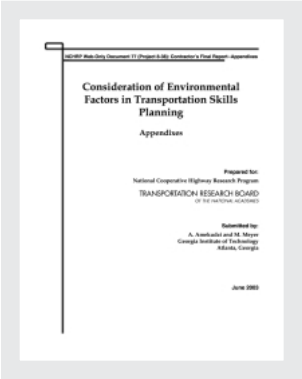

Consideration of Environmental Factors in Transportation Systems Planning: Appendixes

DETAILS

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Consideration of Environmental Factors in Transportation Skills Planning

Appendixes

Prepared for:

National Cooperative Highway Research Program

TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

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APPENDIX A: STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) AND OECD GUIDELINES

SEA DIRECTIVE

The SEA Directive adopted by the European Parliament and Council in 2001 is one of the most important legislative initiatives regarding Strategic Environmental Assessments (SEAs) in the world. The purpose of the SEA Directive is to ensure that environmental effects of certain plans and programs are identified and assessed during the planning process. The requirements set forth in the Directive are to be integrated into existing procedures in Member States for the adoption of plans and programs or incorporated into new procedures. The Directive requires the preparation of an environmental report that identifies, describes, and evaluates the likely significant effects on the environment of implementing the plan/program as well as the identification of reasonable alternatives.

Environmental Report Requirements

The information to be contained in the environmental report includes (*1*):

- An outline of the contents, main objectives of the plan or program and its relationship with other relevant plans and programs
- Relevant aspects of the current state of the environment and likely evolution thereof without implementation of the plan or program
- The environmental characteristics of areas likely to be significantly affected
- Any existing environmental problems that are relevant to the plan or program including those related to any areas of particular environmental importance
- The environmental protection objectives, established at the international, European Community or Member state level, which are relevant to the plan or program and the way in which those objectives or any environmental considerations have been taken into account
- The likely significant effects on the environment, including such issues as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between aforementioned factors
- The measures envisaged to prevent, reduce and offset any significant adverse effects on the environment of implementing the plan or program
- An outline of reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information.
- A description of the measures envisaged concerning monitoring of the implementation of the plan or program
- A non-technical summary of the information provided under the above headings

In addition to the outline of report contents, general criteria for determining the likely significance of the effects on the environment of the plan or program are to be presented. Full contents of the SEA-Directive can be located online at:

http://europa.eu.int/comm/environment/eia/sea-legalcontext.htm

MANUAL ON SEA OF TRANSPORT INFRASTRUCTURE PLANS

A recent landmark report by the European Council (EC) provides detailed guidance and methods for SEA for transportation infrastructure plans (*2*). The report examines the principles and processes of SEA, such as appropriate levels of planning (network, corridor, project), steps to conduct an SEA, and the methods of impact assessment for the transport sector. The Manual describes the main issues in SEA and gives practical suggestions for carrying out an SEA.

Seven Steps in the SEA Process

The Manual identifies and describes seven steps in the SEA process, focusing on their application in transportation infrastructure planning:

- **Screening** → Determines whether an SEA is necessary
- **Scoping** → Determines the issues to be included in an SEA
- **Impact Assessment** → Assesses the impacts of a proposed infrastructure plan in comparison with the baseline situation and analyzes uncertainties
- **Review** → Ensures that all the relevant impacts have been properly assessed
- **Integration into Planning and Decision-Making** → Ensures that the SEA is fully taken into account in making the decisions
- **Implementation and Monitoring** → Ensures that there is a mechanism for correcting unacceptable aspects of implementation
- **Consultation and Participation** → Ensures that environmental authorities, other agencies and the public or non-governmental agencies participate throughout the SEA process, including review of the SEA report.

The Manual also describes methods of forecasting the impact of transportation infrastructure plans on traffic flows and the environment and identifies ways to optimize the environmental effects of plans. It suggests that in the assessment and forecasting of environmental impacts, a distinction should be made between impacts on traffic flows, and environmental impacts on the global, regional and local scales. Useful indicators for assessing effects at these levels are discussed.

Key Pointers for Carrying Out Effective SEAs

Key pointers for carrying out an SEA identify include:

- Setting **clear targets** for the SEA report
- Setting up an **interdisciplinary team**
- Ensuring **good collaboration** exists between the planning and environmental authorities
- Enabling **effective feedback** to be made

- Providing sufficient time and resources to carry out **public participation**
- Ensuring that the results of the evaluation are taken into consideration in the **final decision**

SEA AND INTEGRATION OF THE ENVIRONMENT INTO STRATEGIC DECISION-MAKING

The European Commission issued a report that examines the benefits, challenges and methods for integrating environmental factors into decisions concerning plans, policies and programs (*3*). The following sections describe key success factors gained from this study and recommendations for the effective implementation of SEA as well as for integrating the environment into decision-making.

Key Factors in SEA

Key factors identified for successful SEA include the following:

- **Legislative Support**: The most successful SEA generally occurs where there is a legal obligation that requires it to be undertaken.
- **Transparency**: SEA needs to be a transparent process that allows environmental considerations to be highlighted.
- **Early Consideration**: Successful SEAs have occurred at the beginning of a planning process rather than at the end of a project development effort, and may serve as a catalyst for developing further guidance and training
- **Alternative Options versus Option Alternatives**: Successful SEA assesses the impacts of alternative options rather than option alternatives
- **Public Participation**: Widespread involvement of stakeholders, policymakers and the wider public is crucial for a successful SEA
- **Open Communication**: A successful SEA is an active, participatory and education process for all parties, in that stakeholders are able to influence the decision maker, and the decision maker is able to raise awareness of the strategic dimensions of the policy, plan or program
- **Information Accessibility**: A successful SEA involves wide use and dissemination of baseline and assessment information
- **High Quality Assessment**: A successful SEA depends on high quality and rigorous application of assessment methodologies, whether qualitative, quantitative or both.
- **Systematic Process**: An SEA needs to be a systematic process involving different institutions in a common reporting framework
- **Independent Review**: An independent body that can review or audit the assessment process and content is needed to provide sufficient incentive to carry out an SEA in an accountable way.

Recommendations for Effective Implementation of SEA

Applying SEA at the most strategic levels of decision-making

1. Preliminary environmental assessments or simple policy appraisals can provide a useful starting point for a more extensive SEA

2. A flexible form of SEA is needed at policy-making levels, and existing strategic processes should be examined for compatibility to the SEA process
3. SEA should be promoted as a means of changing attitudes and culture within organizations and government departments
4. The scope of an SEA should not be unduly constrained, otherwise it will not be strategic
5. Effort should be concentrated on establishing appropriate communication processes and networks, and putting in place engines for change.

Promoting effectiveness of integration

1. A tiered approach to an SEA should be adopted to help promote the integration of the environment into decision-making
2. Auditing, monitoring, and quality control should be an integral component of any SEA process
3. Effectiveness of integration should be measured in the long term, rather than simply based on short-term output performance measures.

Public and stakeholder participation

1. A good SEA needs transparent and participatory processes and decisions
2. Stakeholders and the public should be encouraged to think as strategically as possible, to help avoid the 'hijacking' of the SEA by more parochial views

SEA and Sustainability Appraisal

1. SEA and sustainability appraisal should be seen as complementary and not substitutes for each other
2. SEA can strengthen wider sustainability appraisal where it brings baseline information together with objectives-led assessment
3. The reasons for including certain socio-economic impacts within an SEA should be made explicit.

Undertaking SEA

1. There should be a named, senior individual responsible for the co-ordination and delivery of any SEA and also a named individual responsible for the communication of any SEA process
2. Emphasis needs to be placed on 'building the right team' of experts in any SEA or wider appraisal
3. Greater effort is needed to improve the quality of baseline information against which policies and options can be assessed
4. Lessons should be learned from the implementation of the SEA Directive at plan and program levels for wider application to policies

Guidance and training

1. Guidance and training is essential for successful SEA efforts agency or country wide

2. Mechanisms need to be developed within government departments and organizations to foster and retain 'institutional memory.'
3. Guidance should be developed by the European Commission for carrying out SEA at the most strategic policy levels.

LESSONS LEARNED IN SEAS OF TRANSPORT CORRIDORS

A recent publication, *SEA of Transport Corridors: Lessons Learned in Comparing the Methods of Five Member States* (*4*), analyzes five SEAs of multimodal transportation corridors and concludes with several valuable lessons.

Consultation and Participation

- Information sharing, consultation and participation are essential and will have the greatest positive impact when initiated at the earliest stages.
- Consultation and participation should include all stakeholders and the public to ensure wide "buy in" to the solutions being proposed
- The public and stakeholders need to be informed about the SEA process and the options being considered from the beginning of the process
- Information needs to be presented clearly and simply in terms that are relevant to the stakeholders

Scoping

The scoping stage is viewed as the most critical stage in an SEA. It provides an opportunity to inform the stakeholders and obtain their views on objectives, indicators, initial alternatives and data availability. Scoping requires a decision on which themes, objectives and indicators are necessary and sufficient for the scale and level of the decision being made.

Outlining Alternatives

Alternatives identification is viewed as the step where SEA can make the greatest and most constructive contribution to sustainability and environmental protection. This stage was also found to be the most dynamic and intensive phase of the SEA process. Several important lessons learned in this stage include:

- Identify alternatives while keeping in mind the overall objectives, which may include a mixture of environmental, socio-economic, and transportation-based objectives;
- Consider both infrastructure and policy-type alternatives
- Evaluate the business-as-usual scenario to highlight the sustainability implications of not taking action on strategic policy and infrastructure options
- Coordinate the socio-economic, transportation feasibility and environmental assessments to identify alternatives that are desirable from a number of perspectives and that meet several objectives
- Discuss alternatives with stakeholders and the public to help identify realistic options and reduce conflict at later stages

- Discuss alternatives with stakeholders and the public to help identify realistic options and reduce conflict at later stages
- Identify and define options in an iterative process

Assessing Potential Impacts

In assessing potential impacts, geographic information systems (GIS) were widely used across the five studies: however, it should be noted that GIS and modeling are not always essential to provide adequate and sufficient information to decision-makers. The main advantages noted for the use of GIS include:

- The ability to compare the potential impacts of different options against a set of environmental indicators
- The ability to overlay different sets of geo-referenced information with data on traffic flows
- The ability to manage and display considerable quantities of data using GIS-linked databases
- The ability to present maps to decision-makers and the public during consultations

Modeling and traffic forecasting were also viewed as key tools in undertaking an SEA to give results a level of robustness that allows stakeholders to understand the implications. The use of complex assumptions was inevitable, as was the need for transparency in formulating them. The assessment process included the consideration of economic implications of different alternatives to help provide a balanced picture when presenting results. Methods of conducting cost-benefit analyses were different, and not all approaches led to a monetary evaluation of the impacts.

STRATEGIC ENVIRONMENTAL ASSESSMENT IN THE TRANSPORT SECTOR: AN OVERVIEW OF LEGISLATION AND PRACTICE IN EU MEMBER STATES

A report by the European Union, *SEA in the Transport Sector: An Overview of Legislation and Practice in Member States* (*5*) provides a comprehensive assessment of current transport SEAs in the EU. The document reports on the results of a survey conducted of two groups of countries--those with legal requirements for SEA transportation policies, plans and programs; and those having practical experience, but no legal requirements for SEA in the transportation sector. The report found that the existence of legislation promotes consistency and greater influence of SEA studies. In addition to the benefits of early detection and mitigation of environmental effects, the SEA effort was found to provide a more efficient approach to both policy development and implementation. The report also identified as obstacles to SEA implementation the lack of expertise and inadequate institutional collaboration. The Trans-Pennine Corridor (TPC) study in the United Kingdom was one of the five pilot studies funded by the European Commission. Figure A-1 shows the main steps that were undertaken in this study.

ENVIRONMENTALLY SUSTAINABLE TRANSPORT GUIDELINES

The OECD Environmentally Sustainable Transport (EST) Guidelines were developed to provide a strategy for sustainable development and future-oriented policy making and

practice in the transport sector. The guidelines are based on an understanding of unsustainable transport trends, a definition of EST, and health and environmental criteria that are associated with sustainable development. In addition, the report identifies ten guidelines for achieving EST and provides explanations as to the application of the guidelines. The OECD EST Guidelines are presented in Table A.1.

INDICATORS FOR THE INTEGRATION OF ENVIRONMENTAL CONCERNS INTO TRANSPORT POLICIES

In 1991, OECD recommended that transportation/environmental indicators be developed to better facilitate decision-making at the national, international and global levels, and to integrate environmental concerns into transportation decision-making. The conceptual approach in developing sector indicators is outlined in (*6*). Indicators are proposed for three major themes: sector trends of environmental significance; environmental impacts of the transportation sector (with respect to pollution and natural resource use); and economic linkages between transportation and the environment. Indicators that have internationally comparable, comprehensive, and readily available data are presented in tabular and graphical form along with notes on their relevance to transportation and environmental policies, the conceptual base, and data sources. The indicators proposed for the integration of environmental concerns into transportation policies are presented in Table A.2.

CANADA – SEA AND SUSTAINABLE TRANSPORT RESOURCES

A 1999 Canadian Cabinet Directive on Environmental Assessment of Policy, Plan and Program (*7*) proposals requires an SEA when a proposal is submitted to an individual Minister or Cabinet agency for approval, and when implementation of the proposal may result in important environmental effects, either positive or negative. The *Guidelines for Implementing the Cabinet Directive* (*8*) were prepared to provide more detail on the process of conducting an SEA and in preparing the SEA report. The Cabinet Directive and the Guidelines can be accessed online for more information at:

http://www.ceaa-acee.gc.ca/0011/0002/dir_e.htm

How to Conduct Environmental Assessments of Policy, Plan and Program Proposals (*9*) is another guidance document to help in the preparation of SEAs in Canada. This guidance document discusses what must be done, why environmental assessments are required, who should be involved, when the assessment should be performed, how it should be carried out and where to get assistance. In addition, it provides a set of worksheets to use as a tool in analyzing and documenting the environmental effect of a policy, plan, or program. Six steps to completing an SEA for policy, plan and program proposals are defined as follows:

Step 1: Determine the study approach.

Step 2: Identify possible options for the policy, plan, or program.

Step 3: Identify the likely environmental effect of each viable option.

Step 4: Determine what can be done to mitigate negative effects and enhance positive effects.

Step 5: Identify the potential environmental effects that remain after mitigation.

Step 6: Document the results of the analysis.

Prepared for Transport Canada to address a significant aspect of sustainable transportation, *Performance Indicators for Environmentally Sustainable Transportation – A*

Discussion Paper (*10*) reviews the current status of environmental indicator development and proposes a set of indicators for environmentally sustainable transportation. A set of 32 indicators, covering the topics of transportation spills, fossil fuel use, urban land use, climate change, urban air quality, noise, and water pollution, was developed. For these indicators, problems of relevance, measurability, and ease of understanding are identified. For more information on the proposed indicators, this paper can be located online at:

http://www.tc.gc.ca/../envaffairs/english/sustainability/eperform.pdf

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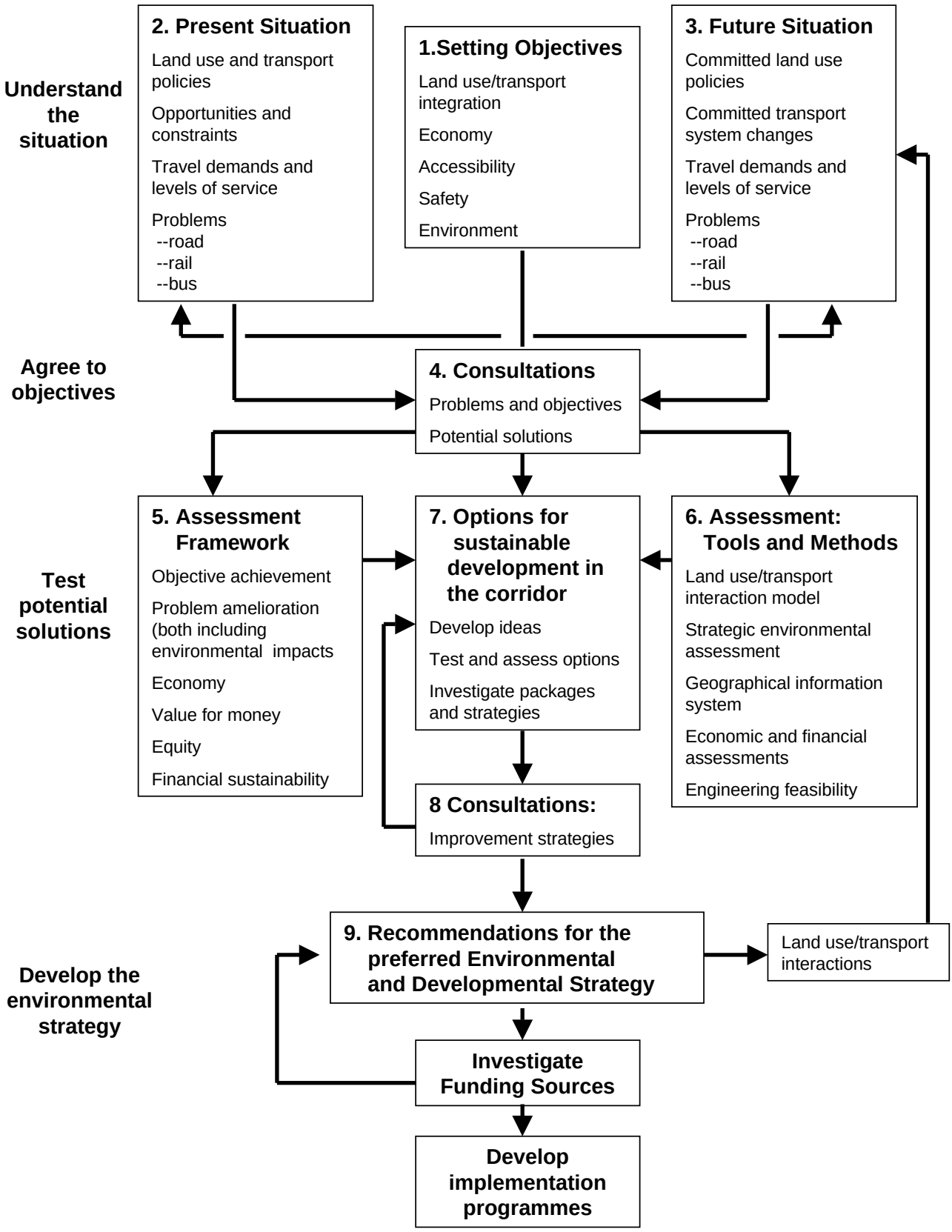
Understand the situation
2. Present Situation
Land use and transport policies
Opportunities and constraints
Travel demands and levels of service
Problems
--road
--rail
--bus
1.Setting Objectives
Land use/transport integration
Economy
Accessibility
Safety
Environment
3. Future Situation
Committed land use policies
Committed transport system changes
Travel demands and levels of service
Problems
--road
--rail
--bus
Agree to objectives
4. Consultations
Problems and objectives
Potential solutions
Test potential solutions
5. Assessment Framework
Objective achievement
Problem amelioration (both including environmental impacts
Economy
Value for money
Equity
Financial sustainability
7. Options for sustainable development in the corridor
Develop ideas
Test and assess options
Investigate packages and strategies
6. Assessment: Tools and Methods
Land use/transport interaction model
Strategic environmental assessment
Geographical information system
Economic and financial assessments
Engineering feasibility
8 Consultations:
Improvement strategies
Develop the environmental strategy
9. Recommendations for the preferred Environmental and Developmental Strategy
Land use/transport interactions
Investigate Funding Sources
Develop implementation programmes

TABLE A.1: OECD ENVIRONMENTALLY SUSTAINABLE TRANSPORT GUIDELINES

Guideline 1. **Develop a long term vision** of a desirable transport future that is sustainable for environment and health and provides the benefits of mobility and access

Guideline 2. **Assess long-term transportation trends**, considering all aspects of transport, their health and environmental impacts, and the economic and social implications of continuing with business as usual

Guideline 3. **Define health and environmental quality objectives** based on health and environmental criteria, standards, and sustainability requirements

Guideline 4. **Set quantified sector-specific targets** derived from the environmental and health quality objectives, and set target dates or milestones

Guideline 5. **Identify strategies to achieve EST** and combinations of measures to ensure technological enhancement and changes in transport activities

Guideline 6. **Assess the social and economic implications of the vision**, and ensure that they are consistent with social and economic sustainability

Guideline 7. **Construct packages of measures and instruments** for meeting the milestones and targets of EST. Highlight 'win-win' strategies incorporating, in particular, technology policy, infrastructure investment, pricing, transport demand and traffic management, improvement of public transport, and encouragement of walking and cycling; capturing synergies (e.g., those contributing to improved road safety) and avoid counteracting effects among instruments

Guideline 8. **Develop an implementation plan** that involves well-phased application of packages of instruments capable of achieving EST taking into account local, regional, and national circumstances. Set a clear timetable and assign responsibilities for implementation. Assess whether proposed policies, plans and programs contribute to or counteract EST in transport and associated sectors using tools such as Strategic Environmental Assessment (SEA)

Guideline 9. **Set provisions for monitoring implementation** and for public reporting on the EST Strategy; use consistent, well-defined sustainable transport indicators to communicate the results; ensure follow-up action to adapt the strategy according to inputs received and new scientific evidence.

Guideline 10. **Build broad support and cooperation** for implementing EST; involve concerned parties, ensure their active support and commitment, and enable broad public participation; raise public awareness and provide education programs. Ensure that all actions are consistent with global responsibility for sustainable development.

