Dutchess County Transportation Council; 9) Westchester County; 10) New York City Department of Health; and 11) Rockland County. PAC members provide support for the program's agenda, provide their opinions on the direction of the program, and provide strategic advice and recommendations.

Project-Level Process

Interagency Coordination Process for Lower Manhattan Recovery Projects:⁴⁰ To minimize the cumulative environmental impacts of federally funded transportation projects in the Lower Manhattan residential and business communities, the Metropolitan Transportation Authority, the Port Authority of New York and New Jersey, NYSDOT, and the Lower Manhattan Development Corporation worked together to establish a process to ensure compliance with Federal environmental requirements. The process includes a commitment by the agencies to an Environmental Framework that represents a common approach for carrying out environmental studies pursuant to NEPA and the conformity

waiver provided for the Lower Manhattan area by Public Law 107-230. The process also includes a set of Environmental Performance Commitments (EPC) and mitigation measures that the project sponsors include in their environmental analyses in order to minimize adverse cumulative effects of construction on sensitive receptors in the area. To ensure consistency among project sponsors during the construction phase as well as the environmental analyses phases, the FTA, project sponsors, and the Lower Manhattan Construction Command Center developed a coordinated EPC implementation and verification plan that identifies common procedures that are incorporated into each project sponsor's construction specifications.

North Carolina DOT (NCDOT)

Statewide Processes

*Statewide Interagency Consultation Meetings:*⁴¹ The North Carolina Division of Air Quality (NCDAQ) established an interagency consultation group that discusses a wide variety of transportation-air quality related issues on a monthly basis via conference calls. The agencies involved in this effort include NCDOT, NCDAQ, the MPOs/RPOs, FHWA, EPA, FTA, local air quality agencies, and the National Park Service. During the calls all the transportation partners, especially those who are located in a non-attainment or maintenance areas, can participate by sharing information and asking questions related to the CMAQ program, conformity, status of SIPs, nonattainment area designations, air quality models, etc. Additional, training opportunities and changes in federal rules that may impact the transportation community are shared.

Interagency Review Committee for Selection of CMAO Projects:⁴² The CMAQ project selection process in North Carolina is a cooperative effort among the following local, state and federal partners: NCDOT, North Carolina Department of Environment and Natural Resources (Division of Air Ouality): FHWA and FTA: and North Carolina Metropolitan Planning Organizations and Rural Planning Organizations representing air quality nonattainment and maintenance areas. Locally proposed and endorsed projects are reviewed based on the CMAQ eligibility rules, emissions reductions benefits, costs and other applicable criteria and eligible projects are recommended to the NCDOT Board of Transportation. NCDOT's CMAQ selection process was revised on August 10, 2009⁴³ and includes a description of the requirements that candidate projects must meet. It also includes a description of the application process for individual MPO/RPO candidate projects and statewide candidate projects. The selection process includes a minimum cost threshold of \$100,000 so that selected projects meet the highest and best use of CMAQ funds. In order to mirror the NCDOT's organizational mission to focus on the transportation system at statewide, regional and sub-regional levels, NCDOT made some modifications⁴⁴ to the CMAQ funding target allocations for the State. Under the guidance NCDOT revised the allocations into the following three broad categories: 1) Statewide projects administered by NCDOT, which require MPO approval and account for 35% of the total North Carolina CMAQ apportionment, 2) Regional projects that are locallyadministered projects spanning more than one air quality region, which require endorsement by the affected MPOs/RPOs and account for 5% of the apportionments, and

3) Sub-Regional projects that are locally-administered projects within eligible counties awarded at the MPO/RPO level, and which account for 60% of CMAQ apportionments.

Pennsylvania DOT (PennDOT)

Regional Processes

Transportation Conformity SIP: Pennsylvania has a two volume conformity SIP which was approved by EPA on June 29, 2009. Volume 1^{45} is essentially the Executive Summary, and Volume II⁴⁶ contains the technical appendices. The Conformity SIP is where PennDOT's interagency consultation processes are mainly spelled out and they are enforceable through a series of MOAs with the various MPOs, Regional Planning Organizations (RPOs), PennDOT, the Department of Environmental Protection (DEP), and certain public transit agencies. The various MOAs are attached to Volume II of the conformity SIP. Section V. of this SIP revision describes Pennsylvania's specific procedures for federal, state and local interagency consultation, conflict resolution, and public involvement. This document requires "representatives of the MPOs, RPOs, ICs [Independent County Organizations], DEP and local air quality planning agencies, PennDOT and local transportation agencies to undertake an interagency consultation process with each other and with local or regional offices of EPA and USDOT's FHWA and FTA on the development of the Transportation Conformity SIP revision, the list of TCMs in the applicable implementation plan, the air quality elements of the unified planning work program, the transportation plan, the TIP, any revisions to the preceding documents, and all conformity determinations".

Air Quality Interagency Consultation Group (ICG): This group addresses conformity issues as well as air quality issues outside of the conformity process. PennDOT chairs this group and has members from EPA, FHWA, FTA, DEP and the respective MPOs or RPOs that are responsible for their own air quality modeling activities. Issues that are routinely discussed by the group include: the latest planning assumptions, SIP issues, emissions inventories and motor vehicle budgets, Inspection and Maintenance Programs and issues, PM Hot-spot issues, and modeling issues. The ICG meets quarterly and conducts conference calls in the interim as necessary. One of the things the ICG was heavily involved in was the development of PennDOT's qualitative PM_{2.5}/PM₁₀ Hot-Spot Screening Process.