Source: *(6)*

Table A.2: Indicators for the Integration of Environmental Concerns into Transport Policies

Sectoral Trends of Environmental Significance

1. Overall Traffic Growth and Modal Split
   - Passenger traffic trends by mode (private cars, buses and coaches, railways, air) in passengers x km
   - Freight traffic trends by mode
     Road traffic trends in vehicles x km
   - Trends of airport traffic: number of movements
   - Trends in tonnage handling in national harbours
2. Infrastructure
   - Capital expenditure: total and by mode
3. Vehicles and Mobile Equipment
   - Number of road vehicles (automobiles, commercial vehicles): total, gasoline, diesel, others

Environmental Impact

1. Resource Use
   - Total final energy consumption of the transport sector (share in total, per capita, by mode), in tonnes of oil equivalent
2. Air Pollution
   - Transport emissions - CO_2, NOx, VOC, CO, etc. (share in total, per capita, by mode)
   - Emissions per vehicle km - CO_2, NOx, VOC, CO, etc.
3. Water Pollution
   - Tonnage of oil released through accidents and discharges during current operations
4. Noise
   - Population exposed to noise greater than 65 dB(A) from transport
5. Waste
   - Tonnage of transport-related waste
   - Tonnage of hazardous waste, imported or exported
6. Risk and Safety
   - Number of people killed or injured
   - Tonne km of hazardous materials transported

Economic Considerations

1. Environmental Damage
   - Environmental pollution damage relating to transport
2. Environmental Expenditure
   - Total expenditures on pollution prevention/clean-up
   - R&D expenditure on quiet, clean, energy-efficient vehicles
   - R&D expenditure on clean transport fuels
3. Taxation and Subsidies
   - Direct subsidies
   - Direct and indirect subsidies
   - Total economic subsidies (direct and indirect subsidies, plus externalities)
   - Relative taxation of vehicles and vehicle use
4. Price Structure
   - Trends in gasoline (leaded, unleaded), diesel and other fuel prices and public transport prices in real terms
5. Trade and Environment
   - Indicator to be developed

Source: (*6*)

Appendix B: State Environmental Laws, Regulations and Policies

State	Law/Reg/Policy	Description
Alabama	Code of Alabama Section 11-85-40	Requires planning agencies to perform comprehensive advisory planning and research and other activities related thereto for urban areas and regions or areas where rapid urbanization has occurred or is expected to occur. "Comprehensive advisory planning" is defined as: "comprehensive studies of the present and future development of the land economics and land policies of a region" including "preparation, as a guide for long-range development, of advisory general physical plans with respect to the pattern and intensity of land use and the provision of public facilities, including transportation facilities, together with long-range fiscal plans for such development."
Alaska	17 AAC 05.125. Statewide Transportation Planning Objectives	One of the statewide transportation planning objectives is to further "the economic vitality of the state". When formulating goals and objectives in the statewide transportation plan, and the strategies to implement those goals and objectives, the Alaska DOT&PF must "consider the concerns of interested parties and minimize any adverse environmental, economic or social impact of the goals and objectives contained within the plan upon any segment of the population."
	17 AAC 05.175. Project Needs List And Evaluation	To be put on the "Needs List" for the STIP, projects will be evaluated on a set of criteria. For rural and urban streets, the criteria includes environmental factors such as economic benefits resulting from the project, the project's effect on health and quality of life, and environmental approval readiness. Additional criteria for remote roads and trails includes "whether the project improves access to water sources, landfills, sewage lagoons, honey bucket sites, health care, airports, subsistence sites, or a river and the ocean". Similar criteria exist for evaluating transit projects, TRAAK projects, and ITS projects.
	17 AAC 05.135, 05.140, 05.145. Public Participation in the Statewide Transportation Planning Process, Methods for Receiving Public Input, and Public Review of the Draft Plan	This section of the Alaska Administrative Code establishes guidelines for including public participation in the statewide transportation planning process.

Arizona	Executive Order 99-2 as Amended by Executive Order 2000-16: Governor's Transportation Vision 21 Task Force	Governor Jane Dee Hull issued this Executive Order which established the Governor's Transportation Vision 21 Task Force to serve the purpose of "evaluating current practices, resources and infrastructures, and recommending and prioritizing the goals, funding, and specific plans that will establish a vision for transportation in Arizona for the 21st century."
		The Task Force recommended the adoption of performance based planning and programming and coordinating land use planning and transportation planning. However, to date, no mechanisms have been identified to coordinate land use and transportation.
	Guidance on Title VI and Environmental Justice	This discussion paper was prepared to provide an overview of Title VI and Executive Order 12898 on Environmental Justice as they relate to the environmental planning process. It provides information on procedures to ensure that Title VI and EO 12898 factors are adequately considered in the planning process through utilization of public involvement and a systematic interdisciplinary approach to the identification and evaluation of alternatives, as well as by continuing to identify, avoid, minimize and mitigate adverse impacts.
	Growing Smarter Act of 1998 and Growing Smarter Plus Act of 2000	Growing Smarter and Growing Smarter Plus are closely intertwined, as the Plus legislation included amendments to the original Act. Governor Jane Hull signed into law both of these acts, which require cities and counties to address issues associated with urban growth and development. The general plan required by these acts must include the elements of land use and circulation and may include (depending on the city size) the elements of open space; growth area; environmental planning; cost of development; water resources; conservation; recreation; public buildings; public services and facilities; housing; conservation, rehabilitation, and redevelopment; safety; and bicycling. ADOT helps fund the development of and reviews the transportation component of the cities' and counties' General Plans.
Arkansas	Arkansas Code 21-1-102	The transportation policy of the state of Arkansas includes enhancing "the social and economic well-being of the citizenry of the state."
California	Senate Bill 45, Chapter 622, Statutes 1997	This bill requires the Department of Transportation to develop guidelines including objective criteria for measuring system performance and cost-effectiveness of candidate projects for placement in the TIP.
	1998 California Transportation Plan Transportation System Performance Measures Report	The Transportation System Performance Measures Report identifies performance measures to aid in the decision making process, including environmental quality, equity, and economic well-being.

California, cont'd	California Environmental Quality Act (CEQA) (Public Resources Code 21000 et. seq.)	The Regional Transportation Plan (RTP) and any subsequent revisions, amendments or updates to the plan must be in compliance with CEQA (Public Resources Code 21002.1). A Program or Master Environmental Impact Report (EIR) is typically prepared for the RTP. An EIR must (Public Resources Code 21080(d)) be prepared if the proposed action will have a significant effect on the environment. In the EIR, consideration of alternatives that would avoid or reduce significant environmental effects is required. A Negative Declaration or Mitigated Negative Declaration may be prepared if no significant environmental impacts are identified, or if all identified potentially significant impacts will be mitigated below the level of significance. The CEQA document must address specific issues, the number and scope of which are determined by the potential environmental impacts. Congestion Management Plans are also subject to CEQA.
	Code of Regulations, Title 14, Division 6, Chapter 3 - California Environmental Quality Act Guidelines	These guidelines provide comprehensive CEQA guidance in the areas of planning, programming, and project development.
	California Clean Air Act	The California Clean Air Act (Health and Safety Code 40717) requires air quality plans to include reasonable transportation control measures. Performance standards for serious areas and additional standards for severe areas are specified.
Colorado	43-1-1103 C.R.S.	Requires a 20-year transportation plan for each transportation planning region that includes the metropolitan area of a metropolitan planning organization. This plan should include "expected environmental, social, and economic impacts of the recommendations contained in the transportation plan, including an objective evaluation of the full range of reasonable transportation alternatives, including traffic system management options, travel demand management strategies and other transportation modes, as well as improvements to the existing facilities and new facilities, in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." [43-1-1103(1)(d) C.R.S.]
	43-1-106 C.R.S.	A transportation commission is created in Colorado Revised Statutes 43-1-106. One duty of the commission is "to assure that the preservation and enhancement of Colorado's environment, safety, mobility, and economics be considered in the planning, selection, construction, and operation of all transportation projects in Colorado." [43-1-106(8)(b) C.R.S.]
	Colorado Transportation Commission Environmental Policy Statement	The Environmental Policy states that "CDOT will promote a transportation system that is environmentally responsible and encourages preservation of the natural and enhancement of the created environment for current and future generations." Also states that social, economic, and environmental concerns will be incorporated into the planning of the state's existing and future transportation system.

Connecticut	Connecticut General Statutes 13b-15 (Master Transportation Plan)	States that "the commissioner shall develop and revise biennially a comprehensive, long-range, master transportation plan designed to fulfill the present and future needs of the state and to assure the development and maintenance of an adequate, safe and efficient transportation system." This plan is intended to provide the Administration, General Assembly, local elected officials, and members of the general public with an understanding of the projects and programs that the Department will be pursuing over the next 10 years. In this plan, the commissioner of ConnDOT should "consider, among other things, federal air quality standards, conservation and cost of energy supplies…as well as long-range land use, environmental and energy impact and economic development patterns."
	Connecticut Environmental Policy Act (Connecticut General Statutes Sec. 22a-2a)	Considered during project design and implementation.
	Inland Wetlands and Watercourses (Connecticut General Statutes Sec. 22a-36)	Considered during project design and implementation.
	Tidal Wetlands (Connecticut General Statutes Sec. 22a-28)	Considered during project design and implementation.
	Structures and Dredging (Connecticut General Statutes Sec. 22a-361)	Considered during project design and implementation.
	Flood Management by State Agencies (Connecticut General Statutes Sec. 25-68b)	Considered during project design and implementation.
Delaware	17 Delaware Code Section 8404	It is the duty of the Secretary of Transportation "to prepare a statewide master transportation plan that is consistent with the state's social, economic and environmental needs and goals."
	Livable Delaware Initiative, Executive Order No. 14	This Initiative was passed on March 28, 2001 by Governor Ruth Ann Minner. It introduced the Livable Delaware initiative, stated eleven goals, and required each department to complete an implementation plan to address these goals. Transportation-related land use goals as identified by DelDOT are: 1. Direct investment and future development to existing communities, urban concentrations, and growth areas. 2. Protect important farmlands and critical natural resource areas. 3. Streamline regulatory processes and provide flexible incentives and disincentives to encourage development in desired areas. 4. Encourage redevelopment and improve the livability of existing communities and urban areas, and guide new employment into underutilized commercial and industrial sites. 5. Promote mobility for people and goods through a balanced system of transportation options. 6. Coordinate public policy planning and decisions among state, counties and municipalities.

Florida	Environmental Policy (Topic Number 000-625-001-g)	The Florida DOT adopted an environmental policy in February 2002 to “help preserve and enhance Florida’s natural, physical, cultural and social environment as they develop implement, and maintain transportation facilities and services”.
	Title XXVI, Section 339.175(5)(b)(4) of the Florida Statutes	In cooperation with the DOT, each MPO should develop a long-range transportation plan and a transportation improvement program that considers projects and strategies that will “protect and enhance the environment, promote energy conservation, and improve quality of life”.
	Title XXVI, Section 339.155(2)(d) of the Florida Statutes	Provides that the Department of Transportation will carry out a transportation planning process that will "protect and enhance the environment, promote energy conservation and improve quality of life."
	FDOT's Mission Statement, Title XXVI, Section 334.046(2) of the Florida Statutes	The department will "provide a safe statewide transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities"
	Title XXVIII, Chapter 380 of the Florida Statutes - Land and Water Management	This chapter recognizes the necessity to adequately to plan for and guide growth and development within this state in order to "protect the natural resources and environment of this state, ensure a water management system that will reverse the deterioration of water quality and provide optimum utilization of our limited water resources, facilitate orderly and well-planned development, and protect the health, welfare, safety, and quality of life of the residents." Activities related to Developments of Regional Impacts (DRIs) are also discussed.
	Title XXVIII, Section 380.27 of the Florida Statutes	This section of the Florida Statutes discusses the coastal infrastructure policy and applies to the construction of bridges to barrier islands.
	Title XI, Chapter 163, Part II of the Florida Statutes	In essence, this section of the Florida Statutes acts as a Growth Management Statute and consists of the Growth Policy Act, the Local Government Comprehensive Planning and Land Development Regulation Act, and the Florida Local Government Development Agreement Act. The law primarily relates to local comprehensive planning, but is relevant since FDOT projects must be consistent with local plans. Protecting and enhancing various aspects of the environment through proper planning are discussed.
	Title XIII, Chapter 187 of the Florida Statutes	Chapter 187 of the Florida Statutes is the State Comprehensive Plan. The plan sets forth broad policy guidance for all agencies and covers environmental goals and policies.

Georgia	Title 32 (32-2-3) Georgia Code	Title 32 of the Georgia Code requires the Department of Transportation to develop a comprehensive, statewide 20-year transportation plan that takes into account "the total environment of the community and region including land use, state and regional development goals and decisions, population, travel patterns, traffic control features, ecology, pollution effects, esthetics, safety, and social and community values."
	Georgia Environmental Policy Act (GEPA) - Georgia Code 12-16	GEPA requires that an environmental affects report be prepared for all governmental actions which may significantly adversely affect the quality of the environment. This report is to include the environmental impact of the proposed action, alternatives, and mitigation measures. The long-range transportation plan is not subject to this act, it is only applicable to project level planning.
Hawaii	HRS 279a-2, Statewide Transportation Plan	Requires HDOT to prepare a statewide transportation plan that is "directed toward the ultimate development of a balanced, multi-modal statewide transportation system that serves clearly identified social, economic and environmental objectives." The statewide transportation plan is to include projected transportation needs for a six-year period and a schedule of priorities for the construction, modification and maintenance of various segments of the statewide plan that may require state financial assistance for a twenty-year period. Both the six-year and twenty-year estimates are to be updated annually.
	Hawaii State Planning Act, HRS 226;	The Hawaii State Planning Act sets for objectives and policies for transportation planning. One of these objectives is planning a "statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the state." Some policies include: --Encouraging the development of transportation systems and programs which would assist statewide economic growth and diversification --Encouraging the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawaii's natural environment --Encouraging the safe and convenient use of low-cost, energy efficient, non-polluting means of transportation --Coordinating intergovernmental land use and transportation planning activities --Encouraging diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency The Hawaii State Planning Act also sets goals and objectives for the economy, physical environment, other facilities systems, and socio-cultural advancement.

Hawaii, cont'd	HRS 344, Environmental Policy	This section establishes the state policy on the environment and provides guidelines to be considered by agencies to conserve natural resources and enhance the quality of life. Section 344-4 (6) states that with regards to transportation, all agencies should "encourage transportation systems in harmony with the lifestyle of the people and environment of the State; adopt guidelines to alleviate environmental degradation caused by motor vehicles; and, encourage public and private vehicles and transportation systems to conserve energy, reduce pollution emission, including noise, and provide safe and convenient accommodations for their users."
	HRS 343, Environmental Impact Statements	This section establishes a system of environmental review and is administered by the Office of Environmental Quality Control (OEQC) of the Hawaii Department of Health. Environmental Assessments are not required for feasibility or planning studies for possible future programs or projects which the agency has not yet approved, adopted or funded.
Idaho	Local Land Use Planning Act of 1975 (Idaho Code 67-65)	67-6508: Discusses Transportation Aspect involved in comprehensive planning, also discusses other elements of transportation planning, such as economic development, land use, natural resources, hazardous areas and community design.
Kentucky	None	There are no state laws that require environmental assessment in the planning process. The environmental work completed in the planning process is all self-directed by the Cabinet. In the Statewide Transportation Plan, they have tried to weave in on a large scale an environmental ethic and environmental priorities. They are also beginning to look at environmental footprints in programming and early cost estimating before projects advance into the Cabinet's Six-Year Highway Plan.
Louisiana	Environmental Policy Statement	This policy, adopted May 12, 2000, states that a goal of the Department of Transportation and Development (DOTD) is "to provide an environmentally sound transportation network and protect, preserve, and enhance Louisiana's cultural and natural resources." It also states that it is the policy of the DOTD "to evaluate environmental consequences, both to the natural and to the human environment (including impacts to the community), and promote compatible solutions in serving the transportation needs of Louisiana."
	Louisiana DOTD Policy Directive on Project Commitments, Permits, and Agreements	This policy directive applies at the project level. Its purpose is "to provide a procedure to ensure that all agreements and permits are identified as needed, and commitments for mitigation and enhancement measures adopted in the project planning and environmental phases are properly coordinated and handled in the project design, rights-of-way acquisition, and construction phases."

Maine	MDOT's Environmental Policy Statement	This statement, adopted November 1998, states that a policy of the Maine Department of Transportation is to "continuously evaluate actions for their impacts upon environmental resources" and to "conduct activities so as to avoid and minimize those impacts". One of the stated methods of accomplishing the policy is to "develop and utilize an Integrated Transportation Decision-making process (ITD) regarding transportation projects that incorporate environmental considerations from the earliest planning state through construction and maintenance."
	Maine's Sensible Transportation Policy Act (23 M.R.S.A. E16773)	Maine's Sensible Transportation Policy Act requires that transportation planning decisions "minimize the harmful effects of transportation on public health and on air and water quality, land use and other natural resources." This act also requires an alternatives analysis (23 M.R.S.A. §73(3)(B)).
	Maine's Site Location of Development Law (38 MRSA 481)	The purpose of this subchapter is to provide a practical means by which the state can "control the location of those developments substantially affecting local environment in order to insure that such developments will be located in a manner which will have a minimal adverse impact on the natural environment within the development sites and of their surroundings and protect the health, safety and general welfare of the people." Standards for development are provided in accordance with the aforementioned environmental goal.
	Maine Dept. of Environmental Protection's Chapter 305, Natural Resources Protection Act (38 MRSA 480-A) - Permit by Rule Standards	The findings of this subchapter include that the "State's rivers and streams, great ponds, fragile mountain areas, freshwater wetlands, significant wildlife habitat, coastal wetlands and coastal sand dunes systems are resources of state significance." Standards and permit processes are provided regarding activities that affect soils and waters.
Maryland	Maryland Transportation Performance Act (May 2000)	The Maryland Transportation Performance Act requires MDOT to apply performance measures to the Maryland Transportation Plan and the State's Consolidated Transportation Program (CTP) or capital improvement program. In response, MDOT, assisted by an appointed advisory committee, developed a set of measurable, meaningful and manageable indicators to assist the Department. Beginning in 2002, an Annual Attainment Report of Transportation System Performance will accompany the Maryland Transportation Plan and the CTP. Legislation requirements can be found in §2-103.1 of the Transportation Article of the Maryland Code.
	Maryland Smart Growth and Neighborhood Conservation Act and Executive Order	Issued in 1997 by Governor Glendening, this initiative directs growth to areas where it is most environmentally suitable while protecting some of the State's most ecologically and environmentally valuable landscapes. It calls for transportation investments that satisfy current and projected travel demands while supporting smarter growth patterns.

Maryland, cont'd	Maryland State Highway Administration's (SHAs) Environmental Responsibility	The Environmental Responsibility states that the primary goal of SHA is maintaining excellence in the natural and human environment that it serves. Some key elements of SHA's environmental policy include incorporating and integrating "smart growth, environmental protection and enhancement measures in planning…" as well as protecting and enhancing "all aspects of the natural and human environment whenever possible, using state-of-the-art practices."
	Economic Growth, Resource Protection, and Planning Act of 1992	This act is a general statewide policy to guide suitable development and protect sensitive areas. The Maryland Department of Transportation works with local planning agencies to obtain Maryland Department of Planning approval that major projects are consistent with this act.
	Maryland Environmental Policy Act	The Maryland Environmental Policy Act is state legislation that requires consideration of environmental factors in decision making. This applies to many of MDOT's state funded projects and usually requires the development of an Environmental Assessment Form.
	Chesapeake Bay Critical Area Protection Law	This law requires coordination with the Chesapeake Bay Critical Area Commission when impervious surface is proposed within 1000 feet of tidal influence.
	Non-tidal Wetlands Protection Act	This act preserves wetlands and prescribes permitting requirements. MDOT coordinates regularly with the Maryland Department of Environment to ensure compliance.
	Endangered Species and Non-Game Conservation Act	This act provides protection for all federally listed species and those listed in Maryland. MDOT coordinates with the Maryland Department of Natural Resources and the US Fish and Wildlife Service on any projects where significant impact is possible.
	Maryland Reforestation Law	When highway construction using State funds causes the cutting or clearing of forests lands, this law requires that these trees be replaced.
	Total Max. Daily Loads and Nat'l Pollutant Discharge Elimination Regs.	These regulations require MDOT to be cognizant of environmental protection needs in all stages of project development.
	Upper Paint Branch Special Protection Area Regulation	This local regulation controls land use and water quality management.
	Maryland Stormwater Regulations	These regulations require 100% mitigation for new pavement 20% mitigation for redeveloped pavement.
	Stormwater Design Guidelines	These guidelines provide information on how to size, design, select, and locate best practices at a new development site to comply with the State's storm water performance standards.

Massachusetts	Massachusetts Environmental Policy Act (MEPA)	MEPA requires state agencies to study the environmental consequences of their actions and to take all feasible actions to avoid, minimize, and mitigate damage to the environment. MEPA further requires state agencies to "use all practicable means and measures to minimize damage to the environment," by studying alternatives to the proposed project, and developing enforceable mitigation commitments, which will become permit conditions for the project if and when it is permitted. This regulation ties together transportation, land use, and environmental planning (301 CMR 11.03).
	Executive Order No. 385 - Planning for Growth	This executive order was issued by Governor William Weld in April of 1996. It recognizes that "conflict between environmental quality and economic activity ultimately puts at risk environmental resources as well as economic opportunity" and states that "such conflict can be avoided to a great extent through proactive and coordinated planning oriented towards both resource protection and sustainable economic activity, known as growth management." All agencies are directed to "evaluate the effect of their current regulations, policies, plans and practices on their and others' ability to facilitate sustainable economic development and to preserve environmental quality and resources, and adopt changes to the extent necessary to effectively contribute to the attainment of these objectives."
Minnesota	Minnesota State Statutes, Chapter 174.01, Subdivision 2	One of Minnesota's 14 transportation goals is "to ensure that the planning and implementation of all modes of transportation are consistent with the environment and energy goals of the state."
	Minnesota State Statutes, Chapter 174.03, Subdivision 1 (2)	Chapter 174.03, Subdivision 1 (2) of the Minnesota State Statutes states that the commissioner shall evaluate alternative transportation programs proposed for inclusion in the statewide transportation plan in terms of "impact of present and planned land uses, environmental effects, and energy efficiency".
	Sustainable Development Act	This act, passed in 1996, defines sustainable development as any "development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economics depend." It directed the Minnesota Environmental Quality Board (EQB) to adopt principles of sustainable development and requires MnDOT to report to the EQB on how the missions and programs of the DOT reflect and implement the state sustainable development principles, or how they could be changed to do so.
	Minnesota Environmental Policy Act (Minnesota State Statutes Chapter 116D)	The Minnesota Environmental Policy Act requires all state agencies to "utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment."

Montana	MCA 90-4-1010, Transportation Energy Policy	The transportation energy policy is "to promote actions that encourage the conservation of energy through the environmentally responsible management and planning of efficient transportation systems."
	MCA 2-15-2505, Department of Transportation	It is the purpose of the Department of Transportation to "provide energy-efficient and ecologically compatible transportation services with optimum efficiency, effectiveness, and economy."
	MCA Title 75, Montana Environmental Policy Act (MEPA)	Recognizes the importance of restoring and maintaining environmental quality and sets forth a policy to preserve and enhance the environment. The Montana DOT must follow all policies set forth in this Act.
Nebraska	Nebraska Statute 39-1365.01	The Department of Roads is responsible for developing specific and long-range state highway system plans. In establishing planning priorities, the Department of Roads should consider a variety of factors, including: "economic development needs, current and projected demographic trends, and maintenance and enhancement of the quality of life for all Nebraska citizens."
Nevada	NRS 408.233 (1)(a)	A primary responsibility of the planning division in the Department of Transportation is to "develop and coordinate balanced transportation policies and planning which are consistent with the social, economic and environmental goals of the state."
New Hampshire	NH Revised Statutes, Section 21-L:2	The department of transportation is responsible for planning a state transportation network that "supports state growth and economic development and promotes the general welfare of the citizens of the state."
	NH Revised Statutes, Section 228:99 – Statewide TIP	This law requires Statewide public hearings to be held in order to solicit Public input on the program (STIP). Some of the input the public provides may be in relation to environmental considerations/planning for the Transportation projects.
	NH Revised Statutes, Section 227-C:9 - Directive for Cooperation in the Protection of Historic Resources	This statute requires all state agencies to cooperate with the division of Historic Preservation in the location, identification, evaluation and management of historic resources
	House Bill (HB) 712 - Relative to coordinating state and local planning efforts	Section 229:4 discusses the development of the State Comprehensive Plan and sets forth a number of goals and policies that address the consideration of environmental factors in planning. The plan is to include a transportation section, as well as "a section which identifies state policies and actions necessary to protect cultural and historic resources of statewide significance and assist in their rehabilitation or preservation, and generally assure their availability for future generations of state citizens" and "a natural resources section which identifies trends in land protection, open space, farm land preservation and protection, and proposes policies and actions necessary at the state level to protect those resources which are perceived to be of statewide significance."

New Jersey	New Jersey State Planning Act of 1986, N.J.S.A. 52:18A-196 et seq	The New Jersey State Planning Act requires sound and integrated statewide planning for the state to "...conserve natural resources, revitalize urban centers, protect the quality of its environment, and provide needed housing and adequate public services at a reasonable cost while promoting beneficial economic growth…."
New Mexico	NM Admin. Code, Title 18, Trans. and Highways, Chapt.1, Trans. General Provisions, Part 4,	This rule establishes procedures for Transportation Development Districts (TDDs) for project funding and for the State Transportation Authority (STA) to evaluate and prioritize such funding requests for planning statewide, regional and local transportation systems. The rule is limited in application to only planning/study proposals. A project ranking system is set forth that includes environmental impacts and alternatives analysis as part of the criteria for ranking.
	NM Admin Code, Title 2, Public Finance, Chapter 40, Part 30, Infra Bank	This rule specifies the procedures and conditions for eligible public entity may apply for and obtain financial assistance from the bank. Per NMAC 2.40.30.13 D, prior to granting preliminary approval of an eligible project for financial assistance, the commission will consider "potential social, economic, and environmental impacts."
	NM Admin Code, Title 20, Chap 2, Part 99	This rule implements the Clean Air Act for New Mexico as it applies to the conformity of transportation plans, programs, and projects to the State Implementation Plan.
New York	New York State Consolidated Laws Article 2, Section 14a.	In order to help preserve agricultural lands, public park and recreational lands, wildlife and waterfowl refuges and historical sites, the commissioner of the department of transportation planning is required to "cooperate and consult with the commissioners of agriculture and markets, parks and recreation, environmental conservation and health in developing transportation plans and programs so that such programs include measures to maintain or enhance the desirable natural characteristics of the land traversed." The cooperation and consultation is to be effected and implemented by memoranda of understanding between the commissioner of transportation and each of the aforementioned commissioners.
	New York State Department of Transportation Environmental Policy	Environmental Policy recognizes an obligation to preserve, protect, and enhance the environment and to proactively protect, conserve, restore, and enhance important natural and man-made resources in the planning of facilities. The document also states that it is the policy of the Department of Transportation to seek opportunities to contribute to the advancement of State and federal environmental policies, programs and objectives through close coordination and communication with State and federal resource agencies.
	NYS Environmental Quality Review Act (SEQRA) - Statutory Authority: Environmental Conservation Law Sections 3-0301(1)(b), 3-0301(2)(m) and 8-0113	In New York State, most projects or activities proposed by a state agency or unit of local government require an environmental impact assessment as stipulates by the NYS Environmental Quality Review Act (SEQRA). SEQRA requires the sponsoring or approving governmental body to identify and mitigate significant environmental impacts of the activity it is proposing or permitting. To standardize environmental assessments, Environmental Assessment Forms (EAFs) and special guidance documents are utilized. After completing an EAF, the lead agency determines the significance of an action's environmental impacts, and then decides whether to require (or prepare) an Environmental Impact Statement and whether to hold a public hearing on the proposed action.

Oregon	Land Conservation and Development Department (OAR 660)	Oregon has 19 state planning goals of which transportation is one element. These planning goals include guidance to "protect and enhance the environment, promote energy conservation, and improve quality of life." The Transportation Planning Rule requires the planning of transportation systems that reduce vehicle miles traveled to meet Oregon's land use goals and to provide economic benefits.
	Oregon Administrative Rules, Chapter 660: Land Conservation and Development Department, Division 12: Transportation Planning	This rule requires alternatives analysis for elements in the Transportation System Plan. Standards used to evaluate alternatives include minimizing "adverse economic, social, environmental and energy consequences" as well as supporting "urban and rural development by providing types and levels of transportation facilities and services appropriate to serve the land uses identified in the acknowledged comprehensive plan."
	ODOT Environmental Guidance	This operational notice gives guidance on environmental stewardship within ODOT through a guidance statement, best management practices, a clear definition of enhancement and a process for enhancement related decisions, an Environmental Program statement, and clear roles, responsibilities and authorities throughout the organization. The document states that "the valuing of Oregon's environment is a responsibility of every ODOT employee and it is reflected in our decisions and actions."
	Oregon Revised Statutes, ORS 184.614	ORS 184.614 states that "as its primary duty, the Oregon Transportation Commission shall develop and maintain a state transportation policy and a comprehensive, long-range plan for a safe, multimodal transportation system for the state which encompasses economic efficiency, orderly economic development and environmental quality"
	Executive Order No. EO-00-23, Use of State Resources to Encourage the Development of Quality Communities	Executive Order EO-00-23 recognizes the need to build and maintain quality communities and sets forth several quality development objectives, including encouraging "mixed use, energy-efficient development designed to encourage walking, biking and transit use" and facilitating "development that is compatible with community and regional environmental concerns and available natural resources (e.g., available water, air quality, etc.)."
	Executive Order No. EO-00-07, Promoting Sustainability in State Government Operations	EO-00-07 defines sustainability as "using, developing and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. Sustainability requires simultaneously meeting environmental, economic and community needs." This EO sets forth goals and guidelines to promote sustainability.
	Oregon Administrative Rules, Chapter 731: DOT Division 15: Coordination Rules (OAR 731-015-0005 through OAR 731-015-0135)	This rule is known as the State Agency Coordination Agreement (SAC). While its main purpose is to get coordination between agencies to happen in a predictable manner, it refers to the timing of environmental and planning activities. It also states that before a final plan is adopted, it must be documented that the plan in compliance with all applicable statewide planning goals.

Oregon, cont'd	Transportation System Planning (TSP) Guidelines 2001	These guidelines outline the expectations of the state planning goal regarding transportation. Included in this document are expectations regarding the type of environmental work that is needed during the planning process. One key addition to these guidelines is the emphasis placed on defining purpose and need in the development of the plan. A Purpose and Need Statement is a fundamental requirement when developing a plan that will require future NEPA documentation.
	NEPA-Refinement Planning Process	ODOT has adopted a policy of doing NEPA tiered documents called Location EIS for large transportation proposals still in the planning process. Test criteria were created to determine the conditions under which ODOT would be willing to commit serious environmental resources during the planning stage. This process is still in the experimental stages at ODOT.
Pennsylvania	Executive Order 1999-1	In January 1999, Governor Tom Ridge issued this executive order requiring all commonwealth agencies to identify laws, regulations, practices, and policies, including the disbursement of public funding that will advance the Commonwealth's land use objectives.
	Acts 67 and 68	These acts, signed into law in 2000, amended the municipal planning code to allow multi-municipality planning for the first time. All counties are required to have a comprehensive land use plan under the new regulations. State agencies are allowed to consider municipality and county plans and zoning when they make decisions on permitting and funding.
Rhode Island	Rhode Island Comprehensive Planning and Land Use Act of 1988 (Rhode Island General Laws, 45-22.2)	This act requires cities and towns to develop a comprehensive plan that includes the elements of land use; housing; economic development; natural and cultural resources; services and facilities; open space and recreation; and circulation. The goals of this act include promoting a more prosperous economic climate, promoting the protection of natural, historic, and cultural resources; promoting the preservation of open space and recreational resources; promoting a balance of housing choices; encouraging the involvement of citizens in the development of the plans; and encouraging the use of innovative development regulations and techniques that promote the development of land suitable for development while protecting natural, cultural, historical, and recreational resources, and achieving a balanced pattern of land uses.
	Rhode Island General Laws 42-11-10: Statewide Planning Program	Section 42-11-10 of the General Laws of Rhode Island directs the Statewide Planning Program to prepare, adopt, and amend strategic plans for the development of the state's human, economic and physical resources. Section 42-11-10(b) and (d) establish a state planning council to provide policy advice and guidance to state planning activities. Under this law, a State Guide Plan must be prepared, consisting of elements that address land use; physical development and environmental concerns; economic development; energy supply, access, use, and conservation; and human services. The State Guide Plan contains the Ground Transportation Plan, which is Rhode Island's long range transportation plan. The DOT must act within the guidance set forth by all elements of the Guide Plan.

Rhode Island cont'd	Rhode Island State Planning Council Rule IX: Trans Planning and Public Involvement Procedures	This rule discusses the steps involved in the planning process, what is to be included in plans, the requirement for consistency with the State Guide Plan and the public participation process that must be undertaken.
	Element 611 of the State Guide Plan: Ground Transportation Plan	This element identifies goals and objectives for the Ground Transportation Plan. Two of the goals include: "Insure that the transportation system embraces the principles of environmental stewardship by meeting or exceeding environmental standards, and providing transportation facilities which enhance the communities they serve" and "Insure that the transportation system equitably serves all Rhode Islanders regardless of race, ethnic origin, income, age, mobility impairment, or geographic location."
South Dakota	none	The South Dakota Department of Transportation is in the process of developing policies in the area of access management and corridor preservation. State laws and regulation regarding other environmental factors in transportation planning would just be a redundancy of federal laws and regulations.
Tennessee	Tennessee Department of Transportation, Environmental Policy Statement	This policy statement recognizes the impact of transportation facilities on the natural, physical and social environment and places emphasis on preserving and enhancing "the existing landscape, environment and associated wildlife through balanced engineering, environmental and economic principles."
Texas	TxDOT Environmental Policy (Texas Administrative Code, Title 43, Part 1, Chapter 2)	TxDOT's Environmental Policy contains the memoranda of understanding adopted by TxDOT to implement Texas Civil Statutes, Article 6673g, which requires TxDOT to adopt a MOU with each state agency that has responsibilities for the protection of the natural environment or for the preservation of historical or archeological resources, and requires the department and each of the agencies to adopt the memoranda and all revisions by rule. This chapter also contains environmental review and public involvement procedures for TxDOT.
	TxDOT Environmental Policy Statement Subchapter A, Rule §2.2)	This policy states that the commission and the department of transportation "will protect, preserve and, when practicable, enhance the environment……In implementing this policy, the department recognizes the need for effective communication and encourages coordination with the public, environmental or transportation interest groups, environmental agencies, resource agencies, businesses, communities, and similar entities in the transportation policy setting, planning, and development processes."
	TxDOT Environmental Policy Directions and Guidelines (Subchapter A, Rule §2.4)	In systems planning, TxDOT should encourage "the input of environmental/resource agencies, groups, and the public throughout the systems planning stage to ensure full consideration of environmental issues in the development of transportation plans and improvement programs and to allow for environmental enhancement, when practicable." The guidelines also suggest that TxDOT encourage MPOs and local governments to promote the integration of land use, transportation, and environmental planning as well as take a leadership role in the identification and consideration of environmental concerns during the development of regional transportation plans.

Texas, cont'd	Texas Administrative Code, Title 43, Part 1, Chapter 13, Subchapter A, Rule §15.8 -- Statewide TIP	The STIP will only be approved by the commission if it meets the requirements of facilitating "economic and social prosperity through the efficient movement of people and goods" and protecting, when feasible, and enhancing, where practicable, the environment in transportation activities.
	Texas Administrative Code, Subchapter A, Rule §15.3 -- Organization, Structure, and Responsibilities of Metropolitan Planning Organizations	This rule states that "the MPO shall not approve any metropolitan transportation plan or transportation improvement program which does not conform with the SIP (State Implementation Plan), as determined in accordance with EPA conformity regulations." In non-attainment areas, the MPO is to coordinate the development of the transportation plan with the SIP development process, including the development of any transportation control measures (TCMs).
	TAC Title 31, Part 16, Chapters 501, 503, 505, 506	Coastal Zone Management (project development)
	Title 30, Part 1, Chapter 213	Edwards Aquifer (project development)
	Title 13, Part 2, Chapter 26.15	Texas Historical Commission (project development)
Vermont	Title 19, Chapter 1, Section 10i V.S.A	Long Range Transportation Systems Plan should be developed pursuant to the planning goals and processes set forth in Act 200 of the Acts of 1988.
	Title 10 VSA Chapter 37 Section 905 (7) "The Vermont Wetland Rules"	The Vermont Wetland Rules protect wetlands which are determined to be "so significant that they merit protection". They establish criteria for evaluating wetland significance as well as establish allowed wetland uses and provide for conditional wetland uses. Conditional uses require a Determination by the Secretary of the Agency of Natural Resources (ANR). A Conditional Use Determination (CUD) will only be issued upon conclusion that the proposed activity will have no undue adverse effect on protected functions of the wetland or that the impacts are sufficiently mitigated.
	Title 10 VSA Chapter 41 "Regulation of Stream Flow"	Chapter 41 of the VSA protects all waters of the State and establishes the ANR as Certifying Agency for Section 401 of the Federal Clean Water Act. Consultation with the ANR prior to altering or modifying the course, current or cross-section of waters of the State is required. Consultation is accomplished through the ANR Stream Alteration Permit (SAP) process.
	Title 10 VSA Chapter 151 "The Land Use and Development Law, Act 250"	Act 250 Was established "to protect and conserve the lands and the environment of the state and to insure that these lands and environment are devoted to uses which are not detrimental to the public welfare and interests". It established "a state environmental board and district environmental commissions ... to regulate the use of lands" and Conditions and Criteria for the issuance of permits by the district commissions. Act 250 is applicable to "Construction by state or local government if the project involves more than 10 acres" and also applies to "substantial changes" in pre-existing developments.

Vermont cont'd	Title 19 VSA Chapter 25 "The Scenic Road Law of 1977"	The Scenic Road Law protects roads designated as scenic under the Vermont Scenic Roads program. It requires reconstruction or improvements to conform to standards established by the Transportation Board.
	Title 22 VSA Chapter 14 "The Historic Preservation Act of 1975"	The Historic Preservation Act established the VT Advisory Council on Historic Preservation and the Division for Historic Preservation, headed by the State Historic Preservation Officer (SHPO), to identify and protect historic and archaeological resources. It requires all State Agencies to consult the Advisory Council before altering any property that is potentially of historical, architectural, archaeological or cultural significance. In addition, it requires all State agencies and municipalities to cooperate with the State Archaeologist in the preservation, protection, excavation, and evaluation of specimens and sites.
	Title 24 VSA Chapter 117 "Municipal and Regional Planning and Development, Act 200"	This Act established a specific set of goals to encourage appropriate development of all lands in the state, and provided means for prevention of land development problems. One of these goals includes providing "for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers." A Council of Regional Commissions was created to review state agency and regional plans. State agencies are prohibited from preparing, adopting, or implementing plans, which are inconsistent with said goals.
	Title 29 VSA Chapter 11 Sections 403 and 404 "Management of Lakes & Ponds"	Sections 403 and 404 of Title 29 VSA Chapter 11 protect public waters and lands below mean water level. Obtaining a Lakes & Ponds Permit from the ANR Water Resources Board is required for construction involving temporary or permanent encroachment (such as concrete, sheet piling, earth or rock fill, or similar construction). The Water Resources Board will require proof that the encroachment will not adversely affect the public good.
	The Endangered Species Act of 1981	The Endangered Species Act protects threatened or endangered plants and animals and requires possession of a Threatened & Endangered Species (T&E) Permit before one can take, possess, transport or transplant threatened or endangered species. T&E Permits are acquired through coordination with the ANR.
	Executive Order No. 52-80, 3 VSA App. Ch. 3	This Executive Order protects farmland and requires coordination with the Department of Agriculture to avoid or minimize impacts on farmlands.
	The Memorandum of Understanding between the Agency of Transportation (AOT) & Agency of Natural Resources (ANR) regarding Bridge Rehabilitation & Replacement	The Memorandum of Understanding provides for cooperation between the ANR and AOT to provide for the State's dual needs to protect the environment and to provide for safe and efficient transportation. The Memorandum requires site visits during the Conceptual Plan stage for the AOT, ANR, and Town to identify issues involved. It also requires cooperation between agencies to address unresolved issues prior to completion of Preliminary Plans.

Virginia	33.1-23.03 VA Code	Requires a 20-year Statewide Transportation plan that provides "consideration of projects and policies affecting all transportation modes" and promotes "economic development" and "environmental quality".
	Chesapeake Bay Agreement (Chesapeake 2000)	This agreement applies to states of Virginia, Maryland, Pennsylvania, and the District of Columbia. It is a commitment to nurture and sustain a Chesapeake Bay Watershed Partnership through living resource protection and restoration; vital habitat protection and restoration; water quality protection and restoration; sound land use; and stewardship and community engagement. Several specific goals relating to transportation are set forth, one of which being: "By 2002, the signatory jurisdictions will promote coordination of transportation and land use planning to encourage compact, mixed use development patterns, revitalization in existing communities and transportation strategies that minimize adverse effects on the Bay and its tributaries."
Washington	Statewide Multimodal Plan Statute (RCW 47.06.040)	Directs WSDOT "to identify and document potential affected environmental resources including, but not limited to, wetlands, storm water runoff, flooding, air quality, fish passage, and wildlife habitat" during the development of the Washington Transportation Plan (WTP).
	Clean Air Washington Act (CAWA) (RCW 70.94)	CAWA requires transportation plans, programs, and projects to be consistent with the SIP in areas where the federal air quality standards are not met. It gives responsibility for determining conformity to the state, local government, or MPO that is developing the transportation plan, program, or project.
	Washington State Transportation Commission Policy Catalogue	One of eight policy objectives is to "meet environmental responsibilities". This objective includes minimizing and avoiding "air, water and noise pollution; energy usage; use of hazardous materials; flood impacts; and impacts on wetlands and heritage resources from transportation activities". It also includes, when consistent with other priorities and practical, protecting, restoring, and enhancing "fish and wildlife habitats and wetlands impacted by transportation facilities".
	Environmental Permit Streamlining Act (RCW 47.06)	Adopted in May 2001, this act established an interagency Transportation Permit Efficiency and Accountability Committee (TPEAC) that is responsible for creating a sustained focus on achieving transportation and environmental goals of the state and for streamlining the environmental permitting process for transportation projects.
	Transportation Commission and State Transportation Department State Environmental Policy Act Rules (WAC 468-12)	Integrates the policies and procedures of SEPA into the DOT's programs, activities, and actions. With regards to timing (WAC 468-12-055), "The SEPA process shall be completed before the transportation department is irrevocably committed to a particular course of action. At the same time, the SEPA process should not be undertaken until a proposal is sufficiently definite to permit meaningful environmental analysis."
	State Environmental Policy Act (SEPA) (RCW 43-21C)	Directs state and local decision makers to consider the environmental consequences of their actions

Washington cont'd	SEPA Rules (WAC 197-11)	Implementing regulations that establish uniform requirements for agencies to use in evaluating the possible adverse environmental impacts of a proposal. With regards to timing (WAC 197-11-055), the rules state that the SEPA process should be "integrated with agency activities at the earliest possible time to ensure that planning and decisions reflect environmental values".
Wisconsin	Wisconsin Statutes, 66.1001 – Comprehensive Planning	States the 9 elements of a comprehensive plan to include: issues and opportunities; housing; transportation; utilities and community facilities; agriculture, cultural, and natural resources; economic development; intergovernmental cooperation; land-use; and implementation.
	Wisconsin Statutes, 1.13 – Land Use Planning Activities	Encourages each state agency to design its programs, policies, infrastructures and F222investments to reflect a balance between the mission of the agency and local, comprehensive planning goals, including: "(a) Promotion of the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial and industrial structures. (b) Encouragement of neighborhood designs that support a range of transportation choices. (c) Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources. (d) Protection of economically productive areas, including farmland and forests. (e) Encouragement of land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state governmental and utility costs. (f) Preservation of cultural, historic and archaeological sites. (g) Encouragement of coordination and cooperation among nearby units of government. (h) Building of community identity by revitalizing main streets and enforcing design standards. (i) Providing an adequate supply of affordable housing for individuals of all income levels throughout each community. (j) Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial and industrial uses. (k) Promoting the expansion or stabilization of the current economic base and the creation of a range of employment opportunities at the state, regional and local levels. (l) Balancing individual property rights with community interests and goals. (m) Planning and development of land uses that create or preserve varied and unique urban and rural communities. (n) Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit–dependent and disabled citizens."

Wisconsin cont'd	Wisconsin Administrative Code, Trans 400, Environmental Policy Act Procedures for Department Actions	Trans 400 states that the policy of the Department of Transportation is to "strive to protect and enhance the quality of the human environment in carrying out its basic transportation mission and consider pertinent environmental factors consequential to any proposed action" beginning in the planning stage of development.
		It requires the DOT to conduct "Systems-Plan Environmental Evaluations" (SEEs) on all statewide transportation plans. The SEE examines potential environmental impacts at the system level over the entire planning period (usually 20-25 years). To date, SEEs have been completed for the Statewide Multimodal Plan (Translinks 21), the State Highway Plan, and the State Airport Plan. Currently, SEEs are being developed for the State Rail Plan and the update of Translinks 21.

APPENDIX C: RESULTS FROM STATEWIDE, METROPOLITAN, AND ENVIRONMENTAL RESOURCE AGENCIES

Statewide Survey

The statewide survey was sent out to 50 members – one from each U.S. state and the District of Columbia – of the American Society of State Highway and Transportation Officials (AASHTO). A total of 42 responses were received – an 82% response rate.