*Congestion Mitigation Air Quality Program Evaluation Committee (CEC) Operating Procedures:*⁴⁷ The CMAQ evaluation process is initiated by the MPO (in this case, the Southwestern Pennsylvania Commission (SPC)) not PennDOT, however, it is an excellent example of interagency coordination. The CEC operating procedures summarize the schedule and interagency coordination process for the CEC members and alternates. The CEC was formed to assist in prioritizing the candidate projects for CMAQ, reporting their findings to the SPC's technical committee, and making recommendations to SPC's Executive Committee. Membership of the CEC is designed to have a balanced and diverse representation of the SPC committees and air quality planning partners. The CEC prioritizes the candidate projects based on the project technical evaluations and ancillary

factor ratings such as congestion relief, greenhouse gas reductions, safety, system preservation, sustainable development and freight, reduced SOV reliance, multi-modal benefits, and others. Recommendations are presented to SPC's technical committees (Transportation Technical Committee and Transit Operators Committee) and others, as appropriate, prior to presentation to SPC's Executive Committee. It is the policy of the SPC to program the CMAQ projects that provide the best air quality benefit for the investment, consistent with FHWA CMAQ Program Guidance.

The SPC also has a CMAQ Application Instruction Package⁴⁸ which summarizes the CMAQ evaluation and selection process, schedule for applicants, and hyperlinks to additional CMAQ-related resources. In addition they developed a CEC Work Plan⁴⁹ that shows the meeting schedule and major tasks for each CEC meeting.

Project-Level Process

 $PM_{2.5}/PM_{10}$ Hot-Spot Screening Process: ⁵⁰ This screening process is intended to help determine projects of air quality concern and to provide additional documentation to assist in the conformity determination. The screening process serves to: "1) expedite decisions on whether a project level qualitative analysis is needed for a project; 2) provide a specific role for the ICG within the project screening process; 3) define the ICG and the review process for PM hot-spot screening; 4) document specific criteria and thresholds used for determining whether projects are of air quality concern; and 5) provide sample text for use in documenting project level hot-spot conformity determinations when a qualitative analysis is not needed". It is the affirmative responsibility of the agency with the responsibility for preparing the final project documentation to initiate the consultation process under this screening process.

Texas DOT (TxDOT)

Regional Processes

Transportation/Air Quality Technical Working Group (TWG): The TWG was driven by the consultation process and supports the consultation partners to address conflict resolution. It has become an ongoing forum that includes informational sharing (training, information, collection of data that may be needed for consultative decisions and guidance) and to address issues before they become problematic. "Consultation partners" refers to the specific nonattainment/maintenance MPO currently undergoing transportation conformity, and includes representatives from the respective MPO, EPA, FHWA, FTA, TxDOT and the Texas Council on Environmental Quality (TCEQ). Consultation partners are a subset of TWG. In early 2004 the TWG members consisting of EPA, FHWA, FTA, TCEQ, TxDOT, and the nonattainment area MPOs formed a subcommittee to standardize the conformity documentation submitted by nonattainment area MPOs.⁵¹ The TWG reviewed the proposed conformity documentation structure on several occasions. Comments from the Consultation Partners and the TWG in February 2007. The purpose of this documentation is to: 1) ensure that all information needed by the reviewing agencies

is included in the conformity documentation; and 2) ensure that a standard format is used which would expedite the review and approval process. The documentation includes a detailed outline and a list of required documents and information that is required for conformity review. The interagency process and the standardized conformity documentation have expedited the conformity process by reducing errors, and defining the responsibilities of consultation partners has reduced turn-around time and individual agency review time.

Conformity Checklists/Charts: To further enhance interagency coordination and expedite the conformity process, conformity partners through TWG developed several different flow charts and checklists. The first is a Pre-analysis Consensus Plan⁵² which requires the agency developing the conformity information to document such items as the demographics that will be used, travel demand model validation year, nonattainment counties in the airshed, land-use model, travel demand model, VMT adjustments, etc. This plan is coordinated by the MPO. Consultation partners approve the plan for each individual conformity process to be sure everyone is in agreement with the inputs for the conformity analysis. The TWG also developed a Concurrent Review Flow Chart⁵³ for the distribution and concurrent review of the conformity determination. This flow chart provides a timeline for each step of the review process and for the interagency consultation process. Furthermore they developed a Table entitled, Information Required for Transportation Conformity Review.⁵⁴ The Table includes a detailed checklist of information that is required such as information regarding the MOBILE and travel demand models; SIP requirements; project listings; public, State, and Federal involvement; emissions estimates, etc. For each item the Table includes the applicable regulatory reference, the format the information needs to be in, and the report location. It also denotes the information that the various involved agencies want in hard copy. This checklist is intended as an informal guideline to be used in preparing and reviewing transportation conformity documentation and is not intended to replace or supersede Federal requirements.

Virginia DOT (VDOT)

Consultation and coordination requirements apply for regional conformity as well as project-level conformity and NEPA analyses. With regard to regional conformity consultation processes, Virginia is in the process of working with MPOs to update its existing conformity consultation procedures in response to the recent approval by the US EPA via Federal Register notice of the Virginia Conformity SIP. The conformity SIP and planned consultation update process is described further below.