Legislation/Regulations

The responses indicate that seventy-one percent (71%) of state DOTs are aware of legislation and/or regulations that require the consideration of environmental factors in the development of the statewide transportation plan, while only eighteen percent (18%) indicated that they are unaware of any rules that require the consideration of environmental factors.

Importance of Environmental Factors in Planning

In the update of the most recent statewide transportation plans, fourteen percent (14%) of state DOTs indicated that environmental factors were a very important consideration (see Table C.1). The majority (25%) of respondents indicated that environmental factors were somewhat important. As indicated by Table C.1 and Figure C-1, the state DOTs indicated that, overall, 10 years in the future, environmental factors will have more importance in the update of the statewide transportation plan. Twenty-one percent (21%) of respondents indicated that environmental factors will be very important 10 years from now. Again, the majority of state DOTs indicated that environmental factors will be somewhat important in the update of their statewide transportation plan 10 years in the future.

Overall, air quality was ranked the most important environmental factor for consideration in transportation planning by the respondents to the statewide survey. Air quality was considered the most important factor in the update of the most recent statewide plan, as well as for the development of the statewide plan 10 years in the future (see Figure C-1).

Socioeconomic and land use considerations were identified as the environmental factors that should have been the next most important in the most recent update of the statewide transportation plan. Land use was identified as the next most important environmental factor for the development of the statewide transportation plan 10 years in the future, followed by socioeconomic considerations.

Other environmental factors considered in the transportation planning process identified by the state DOTs were national forests, smart growth, congestion mitigation, and economic development.

Methods/Tools for Considering Environmental Factors in Transportation Planning

State DOTs identified data trend analysis as the most frequently used method or tool for considering environmental factors in statewide planning. Sixty-six percent (66%) of respondents use data trend analysis. The least frequently used tools are ecosystem models (2%). Overall, ninety-one percent (84%) of the respondents indicated that they are aware of at least one method/tool that has been used when environmental factors

have been considered in the statewide planning process. Figure C-2 summarizes the percentages of respondents using various methods and tools for considering environmental factors in the planning process.

Current Status of Environmental Data

The majority (53%) of state DOTs believe that only some of the supporting environmental data currently exists for planning purposes. Table C.2 summarizes the overall status of environmental data for planning purposes according to the state DOTs. Of the environmental factors, the state DOTs indicated that the most data exists for air quality analyses. Historic properties and land use data followed air quality data in availability. Data required to analyze aesthetics was the least available according to the state DOTs. Figure C-3 summarizes the current status of supporting environmental data by factor according to the respondents to the statewide survey.

Data Sources

The statewide survey respondents indicated that the majority of environmental impact data (38%) for use in the transportation planning process comes from outside the state transportation agency. Other sources of data included “historical data from our agency”, “historical data from another agency”, and “new data collection”. A summary of overall data sources can be found in Table C.3.

Environmental justice and hazardous wastes have the highest percentages of data already in existence, with 95.8% and 95.3% of data, respectively, as historical data or data from another group. Most historical data from within the state DOTs is for socioeconomic considerations (37%) followed by air quality (29%) and environmental justice (29%). Wetlands historic data (47%), followed by historic data on environmental justice and hazardous wastes (both 43%) is most often acquired from agency outside the state DOT. The most pressing need for new data is the areas of socioeconomic considerations and water quality. It should be noted that even though the most in-house data exists for socioeconomic considerations and air quality, approximately twenty-eight percent (28%) of socioeconomic data and twenty-six percent (26%) of water quality data must come from new data collection. Sources of data for specific environmental factors can be found in Figure C-4.

Performance Measures

Twenty-five percent (25%) of state DOTs responded that they do not use performance measures to monitor the performance of the transportation system or of their own progress toward achieving program goals. Thirty-four percent (34%) indicated that they do use performance measures, however they do not include environmental factors in the measures. Forty-one percent (41%) of the respondents indicated that they do include environmental factors in their performance measures.

Interaction with Groups During the Planning Process

The respondents were asked to indicate the level of interaction that occurs between their agency and the following individuals/groups on environmental issues during the planning process:

- Federal environmental resource agency
- Federal transportation agency

- Governor's office
- State environmental resource agency
- Other state agencies
- Environmental advocacy groups: National office
- Environmental advocacy groups: State/Local office
- MPOs
- Public interest groups (other than environmental)

Seventy-four percent (74%) of state DOT's indicated that they interact with these individuals/groups often during the planning process. Twenty-five percent (25%) of the state DOTs indicated that they only interact with these groups during times of public concern, seventeen percent (17%) indicated that they interact frequently with these groups, and 10 percent (10%) indicated that they never interact with the previously mentioned groups/individuals on environmental issues during the planning process.

Among the various individuals and groups, state transportation agencies interact most frequently with MPOs. Local and national offices of environmental advocacy groups receive the least interaction with state transportation agencies. Figure C-5 summarizes the levels of interaction with the various individuals and groups.

Obstacles in the Planning Process

The state DOTs were asked to identify the major obstacles they have experienced in incorporating environmental concerns into statewide transportation planning. The major obstacles they were given to choose from included:

- Competing priorities that distract from environmental issues
- No regulations requiring the consideration of environmental factors
- Lack of data for considering environmental factors
- Lack of appropriate analysis tools for considering environmental factors

On average, the respondents identified that 1.6 major obstacles were faced by agencies in incorporating environmental consideration into transportation planning. Of these obstacles, competing priorities seems to be the biggest obstacle to incorporating environmental considerations in the transportation planning process, with sixty-one percent (61%) of the respondents indicating that it was a major obstacle. Fifty-three percent (53%) of the respondents indicated that lack of appropriate analysis tools was a major obstacle, thirty-nine percent (39%) indicated that lack of data was a major obstacle, and seven percent (7%) of respondents indicated that no regulations was a major obstacle in considering environmental factors in transportation planning. These statistics are summarized in Figure C-6.

Other obstacles identified by the statewide survey respondents include:

- The statewide plan is a policy plan – environmental data is limited and difficult to incorporate at the policy level
- Lack of agreement on which environmental factors to include in the plan

Incorporating Environmental Factors Earlier in Project Development

Eighty-four percent (84%) of the respondents to the statewide survey indicated that they have taken action to promote the consideration of environmental factors earlier in the project development process of implementing agencies, while only three percent (3%) indicated that they have not taken action to incorporate environmental factors earlier in project development.

If environmental factors were considered earlier in the project development process, respondents were asked to choose from a list of actions that they may have taken. These actions included:

- Defined purpose and need earlier in the planning process
- Developed software programs to better manage environmental analyses
- Entered into agreements with environmental resource agencies
- Paid for environmental resource agency staff to work with my agency
- Hired new DOT staff targeted at environmental impact assessment
- Implemented changes to the organization of my agency to better handle environmental issues
- Developed new standard operating procedure that require earlier consideration
- Implemented a fatal flaw assessment that identifies environmental problems early on
- Used environmental experts to identify environmentally sensitive areas
- Adopted the approach of developing a EIS/EA as part of earlier studies

Eighty-nine percent (89%) of respondents who do consider environmental factors earlier in the project development process have defined the purpose and need earlier in the planning process. Seventy-two percent (72%) have entered into agreements with environmental resource agencies earlier. Only nineteen percent (19%) of the respondents have developed software programs to better manage environmental analyses. Figure C-7 shows the percentage of respondents (who have taken action to promote the consideration of environmental factors earlier) taking each action.

Benefits of Incorporating Environmental Factors Earlier in Project Development

The respondents were asked to choose the one most important reason for incorporating environmental factors earlier in project development, as well as the other important reasons. The following is the list of reasons provided for incorporating environmental factors earlier:

- Shortens time to project implementation
- Reduces amount of resourced needed for project
- Engages environmental resource agencies earlier
- Reduces level of potential public controversy
- Results in better decisions

- Helps develop a constituency for a project
- Improves our agency image
- Links planning better with project development
- We do not consider early consideration of environmental factors to be important

When asked which one reason they thought was the most important reason for incorporation environmental factors earlier in project development, thirty-nine percent (39%) of the respondents chose "results in better decisions". The other reasons thought to be most important include shortening time to project implementation (25% of respondents), reducing level of public concern (7%), engaging environmental resource agencies earlier (3%) and linking planning better with project development (7% of respondents).

Of reasons thought to be important, the majority of respondents (72%) indicated engaging the environmental resource agencies earlier was an important benefit to be gained from incorporating environmental factors earlier in project development. In addition, reducing public concern (68%), and improving agency image (70%) and linking planning better with project development (76%) were considered important benefits of incorporating environmental factors earlier in project development. Reducing the amount of resources needed for a project and helping develop a constituency for a project were the least important of the benefits, however fifty-nine percent (59%) of the respondents still indicated that they are important reasons for considering environmental factors earlier. Figure C-8 summarizes the percentage of respondents choosing each reason as important.

Examples of Where Considering Environmental Factors Earlier Resulted in Benefits

Forty-eight percent (48%) of the respondents to the statewide survey could identify examples from their agency of where considering environmental factors earlier in project development resulted in benefits.

Metropolitan Survey

The metropolitan survey was sent out to 340 members of the Association of Metropolitan Planning Organizations. A total of 45 responses were received – a 13.2% response rate.

Legislation/Regulations

The responses indicate that sixty-seven percent (67%) of MPOs are aware of legislation and/or regulations that require the consideration of environmental factors in the development of the metropolitan transportation plan, while only twenty-two percent (22%) indicated that they are unaware of any rules that require the consideration of environmental factors.

Importance of Environmental Factors in Metropolitan Transportation Planning

In the update of the most recent metropolitan transportation plans, the majority, twenty-four percent (24%), of MPOs indicated that the importance of environmental factors lied between a very important and a somewhat important consideration (see Table C.4). Eleven percent (11%) indicated that environmental factors were a very important consideration in the development of the most recent metropolitan transportation plan. As indicated by Table C.4 and Figure C-9, the MPOs indicated that,

overall, 10 years in the future, environmental factors will have more importance in the update of the metropolitan transportation plan. Twenty-five (25%) of respondents indicated that environmental factors will be very important 10 years from now. The majority of MPOs indicated that the importance of environmental factors will lie somewhere between somewhat important and very important in the update of their metropolitan transportation plan 10 years in the future.

Overall, land use was ranked the most important environmental factor for consideration in transportation planning by the respondents to the metropolitan survey. Land use was considered the most important factor in the update of the most recent metropolitan plan, as well as for the development of the metropolitan plan 10 years in the future (see Figure C-9). Air quality, socioeconomic considerations, and environmental justice considerations were identified as the environmental factors that should have been the next most important in the most recent update of the metropolitan transportation plan. Air quality and environmental justice considerations were again identified as the most important environmental factors next to land use for the development of the metropolitan transportation plan 10 years in the future.

Other environmental factors considered in the transportation planning process identified by the MPOs were trails, economic development, solid waste impacts, and stream flow hydrology.

Methods/Tools for Considering Environmental Factors in Transportation Planning

The MPOs identified data geographic information systems (GIS) as the most frequently used method or tool for considering environmental factors in metropolitan planning. Seventy-one percent (71%) of respondents use GIS. The least frequently used tools are ecosystem models. Only six percent (6%) of the respondents identified using this tool. Overall, ninety-six percent (96%) of the respondents indicated that they are aware of at least one method/tool that has been used when environmental factors have been considered in the metropolitan planning process. Figure C-10 summarizes the percentages of respondents using various methods and tools for considering environmental factors in the planning process.

Current Status of Environmental Data

The majority (51%) of MPOs believe that only some of the supporting environmental data currently exists for planning purposes. Table C.5 summarizes the overall status of environmental data for planning purposes according to the MPOs. Of the environmental factors, the MPOs indicated that the most data exists for land use analyses. Socioeconomic considerations and air quality followed land use. The least amount of data exists for analyses of aesthetics and biological considerations according to the MPOs. Figure C-11 summarizes the current status of supporting environmental data by factor according to the respondents to the metropolitan survey.

Data Sources

The metropolitan survey respondents indicated that the majority of environmental impact data (41.5%) for use in the transportation planning process comes from another group. Other sources of data included “historical data from our agency”, “historical data from another agency”, and “new data collection”. A summary of overall data sources can be found in Table C.6.

The metropolitan survey respondents indicated that one hundred percent (100%) of the environmental data for climate, water quality, biological, historic properties, and community cohesion considerations is in existence as historical data or data from another group. The most historical data from within the MPOs exists for noise and energy consumption (30%). The most historical data acquired from another agency is community cohesion data (52%), followed by data on climate and environmental justice (50%). The most new data collection is needed for air quality (29% of data) and cultural considerations (23% of data). Sources of data for specific environmental factors can be found in Figure C-12.

Performance Measures

Forty-three percent (43%) of MPOs responded that they do not use performance measures to monitor the performance of the transportation system or of their own progress toward achieving program goals. Twenty-one percent (21%) indicated that they do use performance measures, however they do not include environmental factors in the measures. Thirty-six percent (36%) of the respondents indicated that they do include environmental factors in their performance measures.

Interaction with Groups During the Planning Process

The respondents were asked to indicate the level of interaction that occurs between their agency and the following individuals/groups on environmental issues during the planning process:

- Federal environmental resource agency
- Federal transportation agency
- Governor's office
- State environmental resource agency
- Other state agencies
- Environmental advocacy groups: National office
- Environmental advocacy groups: State/Local office
- MPOs
- Public interest groups (other than environmental)

Twenty-eight percent (28%) of the respondents to the metropolitan survey indicated that they interact with these individuals/groups only during times of public concern. Twenty-seven percent of MPOs indicated that they interact often with the aforementioned groups, twenty-four percent (24%) indicated that they interact frequently with these groups, and fifteen percent (15%) indicated that they never interact with the previously mentioned groups/individuals on environmental issues during the planning process.

Of the various individuals and groups, the federal transportation agency is interacted with most frequently during the planning process. The state, local and national offices of environmental advocacy groups are interacted with least frequently during the planning process. Figure C-13 summarizes the levels of interaction with the various individuals and groups.

Obstacles in the Planning Process

The MPOs were asked to identify the major obstacles they have experienced in incorporating environmental concerns into statewide transportation planning. The major obstacles they were given to choose from included:

- Competing priorities that distract from environmental issues
- No regulations requiring the consideration of environmental factors
- Lack of data for considering environmental factors
- Lack of appropriate analysis tools for considering environmental factors

On average, the respondents identified two major obstacles that were faced by agencies in incorporating environmental consideration into metropolitan transportation planning. Of these obstacles, competing priorities seems to be the biggest obstacle to incorporating environmental considerations in the transportation planning process, with sixty-four percent (6476%) of the respondents indicating that it was a major obstacle. Fifty-eight percent (58%) of the respondents indicated that lack of appropriate analysis tools was a major obstacle, forty-seven percent (47%) indicated that lack of data was a major obstacle, and twenty seven percent (27%) of respondents indicated that no regulations was a major obstacle in considering environmental factors in transportation planning. These statistics are summarized in Figure C-14.

Other obstacles identified by the MPOs include:

- Lack of analysis of transportation's impact on land use
- Lack of staff time and resources
- Determining regional long range implications versus project specific implications
- Determining environmental impacts (positive/negative/no impact) at the planning level is difficult
- Early planning may precede environmental analyses

Incorporating Environmental Factors Earlier in Project Development

Sixty-two percent (62%) of the respondents to the metropolitan survey indicated that they have taken action to promote the consideration of environmental factors earlier in the project development process of implementing agencies, and thirty-one percent (31%) indicated that they have not taken action to incorporate environmental factor earlier in project development.

If environmental factors were considered earlier in the project development process, respondents were asked to choose from a list of actions that they may have taken. These actions included:

- Defined purpose and need earlier in the planning process
- Developed software programs to better manage environmental analyses
- Entered into agreements with environmental resource agencies
- Paid for environmental resource agency staff to work with my agency
- Hired new DOT staff targeted at environmental impact assessment

- Implemented changes to the organization of my agency to better handle environmental issues
- Developed new standard operating procedure that require earlier consideration
- Implemented a fatal flaw assessment that identifies environmental problems early on
- Used environmental experts to identify environmentally sensitive areas
- Adopted the approach of developing a EIS/EA as part of earlier studies

Sixty-eight percent (68%) of respondents who do consider environmental factors earlier in the project development process have defined the purpose and need earlier in the planning process. Forty-three percent (43%) have used environmental experts to identify environmentally sensitive areas. Figure C-15 shows the percentage of respondents (who have taken action to promote the consideration of environmental factors earlier) taking each action.

Benefits of Incorporating Environmental Factors Earlier in Project Development

The respondents were asked to choose the one most important reason for incorporating environmental factors earlier in project development, as well as the other important reasons. The following is the list of reasons provided for incorporating environmental factors earlier:

- Shortens time to project implementation
- Reduces amount of resourced needed for project
- Engages environmental resource agencies earlier
- Reduces level of potential public controversy
- Results in better decisions
- Helps develop a constituency for a project
- Improves our agency image
- Links planning better with project development

When asked which one reason they thought was the most important reason for incorporation environmental factors earlier in project development, thirty-six percent (36%) of the respondents chose “shortens time to project implementation” and “results in better decisions”.

Of reasons thought to be important, the majority of respondents (69%) indicated that incorporating environmental factors earlier in project development results in better decisions. Sixty-seven percent (67%) indicated that incorporating environmental factors earlier in project development links planning better with project development. Improving agency image was the least important of the benefits, however forty-four percent (44%) of the respondents still indicated that improving agency image is an important reason for considering environmental factors earlier. Figure C-16 summarizes the percentage of respondents choosing each reason as important.

Examples of Where Considering Environmental Factors Earlier Resulted in Benefits

Only twenty-two percent (22%) of the respondents to the metropolitan survey could identify examples from their agency of where considering environmental factors earlier in project development resulted in benefits. Fifty-eight percent (58%) of the respondents indicated that they do not have examples of where considering environmental factors earlier in project development resulted in benefits.

Support of Implementing Agencies

Seventy-three percent of the metropolitan survey respondents believe that implementing agencies in their area would be supportive of addressing environmental concerns earlier in the project development process, while only nine percent (9%) of the respondents indicated that they did not think that implementing agencies in their area would be supportive.

ENVIRONMENTAL RESOURCE AGENCIES

The environmental survey was sent out to 293 members of the State and Territorial Air Pollution Program Administrators (STAAPA), the Association of Local Air Pollution Control Officials (ALAPCO), and the Environmental Council of the States (ECOS). A total of 13 responses were received – a 4.4% response rate. Of these respondents, ninety-two percent (92%) indicated that they are aware of environmental factors being considered in the planning process.

Legislation/Regulations

The responses indicate that sixty-nine percent (69%) of environmental organizations are aware of legislation and/or regulations that require the consideration of environmental factors in the development of the statewide or metropolitan transportation plan, while only thirty-one percent (31%) are unaware of any rules that require the consideration of environmental factors.

Importance of Environmental Factors in Planning

In the update of the most recent statewide and metropolitan transportation plans, the majority of environmental organizations indicated that environmental factors should have been a very important consideration, with 35% and 34% of respondents ranking environmental considerations very important for the statewide and metropolitan plans respectively (see Table C.7).

Again, the majority of respondents indicated that environmental considerations should be very important in the update of the statewide and metropolitan transportation plans 10 years from now. Forty percent (40%) of respondents indicated that environmental factors should be very important in the update of the statewide transportation plan 10 years in the future, and increase from the percent of respondents who believed environmental factors should have been very important in the most recent update of the statewide plan. However, only 32% of respondents indicated that environmental factors would be very important in the development of metropolitan plan 10 years from now, a slight decrease from percent of respondents who indicated that environmental factors should have been very important in the most recent update of the transportation plans.

Important Factors in the Development of Transportation Plans

Overall, air quality was ranked the most important environmental factor for consideration in transportation planning by the respondents to the environmental survey. Air quality was considered the most important factor in the update of the most recent statewide plan, as well as for the development of the statewide plan 10 years in the future (see Figure C-17). Similarly, air quality was ranked the most important factor in the update of the most recent metropolitan plan and for the development of the metropolitan plan 10 years in the future (see Figure C-18). Erosion and water quality were identified as the environmental factors that should have been the next most important in the most recent update of the statewide transportation plan. Erosion and aquatic ecology were identified as the most important environmental factor next to air quality for the development of the statewide transportation plan 10 years in the future.

Erosion, water quality, and storm water runoff were identified as the next most important environmental factors to air quality in the most recent update of the metropolitan transportation plan. Erosion and storm water runoff were again identified as the most important factors next to air quality for the update of the metropolitan transportation plan 10 years in the future.

Another environmental factor considered in the transportation planning process identified by the environmental agencies was greenhouse gas emissions.

Methods/Tools for Considering Environmental Factors in Transportation Planning

Environmental organizations identified environmental impact specific models as the most frequently used method or tool for considering environmental factors in statewide/metropolitan planning. Seventy-seven percent (77%) of respondents use environmental impact specific models. The least frequently used tools are ecosystem models. None of the respondents identified using this tool. Overall, 92% of the respondents indicated that they are aware of at least one method/tool that has been used when environmental factors have been considered in the statewide/metropolitan planning process. Figure C-19 summarizes the percentages of respondents using various methods and tools for considering environmental factors in the planning process.

Environmental Impact-Specific Models

The following is a list of environmental impact-specific models that environmental agencies are aware of being used for planning:

- MOBILE 5
- MOBILE 5B
- MOBILE 6
- CAL3QHC
- STAMINA
- Traffic Noise Model
- EMME Traffic Model
- EPA Cumulative Exposure Assessment

- EPA Mobile model
- Urban Air Shed Model
- PART5 air quality model

Current Status of Environmental Data

The majority (57%) of environmental organizations believe that only some of the supporting environmental data currently exists for planning purposes. Table C.8 summarizes the overall status of environmental data for planning purposes. Of the environmental factors, the environmental organizations indicated that the most data exists for air quality analyses. Erosion and water quality followed air quality, however it should be noted that the environmental survey respondents still did not indicate there was a significant amount of data available for these two factors, or for the other factors. The least amount of data exists for analyses of community cohesion according to the environmental agencies. Figure C-20 summarizes the current status of supporting environmental data by factor according to the respondents to the environmental survey.

Environmental Organization Roles

The following is a list of roles that environmental agencies have played in the promotion of the consideration of environmental factors in the statewide and metropolitan transportation planning process:

- We are a local air quality agency and are very active in the MPO process
- We provide the air quality data
- Our agency promotes an 'Environmental Ethic', which emphasizes that 'consideration of environmental factors' is not just a requirement, but an expectation that adds value to transportation decisions and actions.
- A limited amount - we need to be more participative
- We worked with the local planning agency, TMACOG, to stop construction of a new outer belt that would have promoted sprawl.
- Riparian buffers and surface water quality - surveys Air quality - public information and outreach Storm water runoff/CSOs/SSOs and flood recovery - participation in cleanup and public information
- We have provided expertise for air quality analysis.
- Oregon DEQ worked to gain representation on MPO TAC and Policy committees to support environmental considerations in transportation decision-making. DEQ supported adoption of a strong Transportation Planning Rule.
- We comment as an interested local county air pollution control district on transportation planning efforts and analytical efforts.
- The Dept. of Ecology sits on various transportation committees relating to how resource agencies play a role in transportation planning and permitting. We participate in "Reinventing NEPA" through three pilot projects where we become involved at the NEPA planning stage.

- The Office of Air Resources has a consultative role along with the Department of Transportation, in designing the conformity analysis.
- Participation in conformity process, participation in CMAQ project selection process
- Support where possible and promote.
- Review findings/demonstrations. Act as resource partner in environmental protection.
- We regulate air and water quality. Our role is large relative to air quality in metropolitan transportation planning. Water quality role is only in erosion control.

Interaction with Groups During the Planning Process

The respondents were asked to indicate the level of interaction that occurs between their agency and the following individuals/groups on environmental issues during the planning process:

- Federal environmental resource agency
- Federal transportation agency
- Governor's office
- State environmental resource agency
- Other state agencies
- Environmental advocacy groups: National office
- Environmental advocacy groups: State/Local office
- MPOs
- Public interest groups (other than environmental)
- State transportation agency

The majority of environmental agencies (34%) indicated that they interact with these individuals/groups only when an environmental issue becomes a public concern. Thirty percent (30%) of environmental agencies indicated that they interact often during the planning process; ten percent (10%) indicated that they interact frequently, and eighteen percent (18%) indicated that they never interact with the previously mentioned groups/individuals on environmental issues during the planning process.

Of the various individuals and groups, the state environmental resource agency is interacted with most frequently during the planning process. The governor's office and state, local and national offices of environmental advocacy groups are interacted with least frequently during the planning process. Figure C-21 summarizes the levels of interaction with the various individuals and groups.

Examples of Incorporating Environmental Considerations in the Planning Process

The following is a list of examples of how agencies have incorporated environmental considerations into statewide and/or metropolitan transportation planning:

- The regional government (Metro) developed a 50-year plan for controlling growth in the Portland metropolitan area. The purpose of the plan (the "2040 Growth Concept") is to achieve simultaneous benefits in the areas of land use, quality of life, and environmental quality.
- Ecology participated in the Merger Agreement process with various state and federal resource agencies, along with the state Dept. of Transportation. The agencies developed procedures relating to early project planning and permit review and resource agency involvement.
- There is a Memorandum of Understanding among DOT, DEM and the Division of Planning detailing each agency's role in the planning process.
- Efforts to meet minimum requirements only.
- East-West Gateway Coordinating Council (St. Louis, MO) and Mid-America Regional Council (Kansas City, MO) address environmental justice in their Transportation Improvement Plans and their Long Range Transportation Plans.

Obstacles in the Planning Process

The environmental organizations were asked to identify which major obstacles they thought that agencies faced in incorporating environmental considerations into statewide and metropolitan transportation planning. The major obstacles they were given to choose from included:

- Competing priorities that distract from environmental issues
- No regulations requiring the consideration of environmental factors
- Lack of data for considering environmental factors
- Lack of appropriate analysis tools for considering environmental factors

On average, the respondents identified that 1.6 major obstacles were faced by agencies in incorporating environmental consideration into transportation planning. Of these obstacles, competing priorities seems to be the biggest obstacle to incorporating environmental considerations in the transportation planning process, with eighty-five percent (85%) of the respondents indicated that it was a major obstacle. Twenty-three percent (23%) of respondents indicated that no regulations was a major obstacle, fifteen percent (15%) indicated that lack of data was a major obstacle, and thirty-eight percent (38%) of the respondents indicated that lack of appropriate analysis tools was a major obstacle in considering environmental factors in transportation planning. These statistics are summarized in Figure C-22.

Other obstacles identified by the environmental organizations include:

- Engaging the public in weighing environmental factors
- Lack of interest/concern on the part of federal transportation agencies (state and federal)
- Data too broad at state/federal levels – need local information

Benefits of Incorporating Environmental Factors Earlier in Project Development

The respondents were asked to choose the one most important reason for incorporating environmental factors earlier in project development, as well as the other

important reasons. The following is the list of reasons provided for incorporating environmental factors earlier:

- Shortens time to project implementation
- Reduces amount of resourced needed for project
- Engages environmental resource agencies earlier
- Reduces level of potential public controversy
- Results in better decisions
- Helps develop a constituency for a project
- Improves our agency image
- Links planning better with project development
- We do not consider early consideration of environmental factors to be important

When asked which one reason they thought was the most important reason for incorporation environmental factors earlier in project development, the majority, sixty-two percent (61.5%), of the respondents chose "results in better decisions". The other reasons thought to be most important include shortening time to project implementation (7.7% of respondents), reducing resources (15.4% of respondents), engaging the environmental resource agencies earlier (7.7% of respondents) and linking planning better with project development (7.7% of respondents).

Of reasons thought to be important, the majority of respondents (85%) indicated that linking planning better with project development was an important benefit to incorporating environmental factors earlier in project development. Engaging environmental resource agencies earlier and shortening time to project implementation were also considered to be important benefits. None of the respondents indicated that they did not consider early consideration of environmental factors to be important. Figure C-23 summarizes the percentage of respondents choosing each reason as important.

Examples of Where Considering Environmental Factors Earlier Resulted in Benefits

Only twenty-three percent (23%) of the respondents to the environmental survey could identify examples from their agency of where considering environmental factors earlier in project development resulted in benefits. Two of these projects included:

- The Tacoma Narrows bridge project
- The Metro-Atlanta TIP

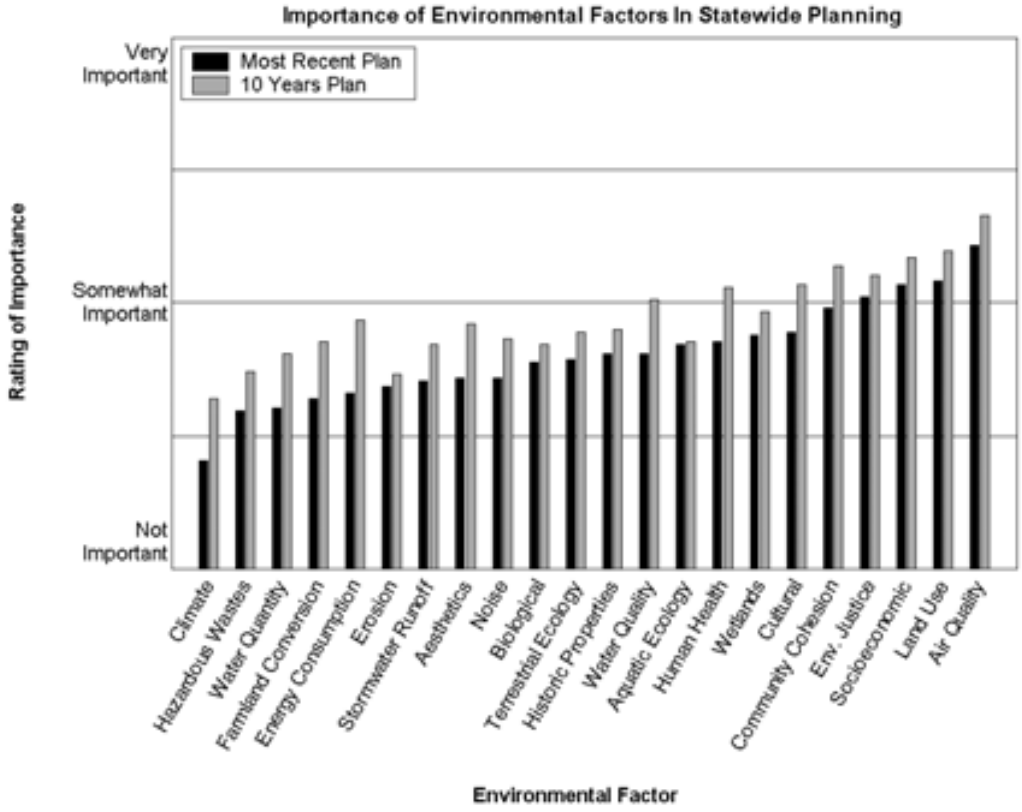

Figure C-1: Importance of Environmental Factors in Statewide Transportation Planning (as Ranked by state DOTs)

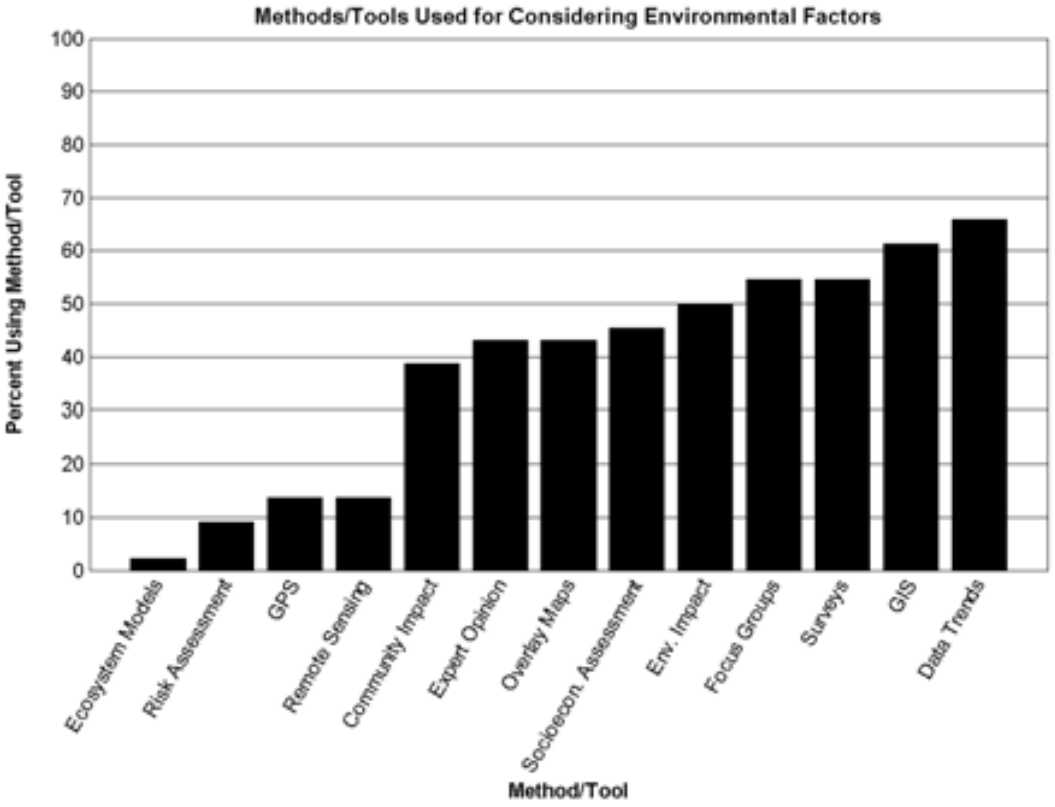

Figure C-2: Percentage of Statewide Respondents Using Specific Methods/Tools for Considering Environmental Factors in the Planning Process

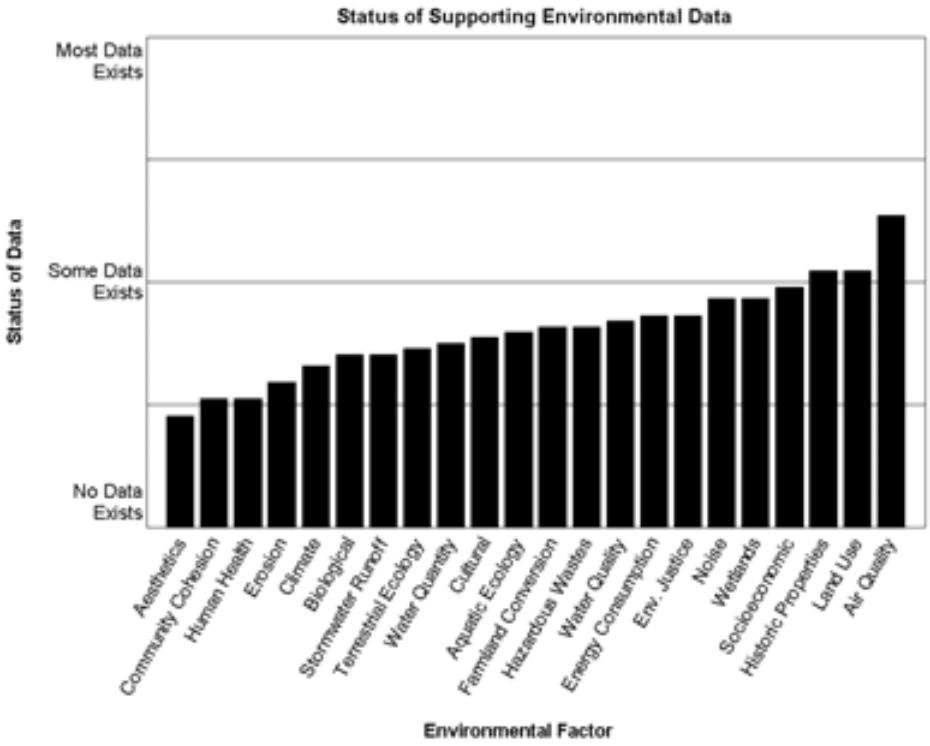

Figure C-3: Current Status of Environmental Data (According to State DOTs)

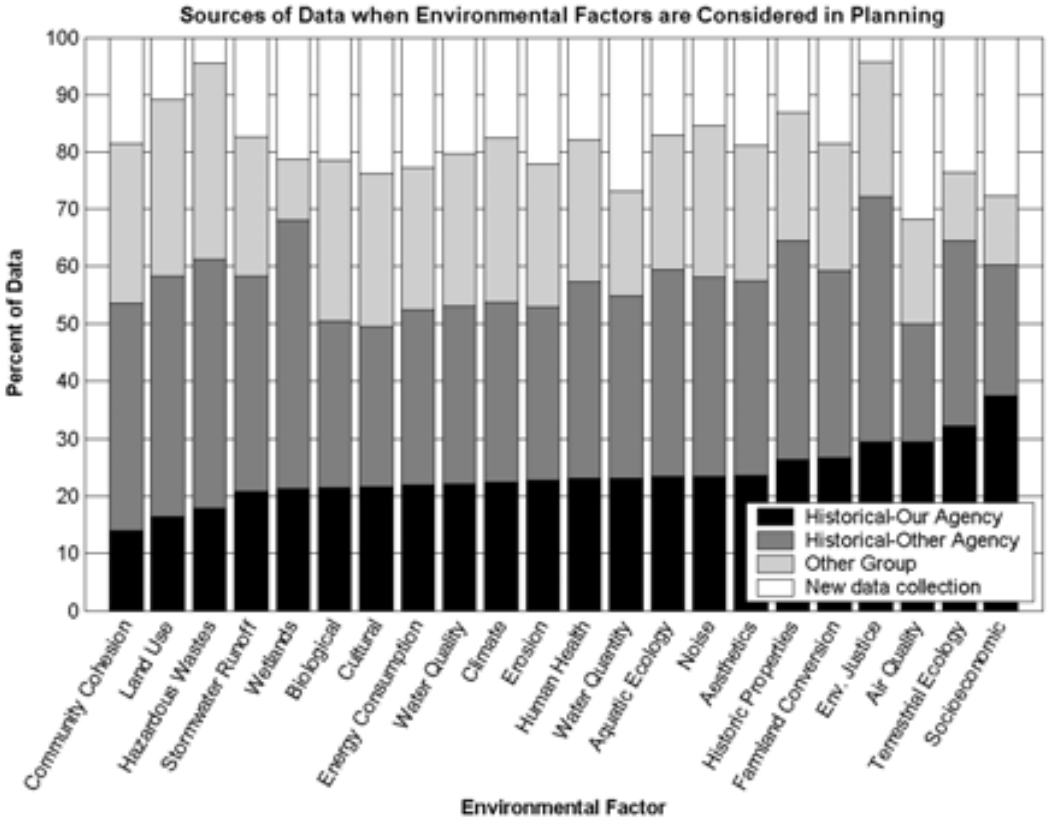

Figure C-4: Sources of Data when Environmental Factors are Considered in the Statewide Transportation Planning Process

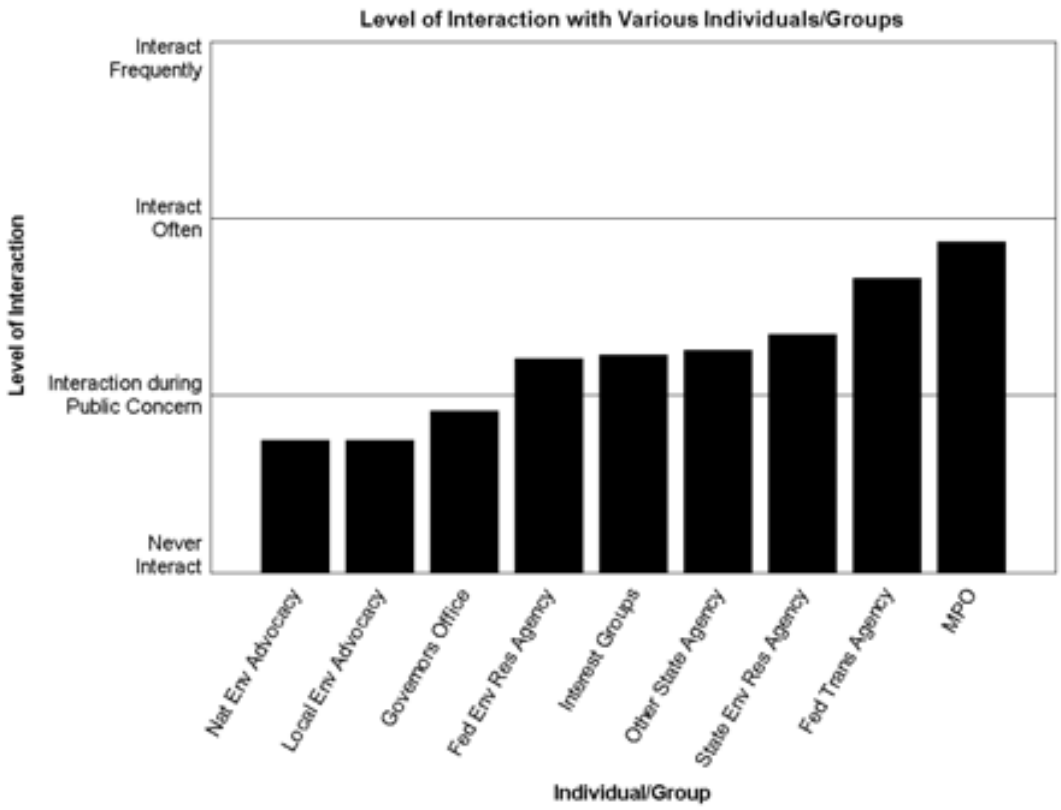

Figure C-5: Level of Interaction with Various Individuals/Groups during the Planning Process (according to the Statewide Respondents)

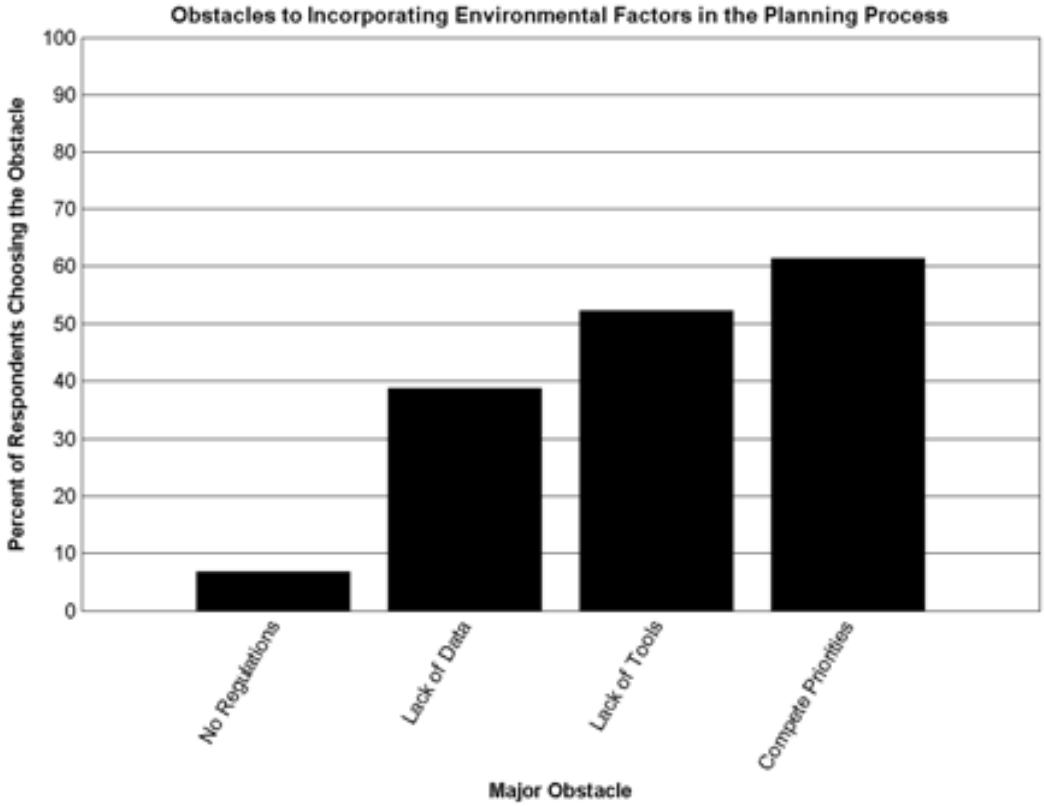

Figure C-6: Major Obstacles Faced by State DOTs when Incorporating Environmental Considerations into Transportation Planning