With regard to project-level analyses for conformity and NEPA, VDOT has entered into a number of agreements with the US DOT that serve to streamline the NEPA process⁵⁵. Three of these agreements address air quality directly, with the first based on detailed modeling to establish threshold criteria for conducting project-level (hot-spot) analyses for carbon monoxide. The other two that address air quality directly establish criteria respectively for the assessment of no-build scenarios and for updates to previously

completed air studies. One additional agreement that is summarized below addresses programmatic categorical exclusions, for which air quality is one area of consideration.

Updates to the project-level agreements for air quality may be initiated by VDOT following the issuance of new guidance from EPA for air studies, which is pending following the official release of the new MOVES2010 model earlier this year, and related federal actions. The latter includes the possible development of federal categorical determinations for carbon monoxide and/or particulate matter based on the new MOVES model and associated new project-level guidance, as well as possible new guidance for the conduct of MSATs analyses to satisfy NEPA requirements. Updates to the agreements may therefore be initiated to not only incorporate the use of the new MOVES model but also to be extended to address, as appropriate, particulate matter and other air quality topics (e.g., mobile source air toxics) as well as carbon monoxide.

Regional Process

Consultation Provisions in Conformity SIP: On July 9, 2007, the Virginia Department of Environmental Quality (VDEQ) submitted a revision to its Transportation Conformity SIP⁵⁶. The SIP addresses the three provisions of the EPA Conformity Rule required under SAFETEA-LU: 40 CFR 93.105 (consultation procedures): 40 CFR 93.122(a)(4)(ii) (control measures) and 40 CFR 93.125(c) (mitigation measures). EPA approved this SIP by Direct Final Rule on November 20, 2009 with an effective date of January 19, 2010. The SIP contains detailed procedures, and the specific roles and responsibilities, that the MPOs, lead planning organizations, VDEO, VDOT, and Virginia Department of Rail and Public Transportation must undertake for: 1) interagency consultation; 2) conflict resolution and public consultation with each other and with local or regional offices of EPA, FHWA, and FTA on the development of control strategy SIP revisions; 3) the list of TCMs in the applicable SIP; and 4) transportation plans, TIPs, and associated conformity determinations. The interagency consultation provisions indicate that it is the affirmative responsibility of the lead agency to initiate the consultation process. The lead agency is the MPO in metropolitan areas and VDOT in non-metropolitan areas. The lead agency is responsible for notifying other participants that the consultation process is starting. They are also responsible for convening meetings, assuring that all relevant documents and information are supplied to all participants in the consultation process in a timely manner, preparing summaries of consultation meetings, maintaining written records of the consultation process, providing final documents and supporting information to each agency after approval or adoption, and assuring the adequacy of the interagency consultation process with respect to the subject document or decision.

In response to the recent approval by EPA of the Virginia Conformity SIP regulation, VDOT is planning updates as appropriate of inter-agency consultation procedures currently in-place with MPOs across the state. The process is being initiated with one of the larger MPOs in the state, the Hampton Roads Transportation Planning Organization.

Streamlining NEPA Processes and Project-Level Analyses for Air Quality

Project-Level Carbon Monoxide (CO) Air Quality Studies Agreement:⁵⁷ This agreement between FHWA and VDOT continues efforts to streamline the air quality analysis requirements for projects of limited scope and expected air quality impacts, based on worst case modeling results for such projects. EPA has also concurred with this agreement at the staff level. The agreement contains procedures and thresholds for determining the level of air quality analysis required for various projects. For example, projects that do not change roadway capacity or transit services do not require qualitative or quantitative project-level air quality analyses. Projects that meet certain requirements, such as projects that are exempt from conformity determinations, programmatic CE projects, and projects that are below certain thresholds for level of service and average daily traffic, require only a qualitative analysis. The qualitative analysis is included in the CE or Environmental Assessment (EA) for the project. A quantitative analysis is required for projects that do not meet the above criteria or which require an Environmental Impact Statement. The agreement also includes guidance on applicable models for projects requiring a quantitative CO analysis. A Technical Support Document,⁵⁸ which includes worst case modeling for CO based on emission factors generated using the MOBILE6.2 model, was completed to support this agreement.

*No-Build Analysis Agreement for Air and Noise Studies:*⁵⁹ In an effort to streamline the completion of project-level air quality and noise studies required by NEPA, VDOT entered into an agreement with FHWA to minimize the need for analysis of the no-build alternative for transportation projects that require a CO air study. The agreement indicates that analysis of the no-build alternative is not required for any project that qualifies for a CE or for an EA. However, VDOT may choose to analyze the no-build alternatives for such projects if they determine it to be appropriate.

Procedures for Updating Air Studies When New Planning Assumptions Become Available:⁶⁰ FHWA and VDOT have procedures in place for determining whether or not current air quality studies need to be updated if: 1) a project has been inactive and is reactivated, and 2) when the design year and traffic data are updated because of delays in the project. The procedures indicate that in the first case, FHWA—or FHWA in consultation with VDOT—will decide if an update of the air quality study is necessary when a decision is made to reevaluate the environmental document as part of the NEPA process. In the second case, FHWA defers to VDOT to determine the effects of the updated assumptions on the existing air quality analysis. If questions are raised about whether the project will contribute to or cause a violation of the NAAQS, then an updated analysis is required.