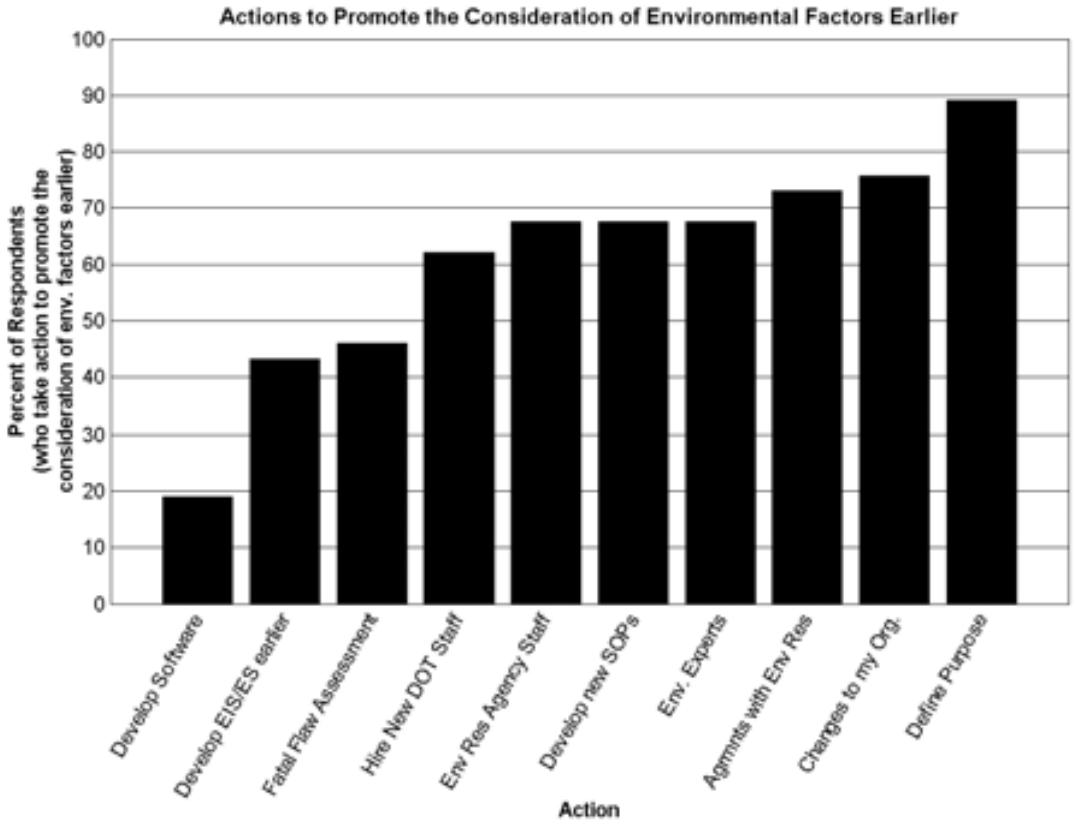

Figure C-7: Actions to Promote the Consideration of Environmental Factors Earlier

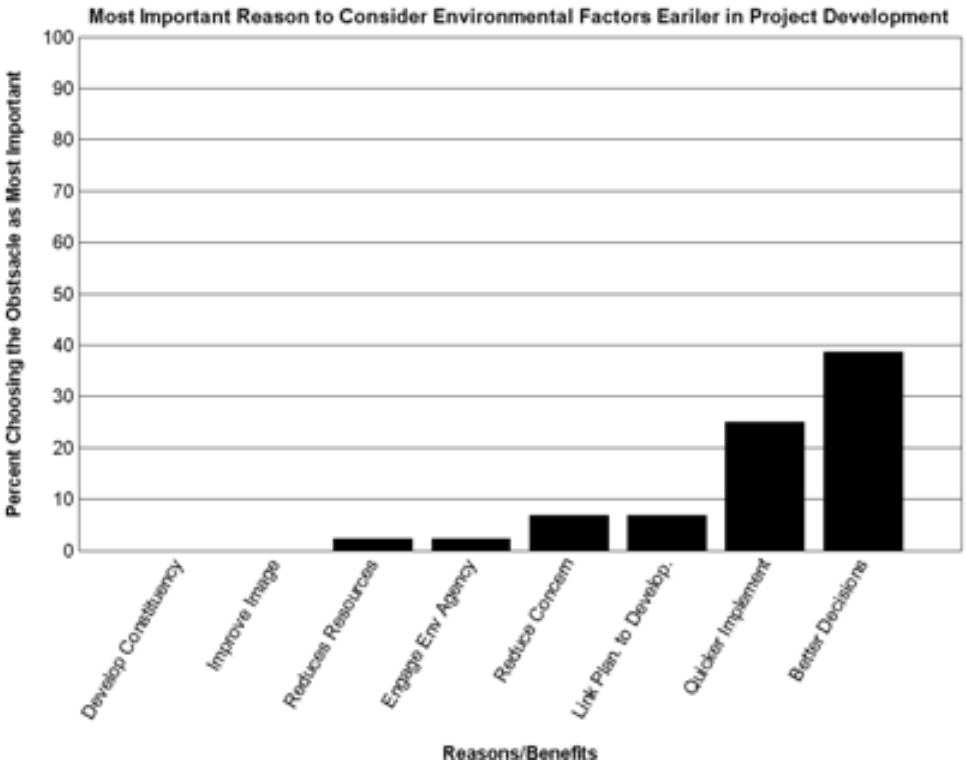

Figure C-8: Reasons to Consider Environmental Factors Earlier in Project Development (according to the Statewide Respondents)

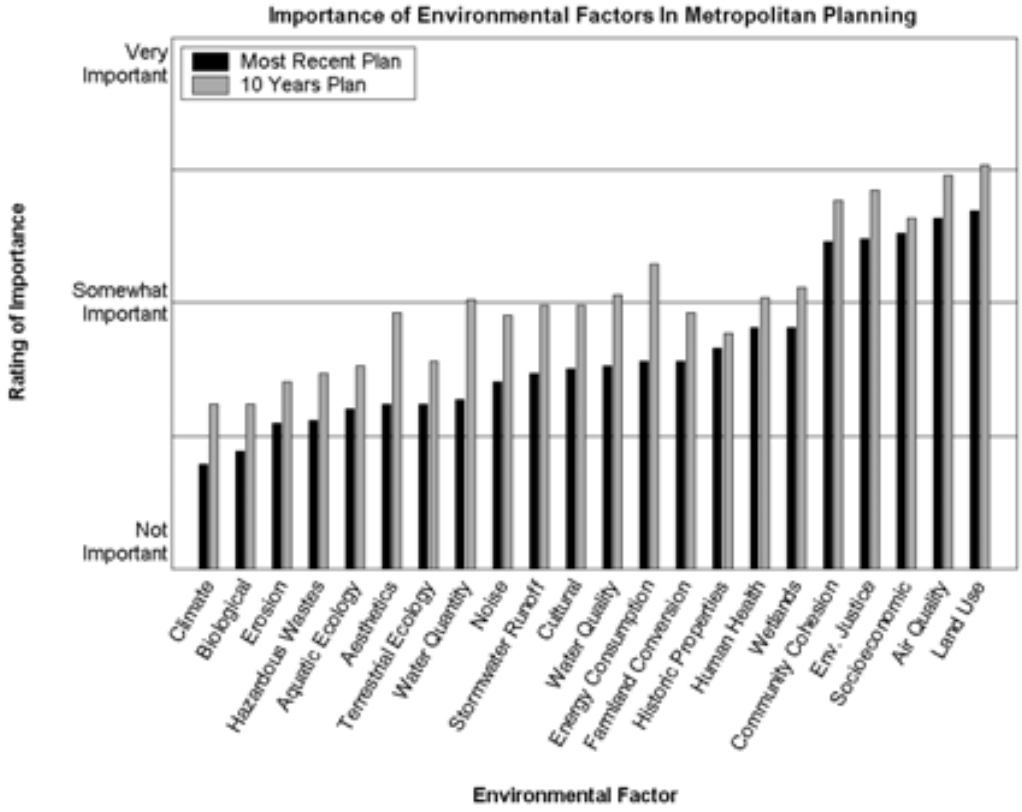

Figure C-9: Importance of Environmental Factors in Metropolitan Transportation Planning (as Ranked by MPOs)

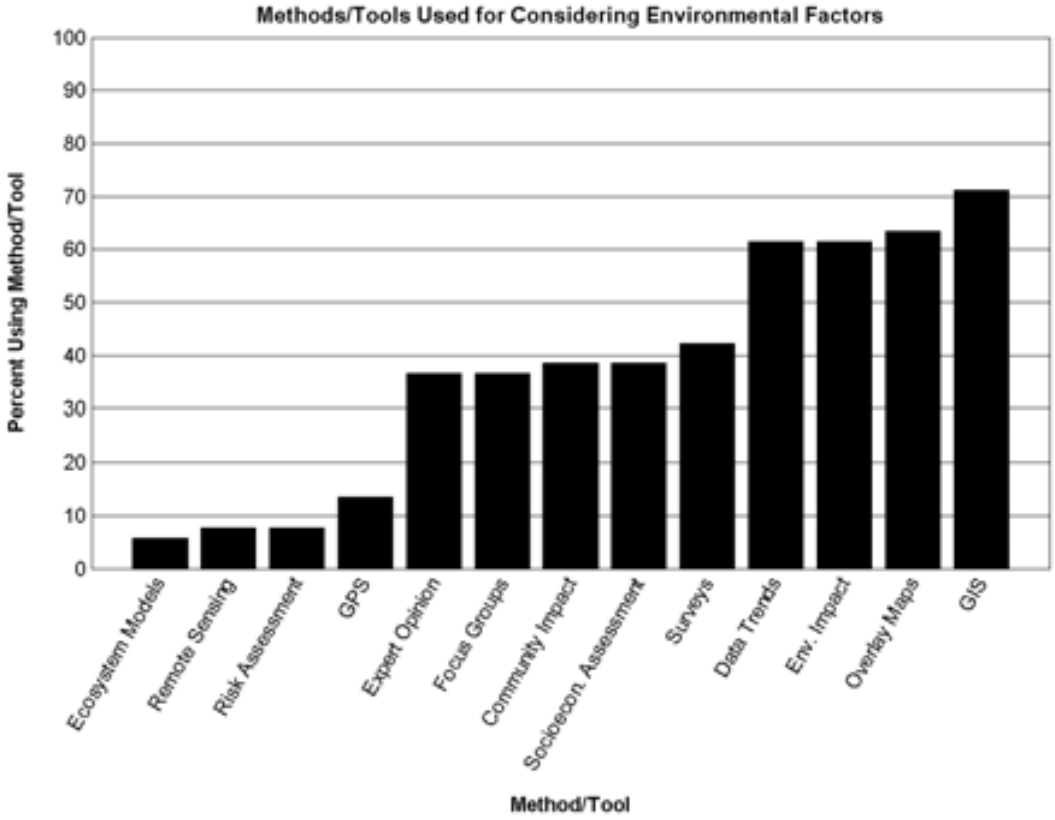

Figure C-10: Percentage of Metropolitan Respondents Using Specific Methods/Tools for Considering Environmental Factors in the Planning Process

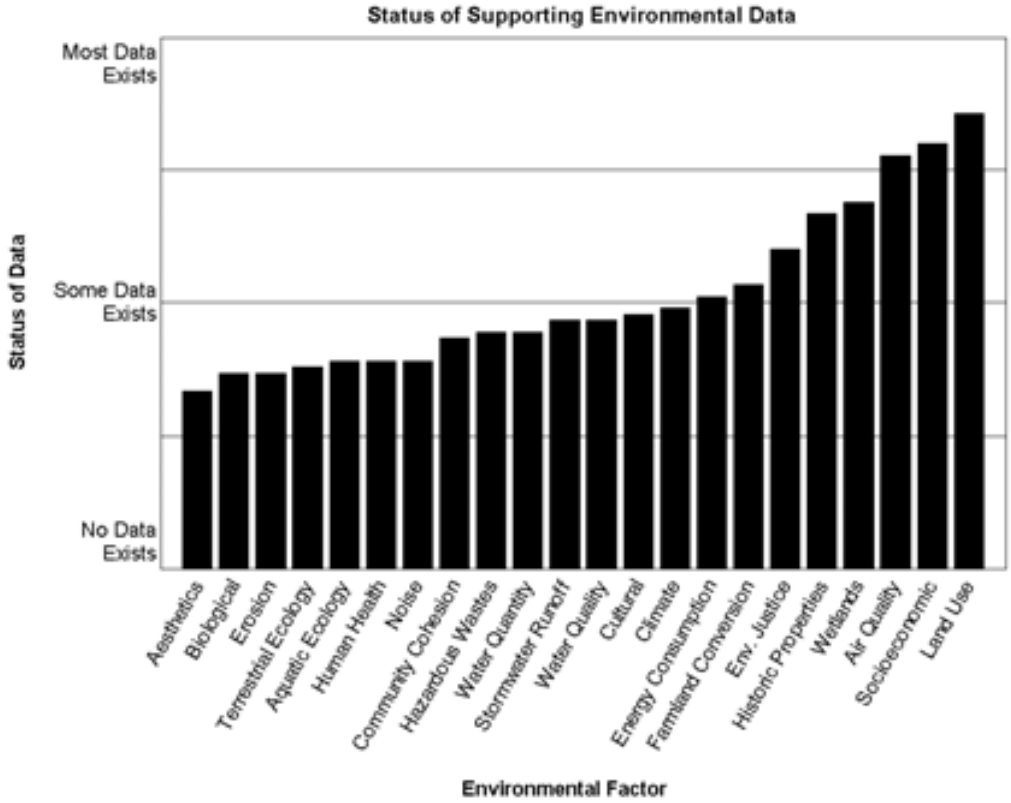

Figure C-11: Current Status of Environmental Data (according to MPOs)

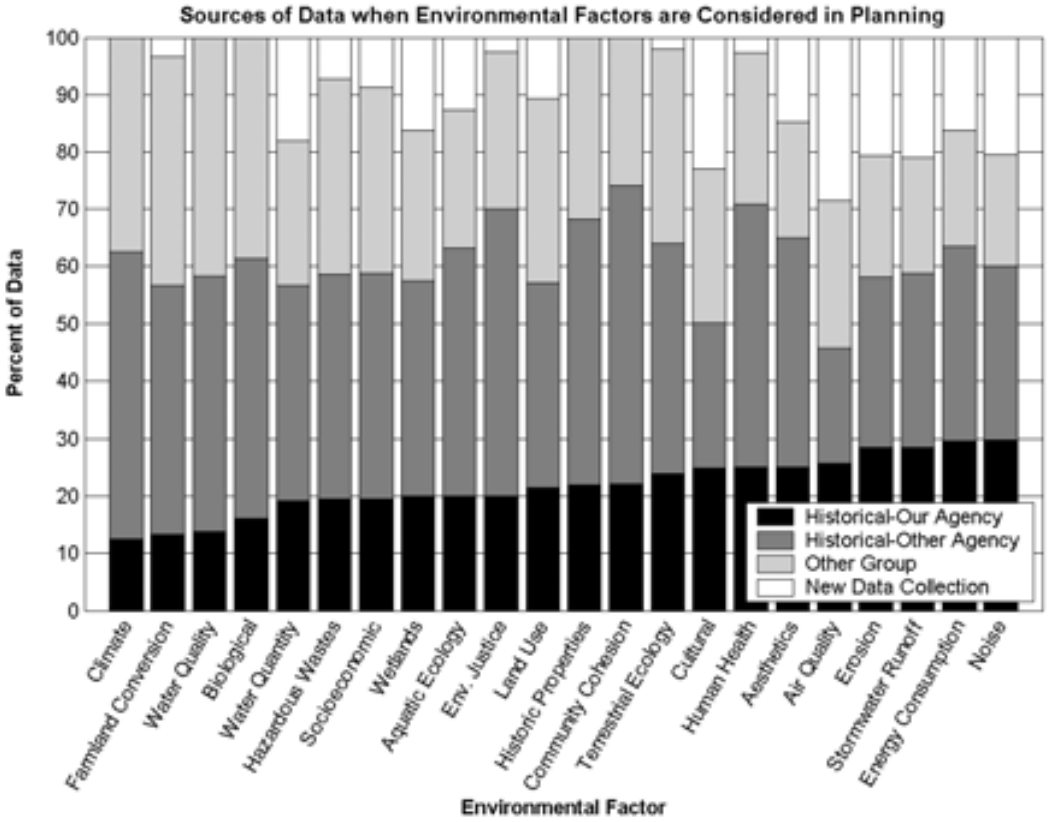

Figure C-12: Sources of Data when Environmental Factors are Considered in the Metropolitan Transportation Planning Process

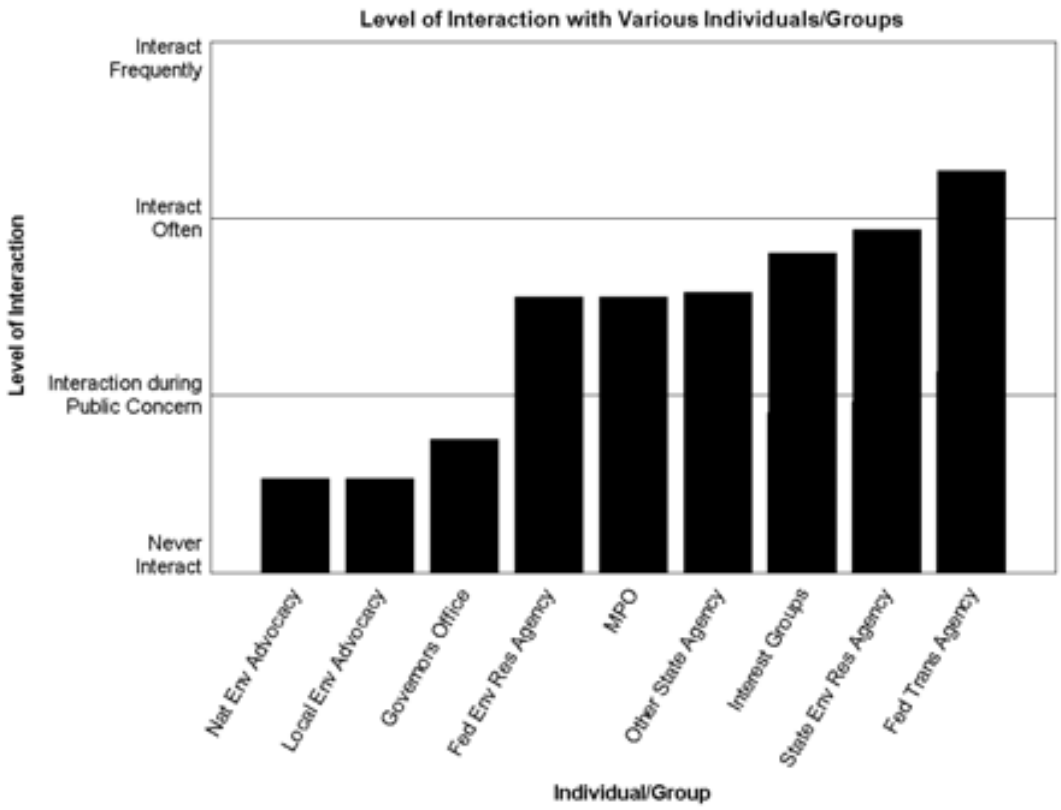

Figure C-13: Level of Interaction with Various Individuals/Groups during the Planning Process (according to the Statewide Respondents)

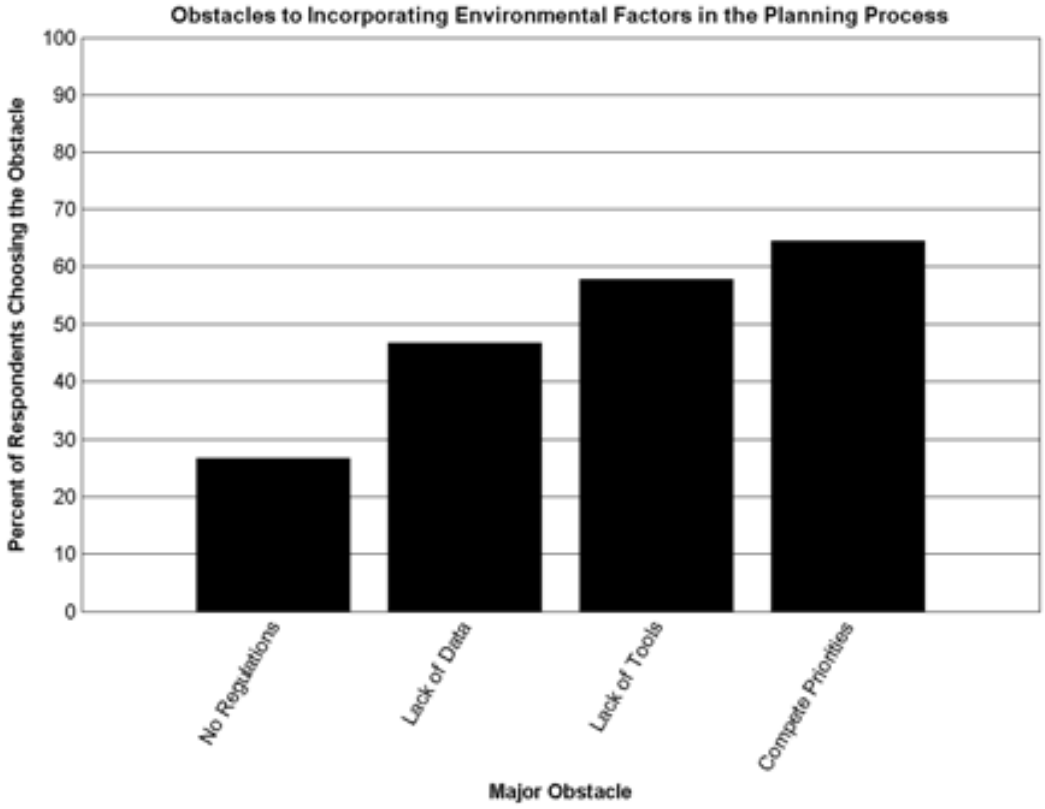

Figure C-14: Major Obstacles Faced by MPOs when Incorporating Environmental Considerations into Transportation Planning

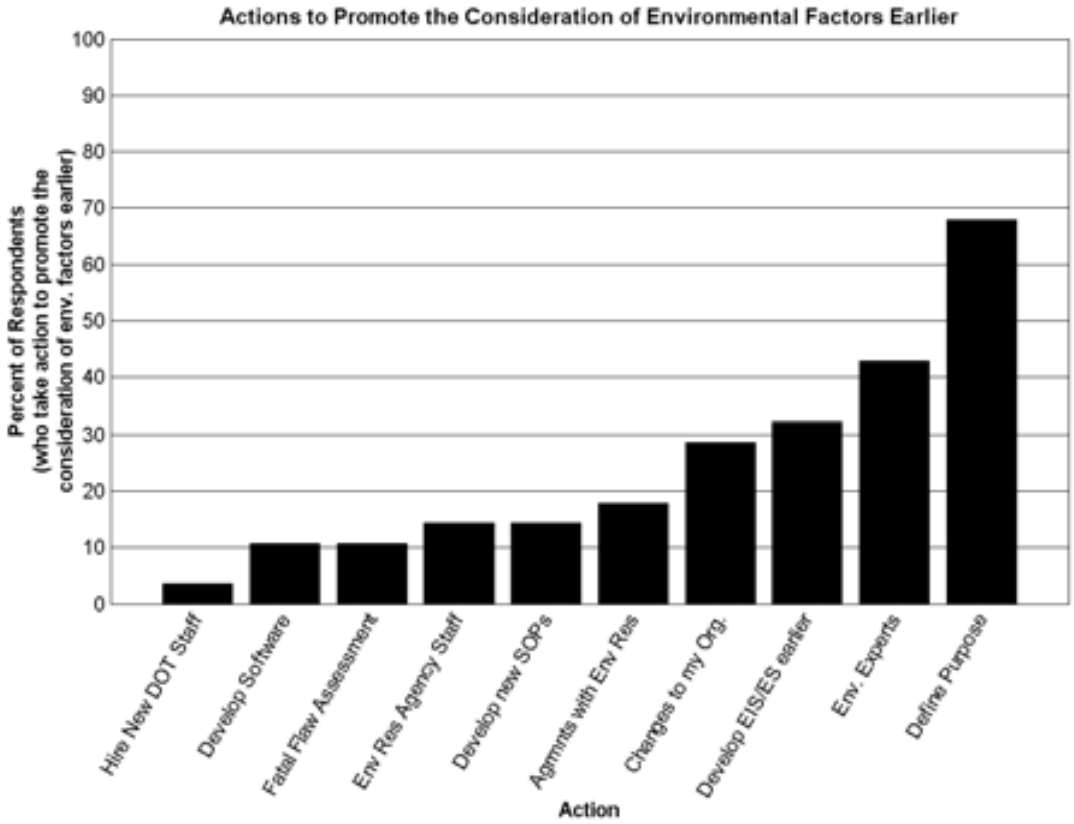

Figure C-15: Actions to Promote the Consideration of Environmental Factors Earlier (according to the Metropolitan Survey Respondents who indicated that they have promoted the consideration of environmental factors earlier)

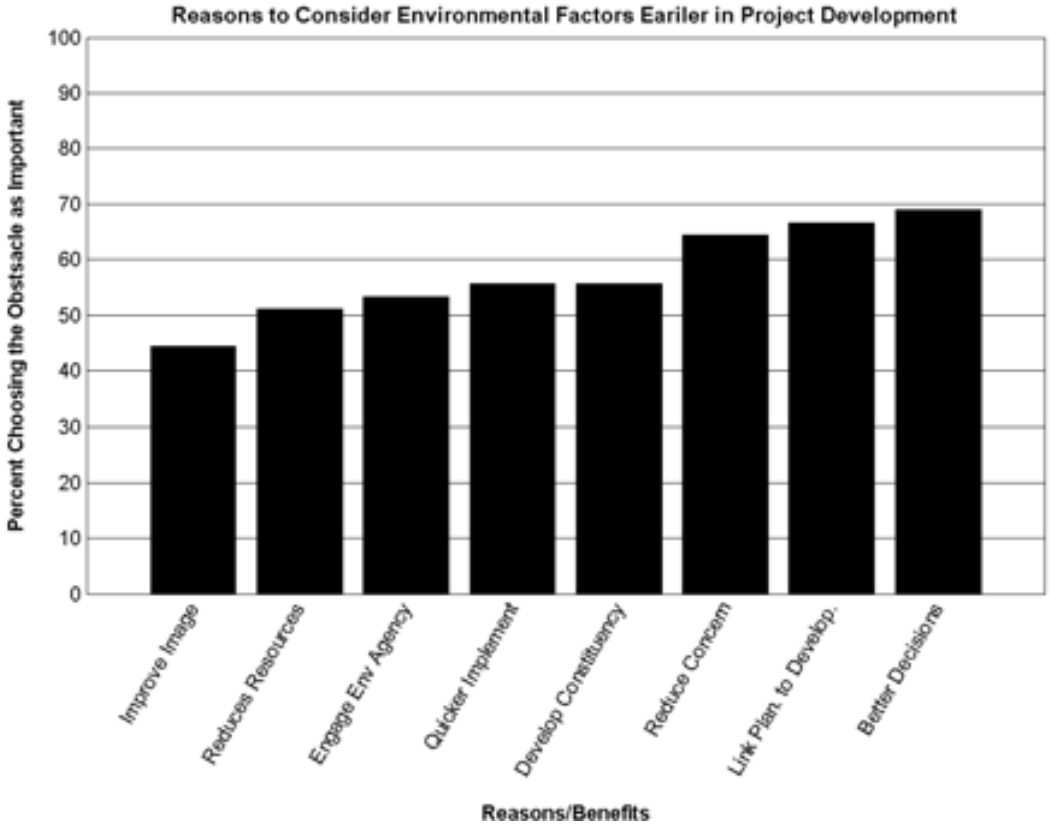

Figure C-16: Reasons to Consider Environmental Factors Earlier in Project Development (according to MPO Respondents)

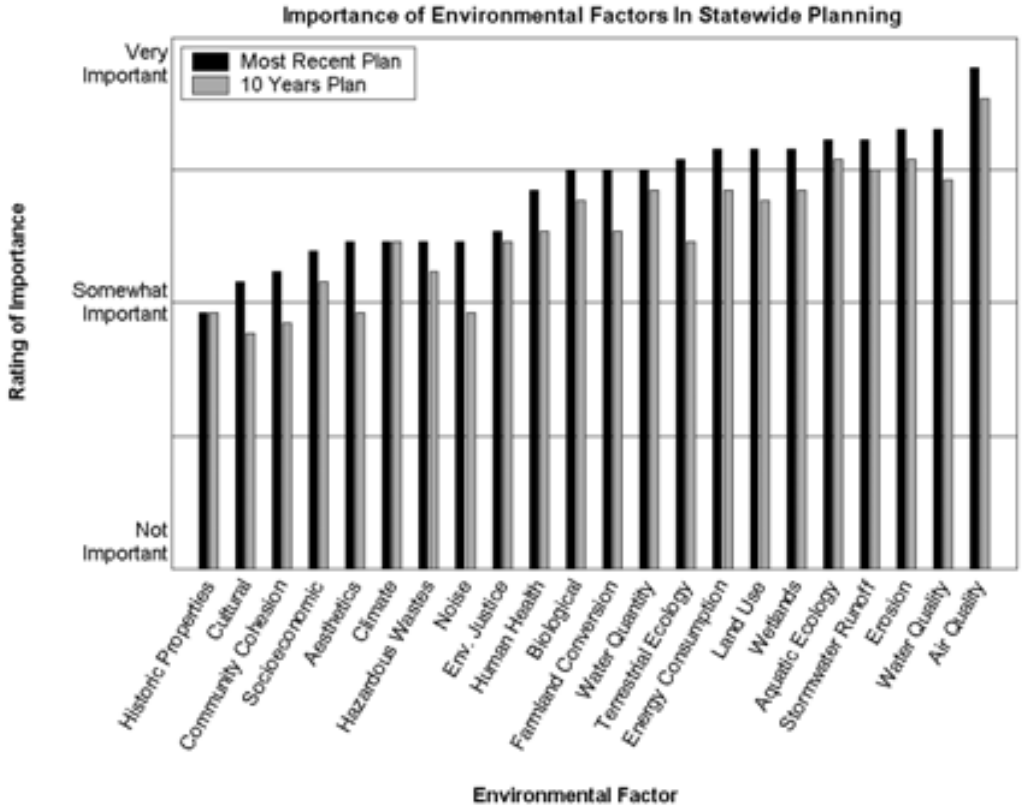

Figure C-17: Importance of Environmental Factors in Statewide Transportation Planning (as ranked by Environmental Organizations)

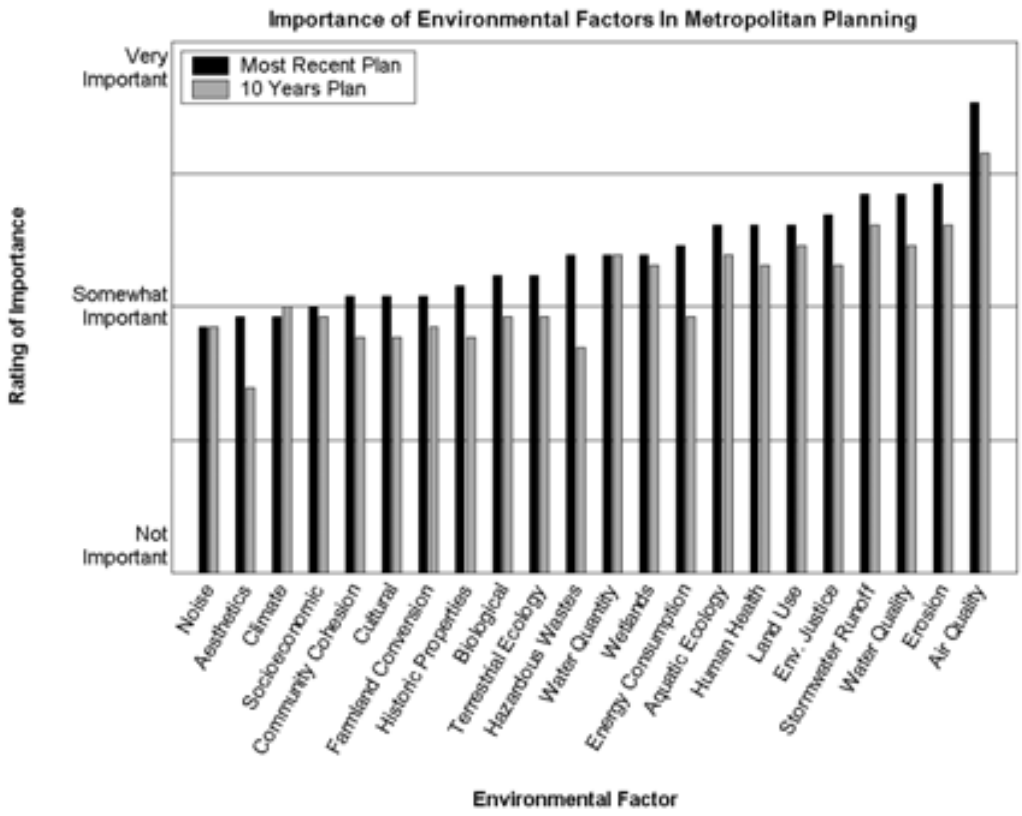

Figure C-18: Importance of Environmental Factors in Metropolitan Transportation Planning (as ranked by Environmental Organizations)

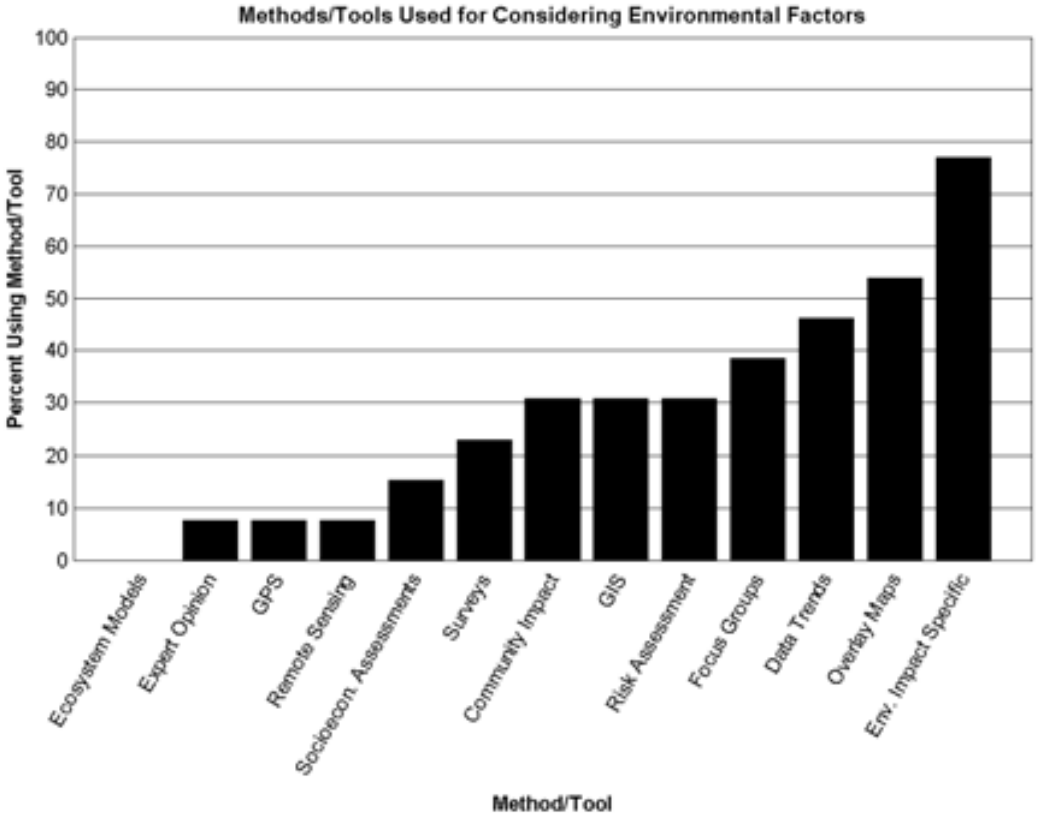

Figure C-19: Percentage of Environmental Respondents Using Specific Methods/Tools for Considering Environmental Factors in the **Planning Process**

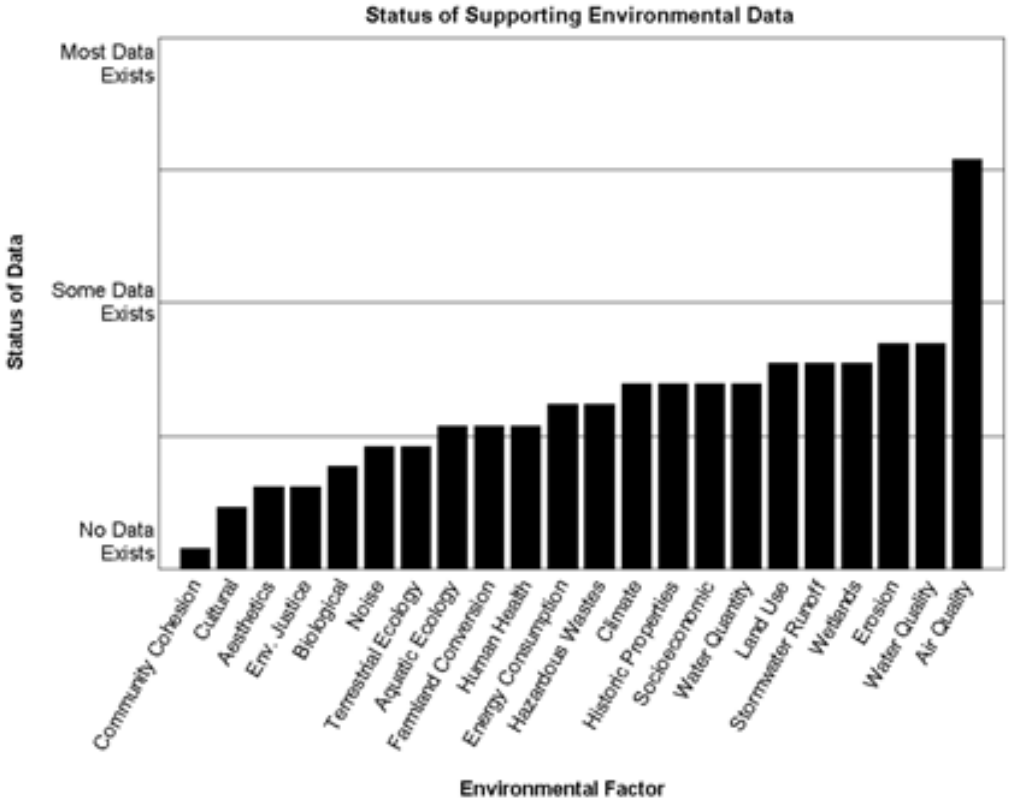

Figure 20: Current Status of Environmental Data (according to Environmental Organizations)

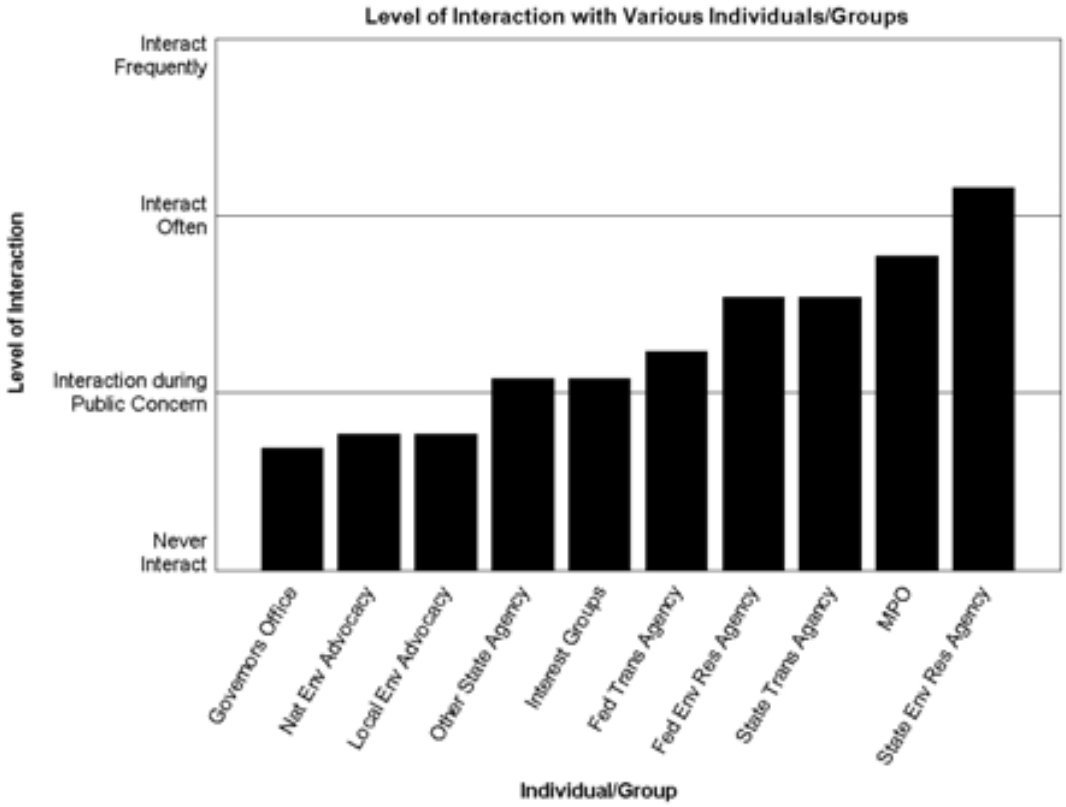

Figure 21: Level of Interaction with Various Individuals/Groups during the Planning Process (according to the Environmental Respondents)

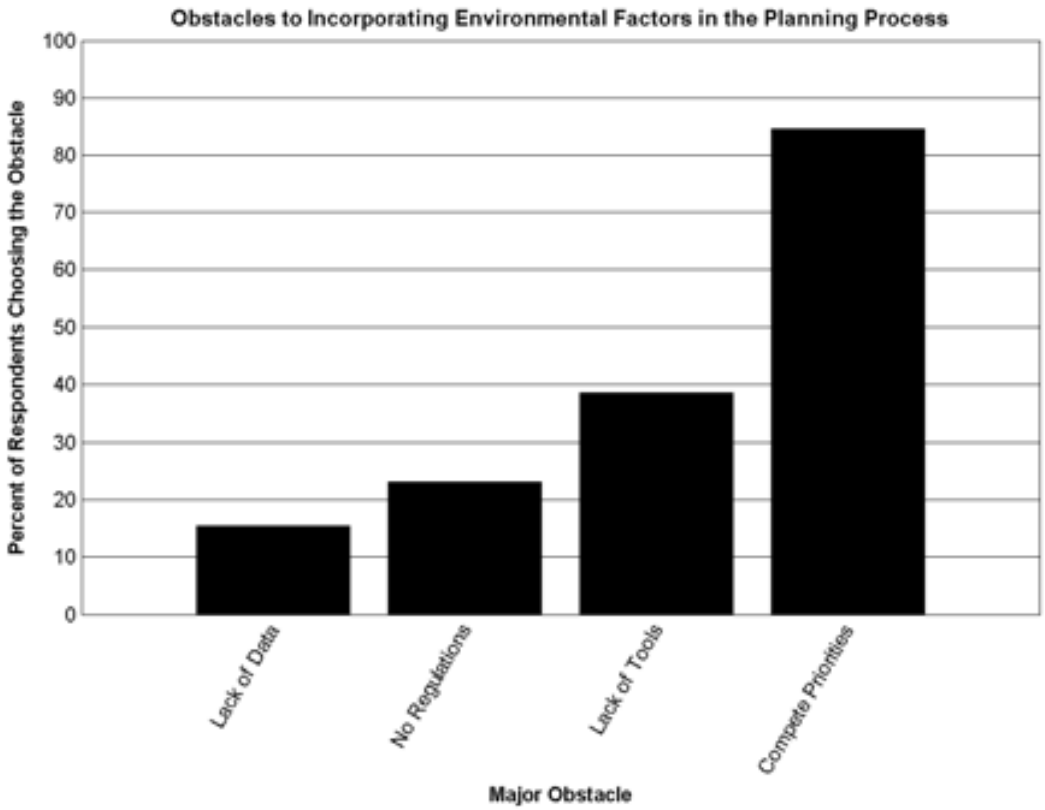

Figure C-22: Major Obstacles thought to be Faced by Agencies when Incorporating Environmental Considerations into Transportation Planning (according to Environmental Organizations)