Programmatic Categorical Exclusion Agreement:⁶¹ This agreement between VDOT and FHWA lists twenty different categories of projects as programmatic CEs which do not normally require any further NEPA approvals by FHWA. One of the factors used in establishing this list is that the noted projects do not involve significant air quality impacts.

Washington DOT (WSDOT)

Regional Processes

Memorandum of Agreement-Fugitive Dust: ⁶² This MOA between the Puget Sound Clean Air Agency and the WSDOT was developed because the respective agencies recognized that fugitive dust from construction projects can become an air pollution problem. Since the goal of both agencies is to control fugitive dust, this MOA establishes a cooperative process to minimize fugitive dust emissions from WSDOT project sites. The agreement effectively grants self-reporting responsibilities to WSDOT on these projects. The MOA outlines the roles and responsibilities of both agencies, and includes deadlines for deliverables such as training programs for Best Management Practices (BMP) for fugitive dust control. The MOA also includes a section on the resource commitments for the respective agencies such as the Puget Sound Clean Air Agency providing for the funding for training courses and materials, and WSDOT preparing, printing and distributing the environmental procedures manual containing the BMP for fugitive dust control language.

Diesel Fleet Facility Registration Program (DFFRP) with Puget Sound Clean Air Agency: ⁶³ The Puget Sound Clean Air Agency convened a Diesel Fleet Facility Registration Program (DFFRP) stakeholder group to advise them on an approach for registering facilities with on-road and non-road diesel fleets in the Agency's 4-county jurisdiction (King, Kitsap, Snohomish, and Pierce). Previously the Agency operated the Diesel Solutions program, which partnered with public and private institutions to voluntarily upgrade diesel fleets. However, State funding for the Diesel Solutions project has ended. Consequently, the DFFRP group was formed because the Agency is now seeking to identify and track sources of diesel particulate pollution-and assist those sources with reducing their emissions-through a registration program that will assess fees to facilities with diesel fleets. Fees will be used to support diesel emissions grants funding opportunities. The group consists of representatives from public transit and operations fleets, school districts, the construction industry, waste management, trucking companies, ports, railroads, terminal operators, the environmental community, government agencies, and large and small private businesses. The registration program objectives are to: 1) protect public health by reducing diesel particulate matter; 2) register facilities as indirect sources of diesel emissions from on-road and non-road mobile sources; 3) cover agency costs to operate and sustain a registration program that will assist diesel fleet facility owners with efforts to reduce their emissions; 4) accelerate fleet upgrades in the 4-country region by obtaining diesel retrofit/replacement grant funding, implementing retrofits and replacements, leveraging capital for financing vehicle upgrades, and other activities; and 5) design the facility registration fee structure to create meaningful incentives for emissions reductions through, for example, higher fees for higher-emitting facilities.

Wisconsin DOT (WisDOT)

Regional Process

*Cooperative Agreement:*⁶⁴ WisDOT does not have any specific air quality agreements, other than Conformity SIPs which are under revision. However, they do have a cooperative agreement with the Wisconsin Department of Natural Resources (WDNR) that they work under and the Air Management Bureau is within WDNR. The cooperative agreement serves as the basic guidance and policy direction for the liaison procedures for coordination of transportation projects. It also serves as the basis for interagency coordination in larger scale policy and planning efforts of the respective agencies. The intent of the agreement is that both agencies maintain close communications to achieve the objectives of the agreement, and that any conflicts be resolved by the primary agency contacts in a timely manner, "consistent with planning, design and construction deadlines and the need for effective environmental protection". The agreement contains detailed liaison procedures for DOT projects, development of statewide policies and plans, and amendments to the agreement. Numerous Memorandums of Understanding between WisDOT and DNR on issues such as erosion control and storm management, floodplain encroachments, wetlands, endangered species, etc. are attached to the agreement. WisDOT has been working with WDNR to either draft an appendix to the Cooperative Agreement for air quality or to draft a separate document related to air quality such as a programmatic approach to Mobile Source Air Toxics, air quality mitigation, etc.

RESEARCH & REPORTS

COMPLETED RESEARCH AND REPORTS:

*NCHRP 25-25/Task 32 - Linking Environmental Resources and Transportation Planning – The Current State of Practice:*⁶⁵ This project was designed to determine the extent to which environmental resource management plans are being considered during transportation project planning, environmental analysis, design, maintenance, and operations. Among other things, the report found that transportation and conservation groups are actively working together to build interdisciplinary and collaborative approaches to planning and project development. The report summarizes the results and recommends next steps to enhance integration of transportation and resource management planning.

*NCHRP 25-25/Task 36 - Recurring Community Impacts:*⁶⁶ The objective of this study was to develop guidelines for state DOTs on how best to address recurring community impacts in NEPA documents by providing a common understanding of requirements and approaches that are available to improve the analysis, documentation, and mitigation of such impacts. Recurring community impacts, as explained in this guide, are a subset of cumulative community impacts that focus on the past and current actions affecting a community. Recurring impacts can result from such items as air toxics, traffic noise, displacement of businesses and residents, etc.

TRB - Streamlining the National Environmental Policy Act Process Through Cooperative Local-State-Federal Transportation and Land Use Planning:⁶⁷ The EPA, FHWA, and Caltrans initiated a demonstration called Partnership for Integrated Planning in California. The purpose of this program was to obtain early involvement from local, state, and federal agency staff to help integrate the planning for transportation infrastructure, urban growth, and resource protection, rather than just to negotiate over permits for major infrastructure at the project stage. The project applied a simple urban growth model based on a geographic information system to evaluate a transportation plan and projects in Merced County.

FUTURE RESEARCH AND DATA NEEDS:

*FHWA - Air Quality and Climate Change Outreach and Communication:*⁶⁸ This proposal is included in FHWA's FY 2010 Research Plan for the Surface Transportation Environment and Planning Cooperative Research Program. This research includes outreach and communications efforts on a wide range of air quality issues such as mobile source air toxics, new air quality standards and regulations, public education, health implications of transportation services, etc. This research effort will use presentations at conferences, written materials, websites, webcasts/webinars, web-based communities of practice, peer exchanges, teleconferences, video conferences, public education materials, and newsletters, and other media for the outreach and communications efforts.

FTA - *Broad Agency Announcement for Innovative Small Research Projects to Advance Public Participation Related to Public Transportation Planning:*⁶⁹ The FTA is soliciting proposals for applied research in the area of public participation as it relates to the planning of public transportation projects and programs. The purpose of this research is "to develop and/or evaluate tools, techniques, and strategies that will improve the state of the practice of public participation in transportation planning at the regional or project level, by reaching out and meaningfully involving audiences that have been traditionally underserved by conventional public participation methods". The program emphasizes both the identification of methods that work towards meaningful public engagement, and efforts to make such strategies replicable across a variety of agencies, audiences, and project contexts.

TRB - Effectiveness of Air Quality Public Education Programs:⁷⁰ This proposed research idea is listed in AASHTO's Transportation and Environmental Research Ideas Database. It proposes to: 1) inventory a cross-section of air quality public education programs; 2) assess the strengths and weaknesses of the various program approaches; 3) identify the most effective program types and approaches; 4) select a limited number of the most effective program types for before-after surveys; 5) design, conduct, and analyze surveys; 6) analyze causal factors that lead to travel behavior changes that resulted in emissions reductions; 7) assess the actual costs of air quality public education programs; 8) evaluate results and develop conclusions and recommendations; and 9) prepare a final report.

In addition to the above research activities, the Air Quality COP recommends that a more comprehensive national inventory of interagency coordination and consultation procedures be completed and that the procedures be evaluated to determine which ones have led to improved and streamlined interagency coordination and/or streamlined air quality analysis processes especially at the project level. A "Current Practices" manual or web site should then be developed to highlight these practices.

SUMMARY

This State-of-the-Practice Report contains an overview of selected Federal and State air quality interagency coordination and consultation practices, and efforts to streamline such practices. The report is not intended to be an all inclusive listing of practices in the selected states, nor does it focus on a specific set of coordination/consultation procedures or processes such as the conformity consultation process. Rather the report gives a broad cross section and representative sampling of statewide, regional, and project-level coordination processes that have been developed by the State DOTs or in which they are heavily involved. This report was developed to assist transportation agencies become more aware of and involved in interagency coordination processes and practices; to more effectively integrate transportation and air quality planning and project development activities; and to help streamline these procedures.

The report discusses EPA's air quality interagency coordination/consultation requirements and voluntary programs to improve transportation and air quality. EPA's Transportation Conformity Regulation (Section 93.105) requires that conformity State Implementation Plans (SIPs) establish detailed interagency consultation procedures. While the rule lists specific topics that the consultation procedures must address, the States are given the flexibility to tailor their consultation process to address the topics so that they are effective in their own State. The EPA also promotes a number of voluntary programs which are aimed at improving transportation and air quality through interagency coordination and partnerships. They include such programs as the Best Workplaces for Commuters program, which promotes innovative solutions to commuting challenges faced by employers and employees; and the SmartWay Transport Partnership program which, among other things, includes the National Transportation Idle-Free Corridor Project which is intended to reduce unnecessary idling emissions from trucks and locomotives.

The FHWA/FTA statewide and metropolitan transportation planning regulations also contain coordination requirements, some of which are specific to air quality. The guidance for the CMAQ Program, which is jointly administered by FHWA and FTA, indicates that FHWA, FTA, and EPA field offices should establish and maintain a consultation and coordination process to review CMAQ funding proposals as needed and that the process provide for timely review and handling of CMAQ funding proposals. It also encourages States and MPOs to consult with each other, and with state and local air quality agencies on CMAQ priorities. FHWA, FTA and EPA also developed a public education and partnership-building initiative, referred to as "*It All Adds Up to Cleaner Air*" for the purpose of educating the public regarding the impact of their transportation choices on

traffic congestion and air quality. The initiative was developed in response to requests from state and local governments to help them meet mobility and clean air goals.

The State DOTs are using a variety of interagency coordination procedures and processes at the statewide, regional, and project-level to better integrate the transportation and air quality planning processes and to streamline the project development process. These interagency processes include such efforts as forming regional planning groups and technical working groups, developing MOAs, programmatic agreements and partnership agreements, and project-level protocols and screening processes. The State DOTs have found that these efforts help: 1) foster positive interagency coordination, consultation, and cooperation, 2) create a framework for improving working relationships and for better understanding each other's programs, 3) incorporate environmental concerns early in the process and resolve issues earlier in the project development process, 4) build trust among the agencies involved in the processes, 5) increase the credibility of the State DOTs and their programs and projects if health agencies and environmental groups are involved early in the process and agree on how a program or project should proceed, and 6) streamline the conformity analysis by getting early agreement by the interagency group on technical and procedural requirements.

The Air Quality COP recommends that a more comprehensive national inventory of interagency coordination and consultation procedures be completed and that the procedures be evaluated to determine which ones have led to improved and streamlined interagency coordination and/or streamlined air quality analysis processes especially at the project level. A "Current Practices" manual or web site should then be developed to highlight these practices.

REFERENCES

¹ AASHTO, Air Quality Practitioner's Conference, Albany, N.Y., November 17-20, 2008.

² AASHTO, State-of-The-Practice Report on Mobile Source Air Toxics, May 2009, available at <u>http://environment.transportation.org/pdf/communities_of_practice/mobile_soruce_air_toxics_final_063009.pdf</u>.

³ AASHTO, State-of-the-Practice Report on Short Term Impacts from Construction Equipment and Operations, May 2010, available at http://environment.transportation.org/pdf/communities_of_practice/airqualconstr.pdf.

⁴ EPA, Chronological List of Additional Transportation Conformity Rulemakings, available at <u>http://www.epa.gov/otaq/stateresources/transconf/conf-regs-c.htm</u>.

⁵ EPA, Transportation Conformity Rule Amendments to Implement Provisions Contained in the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), dated January 24, 2008, available at <u>http://www.epa.gov/fedrgstr/EPA-AIR/2008/January/Day-24/a597.htm</u>.

⁶ EPA, Voluntary Programs, available at <u>http://www.epa.gov/otaq/stateresources/voluntaryprograms.htm</u>.

⁷ EPA, National Clean Diesel Campaign; Regional Clean Diesel Collaboratives, available at <u>http://www.epa.gov/otaq/diesel/whereyoulive.htm#coll</u>.

⁸ EPA, National Clean Diesel Campaign; Grants and Funding Overview, available at <u>http://www.epa.gov/otaq/diesel/grantfund.htm</u>.

⁹ U.S. DOT, Statewide Transportation Planning; Metropolitan Transportation Planning; Final Rule; dated February 14, 2007, available at

http://www.regulations.gov/search/Regs/home.html#documentDetail?R=09000064802ac8ea.

¹⁰ FHWA, Final Guidance on the Congestion Mitigation and Air Quality (CMAQ) Improvement Program under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, dated November 17, 2008, available at <u>http://www.fhwa.dot.gov/environment/cmaq08gm.htm</u>.

¹¹ FHWA, It All Adds Up to Cleaner Air, available at <u>http://www.fhwa.dot.gov/environment/addsup.htm</u>.

¹² FHWA, Air Quality Planning for Transportation Officials, available at <u>http://www.fhwa.dot.gov/environment/aqplan/index.htm</u>.

¹³ California DOT, Statewide Conformity Working Group, available at <u>http://www.dot.ca.gov/hq/env/air/state_cwg/CWGindex.htm</u>.

¹⁴ California Transportation Commission, Regional Transportation Plan Guidelines, dated 2007, available at <u>http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/index_files/2007_California_Regional_Transportation_Plan_G</u>uidelines.pdf.

¹⁵ California DOT, Regional Transportation Plan Checklist, dated September 2007, available at <u>http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/index_files/RTP_Checklist_Ver.4.7_July2007.pdf</u>.

¹⁶ California DOT, San Francisco Bay Area Transportation Air Quality Conformity Interagency Consultation Procedures, dated August 4, 1994, available at http://yosemite1.epa.gov/R9/r9sips.nsf/AgencyProvision/96F466AA42A9520388256A5C0055F5EC/\$file/B

A+T+CONFORMITY.PDF?OpenElement.

¹⁷ Southern California Association of Governments, PM Conformity Hot Spot Analysis-Project Summary Form For Interagency Consultation, dated August 1, 2007, available at <u>http://www.scag.ca.gov/tcwg/index.htm</u>.

¹⁸ San Diego Association of Governments, Committee Working Group Charter, dated May 2005, available at <u>http://www.sandag.org/uploads/committeeid/committeeid_58_4437.pdf</u>.

¹⁹ California DOT, Conformity Information, available at <u>http://www.dot.ca.gov/hq/env/air/index.htm#conformity</u>

²⁰ California DOT, California Regional Blueprint Program, available at <u>http://calblueprint.dot.ca.gov/overview.html</u>.

²¹ California DOT, Partnership Agreement "Mare Island Accord", dated July 14, 2000, available at <u>http://www.dot.ca.gov/hq/env/irsd/files/mare_island_accord.pdf</u>.

²² University of California Davis, Transportation Project-Level Carbon Monoxide Protocol (CO Protocol), dated December 1997, available at <u>http://www.dot.ca.gov/hq/env/air/pages/coprot.htm</u>.

²³ California DOT, Standard Environmental Reference Chapter 38, available at <u>http://www.dot.ca.gov/ser/vol1/sec6/ch38nepa/chap38.htm</u>

²⁴ Colorado DOT, Statewide Transportation Advisory Committee, available at <u>http://www.coloradodot.info/programs/statewide-planning/stac.html</u>.

²⁵ Colorado DOT, Strategic Transportation, Environmental, and Planning Process for Urban Places (STEP-UP) Program, available at <u>http://www.environment.fhwa.dot.gov/integ/case_colorado.asp</u>.

²⁶ Colorado DOT, Multi-Agency Memorandum of Agreement for Transportation Conformity Evaluations Conducted Under the Eight Hour Ozone Standard, dated March 14, 2008. For more information contact CDOT by email at <u>Jill.Schlaefer@dot.state.co.us</u>.

²⁷ Colorado DOT and Colorado Department of Public Health and Environment, Memorandum of Agreement for Air Quality and Transportation Integration, dated May 10, 2002. For more information contact CDOT by email at <u>Jill.Schlaefer@dot.state.co.us</u>.

²⁸ Colorado Department of Public Health and Environment, Regulation 10-Criteria for Analysis of Conformity, October 17, 1996, available at <u>http://192.70.175.126/regulations/airregs/100112aqcccriteriaanalysisconformity.pdf</u>.

²⁹ Colorado DOT, Interagency Consultation Group. For more information contact CDOT by email at <u>Jill.Schlaefer@dot.state.co.us</u>.

³⁰ Colorado DOT, Travel Demand Management Program, available at <u>http://www.coloradodot.info/programs/commuterchoices/tdm.html</u>.

³¹ Colorado DOT, Procedures for Determining Project Level Conformity, last updated 1995, available at <u>http://environment.transportation.org/pal_database/agreement_details.aspx?pal_id=89</u>.

³² Georgia DOT, State Air Quality Partners Statewide CMAQ Project Selection Process, dated June 4, 2007, available at

http://www.dot.ga.gov/localgovernment/FundingPrograms/cmaq/Documents/georgia cmaq program.pdf.

³³ Maryland Department of Environment, Interagency Consultation Procedures for Transportation Conformity Determinations and State Implementation Plan Development in the Baltimore Region, dated 1996. For more information contact MDOT by email at <u>hsimons@mdot.state.md.us</u>.

³⁴ Interagency Consultation Group (ICG) of the Baltimore Region Transportation Board, ICG Meeting Bylaws, dated 1999. For more information contact MDOT by email at <u>hsimons@mdot.state.md.us</u>.

³⁵ Maryland Department of Environment, Revision to Maryland's Transportation Conformity State Implementation Plan, dated November 9, 2006. For more information contact MDOT by email at <u>hsimons@mdot.state.md.us</u>.

³⁶ Minnesota DOT, Multi-Agency <u>DRAFT</u> Joint Powers Agreement on "Transportation Conformity Procedures for Minnesota: A Handbook for Transportation and Air Quality Professionals". For more information contact Mn/DOT by email at <u>marilyn.jordahl@state.mn.us</u>.

³⁷ Minnesota DOT, CO Hotspot Screening Method. For more information contact Mn/DOT by email at <u>marilyn.jordahl@state.mn.us</u>.

³⁸ Minnesota DOT, Transportation Project Level Hotspot Screening Method Update, dated April 15, 2009. For more information contact Mn/DOT by email at <u>marilyn.jordahl@state.mn.us</u>. ³⁹ New York State DOT, Clean Air NY Program, available at <u>http://cleanairny.org/cleanairny/Home/Default.aspx</u>.

⁴⁰ Memorandum from Lower Manhattan Development Corporation, Metropolitan Transportation Authority, NYSDOT, and Port Authority of New York and New Jersey to Director, Lower Manhattan Recovery Office, dated April 21, 2006. More information available upon request from NYSDOT by email to jzamurs@dot.state.ny.us.

⁴¹ North Carolina Division of Air Quality (NCDAQ), Statewide Interagency Consultation Meetings. More information available upon request from NCDAQ by email to <u>laura.boothe@ncdenr.gov</u>.

⁴² North Carolina DOT, Development of a New Direction for CMAQ at NCDOT, dated October 2, 2008, available at <u>http://www.ncdot.org/doh/preconstruct/tpb/PDF/AQ_New_Direction_NCDOT_FINAL.pdf</u>.

⁴³ North Carolina DOT, CMAQ Program-Revised Project Selection & Programming, dated August 10, 2009, available at <u>http://www.ncdot.org/doh/preconstruct/tpb/PDF/AQ_CMAQ_Process-ProjectSelection_081009.pdf</u>.

⁴⁴ North Carolina DOT, North Carolina CMAQ Program Update – Effects of Federal Rescission, Interagency Review of Applications for Updated STIP & Revisions to CMAQ Funding Target Allocations, dated March 26, 2010, more information available upon request from NCDOT by email to <u>tarellano@ncdot.gov</u>.

⁴⁵ Pennsylvania DOT, Transportation Conformity SIP, Volume 1, dated January 2008, available at (http://www.dep.state.pa.us/dep/deputate/airwaste/aq/plans/plans/transconform/SIP_Vol_I.pdf.

⁴⁶ Pennsylvania DOT, Transportation Conformity SIP, Volume II-Appendices, dated January 2008, available at <u>http://www.dep.state.pa.us/dep/deputate/airwaste/aq/plans/plans/transconform/SIP_Vol_II.pdf</u>.

⁴⁷ Southwestern Pennsylvania Commission, CMAQ Evaluation Committee Operating Procedures, dated October 2009. For more information contact PennDOT by email at <u>michaelba@state.pa.us</u>.

⁴⁸ Southwestern Pennsylvania Commission, CMAQ Application Instructions, dated August 2009. For more information contact PennDOT by email at <u>michaelba@state.pa.us</u>.

⁴⁹ Southwestern Pennsylvania Commission, CEC Work Plan, dated October 2009. For more information contact PennDOT by email at <u>michaelba@state.pa.us</u>.

⁵⁰ Pennsylvania DOT, $PM_{2.5}/PM_{10}$ Hot-Spot Project Screen Process, dated November 2006. For more information contact PennDOT by email at <u>michaelba@state.pa.us</u>.

⁵¹ Texas DOT, Texas Conformity Documentation, dated June 30, 2007. For more information contact TxDOT by email at <u>jploch@dot.state.tx.us</u>.

⁵² Texas DOT, Pre-analysis Consensus Plan for Transportation Conformity, dated December, 19, 2009. For more information contact TxDOT by email at <u>jploch@dot.state.tx.us</u>.

⁵³ Texas DOT, Distribution of the Transportation Conformity Determination-Concurrent Review, dated August 2, 2004. For more information contact TxDOT by email at <u>jploch@dot.state.tx.us</u>.

⁵⁴ Texas DOT, Information Required for Transportation Conformity Review. For more information contact TxDOT by email at <u>jploch@dot.state.tx.us</u>.

⁵⁵ Copies are available upon request from the Virginia DOT by email to <u>christopher.voigt@vdot.virginia.gov</u>.

⁵⁶ Virginia Conformity SIP (Regulation for Transportation Conformity), available at: <u>http://www.deq.virginia.gov/air/regulations/air151.html</u>

⁵⁷ VDOT, Project-Level Carbon Monoxide Air Quality Studies Agreement, dated February 27, 2009. Copy available upon request from the Virginia DOT by email to <u>christopher.voigt@vdot.virginia.gov</u>.

⁵⁸ Christopher Voigt, VDOT Environmental Division, FHWA-VDOT Agreement on Project-Level Carbon Monoxide Air Quality Studies, Technical Support Document, dated February 2009. Copy available upon request from the Virginia DOT by email to <u>christopher.voigt@vdot.virginia.gov</u>.

⁵⁹ VDOT, No-Build Analysis Agreement for Air and Noise Studies, dated May 22, 2009. Copy available upon request from the Virginia DOT by email to <u>christopher.voigt@vdot.virginia.gov</u>.

⁶⁰ FHWA, Procedures for Updating Air Studies When New Planning Assumptions Become Available, dated October 28, 2004. Copy available upon request from the Virginia DOT by email to <u>christopher.voigt@vdot.virginia.gov</u>.

⁶¹ VDOT, Programmatic Categorical Exclusion Agreement, dated December 22, 2004. Copy available upon request from the Virginia DOT by email to <u>christopher.voigt@vdot.virginia.gov</u>.

⁶² Puget Sound Clean Air Agency and Washington DOT, Memorandum of Agreement-Fugitive Dust, dated October 14, 1999, more information available upon request from WSDOT by email to <u>SextonT@WSDOT.WA.GOV</u>.

⁶³ Puget Sound Clean Air Agency, Diesel Fleet Facility Registration Program Stakeholder Group Final Report, dated June 2009, available at http://www.pscleanair.org/programs/dieselsolutions/registration/stakeholders/default.aspx.

⁶⁴ Wisconsin Department of Natural Resources and the Wisconsin Department of Transportation, Cooperative Agreement, dated November 2002. For more information contact WisDOT by email at <u>Patricia.Trainer@dot.wi.gov</u>.

⁶⁵ NCHRP 25-25/Task 32 – Linking Environmental Resources and Transportation Planning – The Current State of Practice, dated December 2008, available at <u>http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25(32)_FR.pdf</u>.

⁶⁶ NCHRP 25-25/Task 36 - Recurring Community Impacts, dated September 2008, available at <u>http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25(36) FR.pdf</u>.

⁶⁷ TRB - Streamlining the National Environmental Policy Act Process Through Cooperative Local-State-Federal Transportation and Land Use Planning, dated January 30, 2007, available at <u>http://trb.metapress.com/content/cn0082835538510l/</u>.

⁶⁸ FHWA - Air Quality and Climate Change Outreach and Communication, dated April 13, 2010, available at <u>http://www.fhwa.dot.gov/hep/step/fy2010rp.htm#aqcc</u>.

⁶⁹ FTA - Broad Agency Announcement for Innovative Small Research Projects to Advance Public Participation Related to Public Transportation Planning, dated March 18, 2009, available at http://www.grants.gov/search/search.do;jsessionid=0lN1JjNM9j21Y5q7x8RNLNdpwv5D2pdnQcTSnsHnw R4QcHK1Szwb!1315278440?oppId=46140&flag2006=false&mode=VIEW.

⁷⁰ TRB, Effectiveness of Air Quality Public Education Programs, dated August 10. 2007, available at <u>http://environment.transportation.org/teri_database/idea_details.aspx?rid=454</u>.