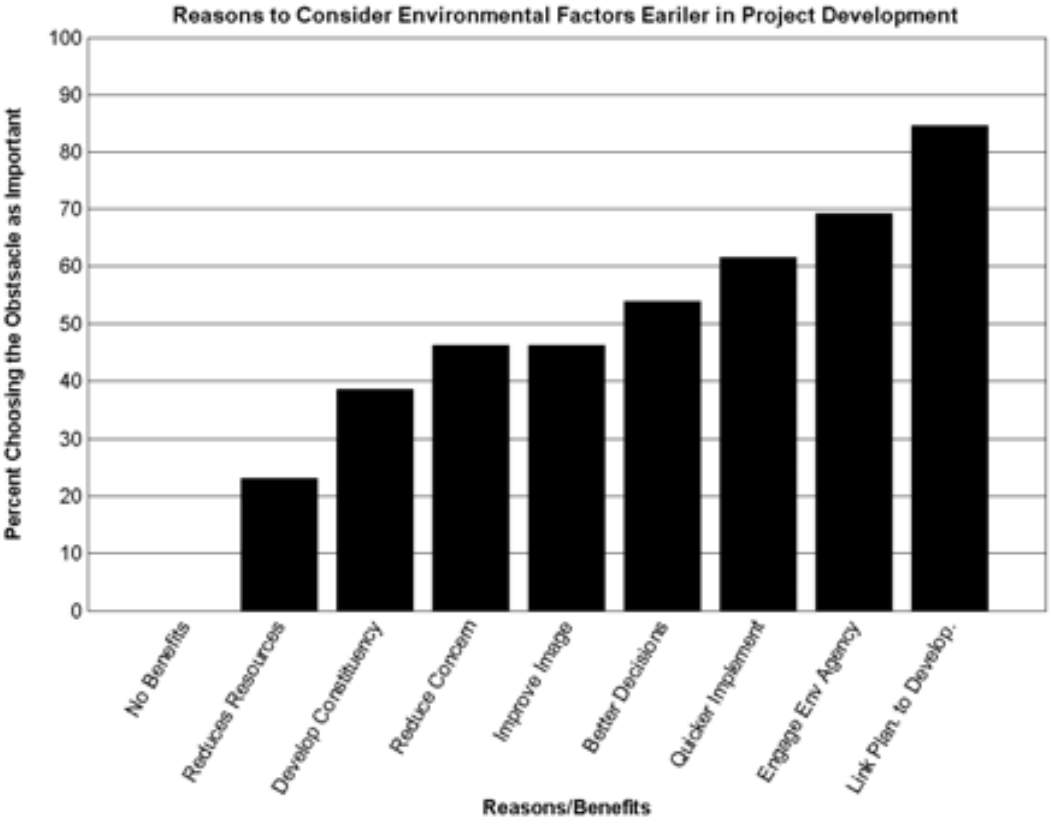

Figure C-23: Reasons to Consider Environmental Factors Earlier in Project Development (according to the Environmental Respondents)

Table C.1: Overall Importance of Environmental Factors (as Ranked by State DOTs)

	Statewide Plan	
	Most Recent	10 Year
5 (Very Important)	12.1%	17.9%
4	19.8%	22.9%
3 (Somewhat Important)	26.1%	28.6%
2	16.4%	8.2%
1 (Not Important)	9.9%	6.1%
0 (No Response)	15.6%	16.3%

Table C.2: Percent of Respondents to the Statewide Survey Regarding the Current Status of Data

Current Status of Data	Percent of Respondents
Most Data Exists	21.2%
Some Data Exists	52.5%
No Data Exists	11.4%
No Response	14.9%

Table C.3: Percent of Respondents to the Environmental Survey Regarding the Current Status of Data

Data Source	Percent of Data
Historical – Our Agency	16.2%
Historical – Another Agency	25.8%
Another Group	36.1%
New Data Collection	21.9%

Table C.4: Overall Importance of Environmental Factors (as Ranked by MPOs)

	Metropolitan Plan	
	Most Recent	10 Year
5 (Very Important)	10.6%	22.2%
4	24.0%	25.1%
3 (Somewhat Important)	20.7%	19.2%
2	17.9%	13.1%
1 (Not Important)	15.6%	7.7%
0 (No Response)	11.1%	12.7%

Table C.5: Percent of Respondents to the Environmental Survey Regarding the Current Status of Data

Current Status of Data	Percent of Respondents:
Most Data Exists	28.9%
Some Data Exists	51.1%
No Data Exists	13.5%
No Response	6.5%

Table C.6: Percent of Respondents to the Environmental Survey Regarding the Current Status of Data

Data Source	Percent of Data:
Historical – Our Agency	12.9%
Historical – Another Agency	24.9%
Another Group	41.5%
New Data Collection	20.7 %

Table C.7: Overall Importance of Environmental Factors (as Ranked by Environmental Organizations)

	Statewide Plan		Metropolitan Plan	
	Most Recent	10 Year	Most Recent	10 Year
5 (Very Important)	35.3%	39.9%	34.3%	31.8%
4	27.6%	19.6%	21.0%	19.6%
3 (Somewhat Important)	26.2%	19.6%	24.1%	21.0%
2	7.0%	7.3%	4.6%	4.6%
1 (Not Important)	3.5%	3.2%	3.5%	3.2%
0 (No Response)	0.4%	10.5%	12.6%	19.9%

Table C.8: Percent of Respondents to the Environmental Survey Regarding the Current Status of Data

Current Status of Data	Percent of Respondents:
Most Data Exists	12.2%
Some Data Exists	57.3%
No Data Exists	9.4%
No Response	21.0%

Appendix D: Example Interagency Agreements from Minnesota

Mn/DOT Agreement No. 82161

STATE OF MINNESOTA
INTERAGENCY AGREEMENT

THIS AGREEMENT is made by and between the Department of Natural Resources (DNR)("PROVIDING AGENCY") and the Minnesota Department of Transportation (Mn/DOT)("REQUESTING AGENCY").

BACKGROUND

REQUESTING AGENCY and PROVIDING AGENCY are empowered to enter into interagency agreements pursuant to Minnesota Statutes Section 471.59, subdivision 10. Requesting agency is responsible for implementing state highway projects that meet environmental requirements administered by PROVIDING AGENCY. PROVIDING AGENCY will provide dedicated staff and a timely delivery process related to environmental consultation ,review and permits for state highway projects consistent with all environmental laws and regulations.

NOW, THEREFORE, it is agreed:

I. DUTIES OF PROVIDING AGENCY

PROVIDING AGENCY will:

1.) Designate at least two experienced, professional, environmental staff to coordinate and expedite activities necessary for state highway plans and projects.

2.) Participate at REQUESTING AGENCY project development meetings and public meetings when requested by REQUESTING AGENCY within 10 working days notice by telephone, e-mail or letter.

3.) Provide environmental information when requested by REQUESTING AGENCY within 15 working days.

4.) Provide consultation and review of REQUESTING AGENCY plans, alternatives and mitigation within 15 working days.

5.) Provide comments for environmental review documents within 15 working days.

6.) Provide information, analysis and administration needed for PROVIDING AGENCY permits and approvals within 15 working days. (The 15 day deadlines listed in 3 – 6 above may need to be modified at times, due to heavy workloads, in accordance with II. 8 below.)

7.) Implement a general permit process for limited highway construction involving water resources by December 31, 2001.

8.) Perform site inspections before, during and after construction at the discretion of PROVIDING AGENCY.

9.) Focus activities (consultation, analysis, review, comments) to environmental effects that are assigned to PROVIDING AGENCY jurisdiction by law and represent the official position of PROVIDING AGENCY.

10.) Respond to disputes consistent with the June 1999 "Memorandum of Understanding" between REQUESTING AGENCY and Department of Natural Resources with every effort to resolve disputes at the lowest possible level.

11.) Provide 8 quarterly reports (one every 3 months) on PROVIDING AGENCY activities preformed under this agreement noting the type of activity (consultation, review, analysis, information or comment on environmental documents) and the date of request and date of completion.

Mn/DOT Agreement No. _____

II. DUTIES OF REQUESTING AGENCY

REQUESTING AGENCY will:

1.) Invite PROVIDING AGENCY participation and consultation about state highway plans and projects where there is likely environmental effects assigned to PROVIDING AGENCY jurisdiction by law. Such invitation will have a minimum of 10 working days notice.

2.) Request environmental information that is needed for REQUESTING AGENCY project development or environmental documents that is reasonably available from PROVIDING AGENCY.

3.) Submit environmental documents to PROVIDING AGENCY for review and comment.

4.) Apply for permits or approvals when required by law or rule.

5.) Abide by permit or approval requirements.

6.) Evaluate the quality and timeliness of PROVIDING AGENCY services provided under this agreement. Such evaluation will be shared with PROVIDING AGENCY.

7.) Initiate prompt resolution of any dispute with PROVIDING AGENCY consistent with the June 1999 " Memorandum of Understanding" between REQUESTING AGENCY and Department of Natural Resources.

8.) Consider time extensions for PROVIDING AGENCY duties based on responsible requests and project schedules as determined by REQUESTING AGENCY'S Authorized Representative.

III. CONSIDERATION AND TERMS OF PAYMENT

A. Consideration for all services performed and goods or materials supplied by PROVIDING AGENCY pursuant to this Agreement shall be paid by REQUESTING AGENCY on a lump sum basis as follows:

Total Agreement Amount: $400,000.00

Upon receipt of each quarterly report, PROVIDING AGENCY will invoice REQUESTING AGENCY in the amount of $50,000.00. Payments will be made by REQUESTING AGENCY upon approval and acceptance of quarterly report by REQUESTING AGENCY'S Authorized Representative. Providing that the final quarterly report can be submitted and invoiced as early as May 15,2003 so that the total of all 8 payments will be completed within fiscal years 2002 and 2003.

B. Terms of Payment Payment shall be made by REQUESTING AGENCY within 30 days after PROVIDING AGENCY has presented invoices for services performed or goods or materials supplied to REQUESTING AGENCY. All services provided by PROVIDING AGENCY pursuant to this Agreement shall be performed to the satisfaction of REQUESTING AGENCY, as determined by its Authorized Representative.

Mn/DOT Agreement No. _____

IV. TERM OF AGREEMENT This Agreement will be effective on July 1. 2001 **or upon such date as it is approved and executed by the appropriate REQUESTING AGENCY, PROVIDING AGENCY, and other state officials, whichever occurs later**, and shall remain in effect until June 30, 2003, or until all obligations set forth in this Agreement have been satisfactorily fulfilled, whichever occurs first.

V. CANCELLATION This Agreement may be canceled by REQUESTING AGENCY or PROVIDING AGENCY at any time, with or without cause, upon 30 day's written notice to the other party. In the event of such a cancellation PROVIDING AGENCY shall be entitled to payment, determined on a pro rata basis, for work or services satisfactorily performed.

VI. AUTHORIZED REPRESENTATIVES REQUESTING AGENCY=s Authorized Representative for the purposes of administration of this Agreement is Merritt Linzie, Chief Environmental Officer, Office of Environmental Services, 395 John Ireland Blvd. MS 620, St. Paul, MN 55155. Phone: 651-284-3751, Fax: 651-284-3754, E-mail: merritt.linzie@dot.state.mn.us. PROVIDING AGENCY=s Authorized Representative for the purposes of administration of this Agreement is Tom Balcom, Environmental Planning Director, Minnesota Department of Natural Resources, 500 Lafayette Road, St. Paul, Mn. 55155. Phone: 651-296-4796 Fax:651-296-6047 E-Mail: tom.balcom@dnr.state.mn.us. Each Authorized Representative shall have final authority for acceptance of services of the other party and shall have responsibility to ensure that all payments due to the other party are paid pursuant to the terms of this Agreement.

VII. ASSIGNMENT Neither REQUESTING AGENCY nor PROVIDING AGENCY shall assign or transfer any rights or obligations under this Agreement without the prior written approval of the other party.

VIII. LIABILITY Each party will be responsible for its own acts and the results thereof to the extent authorized by law and shall not be responsible for the acts of any others and the results thereof. PROVIDING AGENCY and REQUESTING AGENCY liability shall be governed by Minnesota Statutes Section 3.736, and other applicable law.

IX. AMENDMENTS AND COUNTERPARTS Any amendments to this Agreement shall be in writing, and shall be executed by the same parties who executed the original Agreement, or their successors in office. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same Agreement.

X. DATA PRACTICES, OWNERSHIP OF COPYRIGHT, AND OWNERSHIP OF MATERIALS

A. PROVIDING AGENCY must comply with the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, as it applies to all data provided by REQUESTING AGENCY in accordance with this Agreement and as it applies to all data created, gathered, generated, or acquired in accordance with this Agreement.

XI. COORDINATION COMMITMENTS: The AGENCIES commit to a comprehensive coordination process. Both AGENCIES recognize that the objectives of this Interagency Agreement can best be realized through coordination and cooperation between their respective staffs during the planning and development stages of projects, and through a cooperative problem solving approach in the environmental review and permitting programs. Neither AGENCY will unduly criticize, make unwarranted claims or over generalizations not supported by facts, science or seasoned professional opinion about the plans, comments or professional opinions of the other AGENCY. The PROVIDING AGENCY will not publicly claim or assert credit for project design changes or mitigation measures of the REQUESTING Agency.

XII. AUDIT Pursuant to Minnesota Statutes Section 16C.05, subdivision 5, the books, records, documents, and accounting procedures and practices relevant to this Agreement will be subject to examination by either agency=s auditor and the Legislative Auditor, for a minimum of six years.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed intending to be bound thereby.

PROVIDING AGENCY'S REPRESENATIVE

By:_____
Steven Morse
Title: Deputy Commissioner
Department of Natural Resources

Date:_____

REQUESTING AGENCY'S REPRESENATIVE

By:_____
Merritt H. Linzie,
Title: Chief Environmental Officer
Office of Environmental Services
Minnesota Department of Transportation

Date:_____

Mn/DOT Office of Contract Management

By:_____

Date:_____

LETTER OF UNDERSTANDING ON ENVIRONMENTAL STREAMLINING

MINNESOTA TRUNK HIGHWAY (U.S.) 169, TRUNK HIGHWAY 27 TO TRUNK HIGHWAY 18

This Letter of Understanding (LOU) is executed pursuant to and consistent with the intent of Section 1309 "Environmental Streamlining" of the Transportation Equity Act for the 21st Century (TEA-21).

The undersigned parties recognize that it is in the public interest to develop cost-effective projects in a timely way while fully meeting our responsibilities to protect the environment. To achieve this goal, this LOU adopts and incorporates the project development concurrence/concurrence points decision framework contained in the March, 1994 Region 5 "Concurrent NEPA/404 Processes for Transportation Projects", for streamlining Trunk Highway (U.S.) 169 project development in Minnesota. The latter agreement was developed to merge the Section 404 and NEPA processes for transportation projects and was signed by the U.S. Environmental Protection Agency, Federal Highway Administration, U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers.

For the purposes of this LOU, the same concurrence/concurrence point decision framework will be extended to include the equal participation of the Advisory Council on Historic Preservation (ACHP), the Minnesota State Historic Preservation Officer (MnSHPO) and Mille Lacs Tribal Historic Preservation Officer (THPO) as full partners. The requirements of the National Historic Preservation Act and all other applicable laws, regulations and policies administered by the ACHP, the MnSHPO and THPO will be observed and incorporated into this Minnesota Trunk Highway 169 streamlining initiative.

All parties to this LOU agree to collaborate in a manner that gives full consideration to the roles and responsibilities of each; to encourage an open exchange of ideas, priorities, and information; and to commit to constructive resolutions of disagreements.

Nothing in this LOU affects the statutorily prescribed duties and obligations of the undersigned parties or any party's responsibility or ability to discharge fully such duties and obligations under all applicable laws and regulations. Concurrence does not indicate agreement by any party that the project must be built or that a permit will be issued, only that information developed to date is sufficient to advance the project to the next stage of project development.

The undersigned agree to the following:

A. The Minnesota Department of Transportation (MnDOT), will perform all project management, including scheduling meetings, documenting and distributing meeting minutes (which constitute the "official record"), performing data collection; arranging and conducting field reviews; preparing environmental technical studies and reports, preliminary engineering information, and any other information mutually agreed to as necessary to reaching mutual concurrence at these Concurrence Points:

Concurrence Points

1) Project Purpose and Need - Prior to issuance of the Scoping Document/Draft Scoping Decision Document.

2) Alternatives to be Carried Forward to Detailed Study - Agency scoping meeting during the comment period on the Scoping Document/Draft Scoping Decision Document prior to issuance of Scoping Decision Document.

3) Selected Alternative - After issuance of the Draft Environmental Impact Statement (EIS) and prior to announcement of the Preferred Alternative.

B. MnDOT will provide supporting data, technical studies, and other needed information to the undersigned not less than thirty (30) calendar days in advance of a scheduled Concurrence Point meeting.

C. At each Concurrence Point meeting, or for any additional project meeting found by mutual consensus to be necessary, the undersigned parties will define and agree to the type(s) of information, data, evaluations, technical studies, etc., necessary to allow a reasonably informed decision at the next Concurrence Point or other project meeting.

D. Not more than fifteen (15) days after each Concurrence Point or other meeting, MnDOT will distribute meeting minutes. Each party will correct errors of fact or of significant misunderstanding and submit its corrections to MnDOT not more than fifteen (15) days after its receipt of the draft minutes from MnDOT.

E. Final minutes will be prepared by MnDOT and distributed not more than thirty (30) days after its receipt of requests for corrections to the minutes.

F. Concurrence can be stated by any party during any Concurrence Point meeting, and the minutes will document such concurrence. If unable to give concurrence during the meeting, the party will provide a preliminary explanation of the reasons for withholding concurrence.

G. Any party unable to give its concurrence after final minutes are distributed must give written notification to each of the undersigned not more than fifteen (15) days after receipt of the final minutes from MnDOT explaining the reasons for withholding concurrence and to allow consideration of its concerns by the other parties.

H. Each party agreeing to concur will provide written concurrence, if not already documented in the meeting minutes, to MnDOT not more sixty (60) days after receipt of the final meeting minutes.

I. For all other major project activities not requiring concurrence, e.g., scoping, alternatives development, draft NEPA document review, etc., the roles and responsibilities of each party shall conform to those defined in the Flow Diagram of the March, 1994 Concurrent NEPA/404 Processes Guidance. Parties to this LOU not signatory to the 1994 agreement shall review and provide comments consistent with its applicable agency authorities and regulations. The undersigned agree that review comments for any of these activities or draft documents shall be provided to MnDOT not more than thirty (30) days after receipt of a request for review.

J. After the Final EIS is issued but prior to the Record of Decision, each party will provide MnDOT with a list of required information and outstanding issues to be resolved in order for project permits to be issued.

K. Disputes arising at Concurrence Points will be resolved consistent with the dispute resolution guidelines contained in the March, 1994 Concurrent NEPA/404 Processes Guidance.

L. Once concurrence at any Concurrence Point has been reached, that Point will not be revisited or reopened unless significant new information which bears on that Concurrence Point becomes available.

M. Extensions of the response times stipulated in this LOU can be granted by MnDOT upon request by any party to this LOU. Such request must provide the reasons a longer response time is needed. Response time extensions shall not exceed 30 days.

Schedules:

- Information 30 days before concurrence point
- Identify information needed at next concurrence point
- Minutes 15 days after concurrence point meeting; corrections due in 15 days
- Final minutes within 30 days of corrections
- Oral concurrence noted in minutes; explain reason for not concurring
- Non- concurrence in writing to all members within 15 days of final minutes with reasons
- Written concurrence in minutes or separately within 60 days of final minutes
- Respond to reviews within 30 days
- After final EIS; necessary information and outstanding issues for permits
- Dispute resolution process
- Concurrence will not be revisited without significant new information
- Time extension not to exceed 30 days by Mn/DOT

11/28/01

PROGRAMMATIC AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION
MINNESOTA DEPARTMENT OF TRANSPORTATION
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
THE MINNESOTA STATE HISTORIC PRESERVATION OFFICER
MINNESOTA OFFICE OF THE STATE ARCHAEOLOGIST
THE MINNESOTA HISTORICAL SOCIETY
THE DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS, ST. PAUL DISTRICT
REGARDING IMPLEMENTATION OF THE FEDERAL AID HIGHWAY PROGRAM
IN MINNESOTA

WHEREAS, the Federal Highway Administration (FHWA) proposes to administer the Federal-Aid Highway Program in Minnesota authorized by 23 USC 101 et seq. through the Minnesota Department of Transportation (Mn/DOT) (23 USC 315) and,

WHEREAS, the FHWA: (1) has determined that the Federal-Aid Highway Program may have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places; (2) has consulted with the Advisory Council on Historic Preservation (Council) and the Minnesota State Historic Preservation Officer (SHPO) pursuant to Section 800.3 of the regulation (36 CFR 800) implementing Section 106 of the National Historic Preservation Act (NHPA) (16 USC 470f); (3) wishes to insure that Mn/DOT will conduct its programs in a manner consistent with 36 CFR 800 and the National Environmental Policy Act (NEPA) (36 CFR 800.8); and (4) intends to integrate its historic and archaeological preservation planning and management decisions with other policy and program requirements to the maximum extent possible consistent with Section 110 of the NHPA and applicable State legislation; and

WHEREAS, 36 CFR 800 encourages Federal agencies to efficiently fulfill their obligations under Section 106 of the NHPA through the development and implementation of cooperative programmatic agreements; and

WHEREAS, consistent with applicable Federal legislation, the SHPO reflects the interests of the State and its citizens in the preservation of their cultural heritage, and in accordance with Section 101(b)(3) of the NHPA advises and assists Federal agencies in carrying out their Section 106 responsibilities for all federal undertakings that may affect historic properties; and

WHEREAS, consistent with applicable State legislation, the Minnesota Office of the State Archaeologist (OSA) reflects the interests of the State and its citizens in the preservation of their cultural heritage, and State agencies are directed to cooperate with the OSA in carrying out all agency undertakings that may affect archaeological and historic properties in accordance with provisions of Minnesota Statutes 138.40; and

WHEREAS, consistent with applicable State legislation, the Minnesota Historical Society (MHS) reflects the interests of the State and its citizens in the preservation of their cultural heritage, and State agencies are directed to cooperate with the MHS in carrying out all agency undertakings that may affect historic properties in accordance with provisions of Minnesota Statutes 138.666; and

WHEREAS, Mn/DOT participated in the consultation and has been invited to execute this Programmatic Agreement; and

WHEREAS, for the purpose of Section 106 compliance for all Federal undertakings pertaining to the Federal-Aid Highway Program, the Department of the Army, Corps of Engineers, St. Paul District (Corps), will recognize the FHWA as the lead Federal agency, but will remain a signatory party to this agreement pursuant to 36 CFR 800.2(a)(2); and

WHEREAS, the OSA has authority to approve licenses for archaeological investigations on state lands pursuant to Minnesota Statutes 138.31 – 138.42 and 307.08, and grants Mn/DOT permission to conduct archaeological investigations on all lands or waters owned, leased by or subject to the paramount right of the state or its subdivisions, as well as on lands impacted by publicly-funded development projects, as needed in connection with highway projects involving Section 106 review; and

WHEREAS, FHWA and Mn/DOT are committed to the design of transportation systems that: (1) achieve a safe and efficient function appropriately placed within the Minnesota context; (2) avoid, minimize and mitigate adverse effects on historical and cultural resources; (3) recognize that investment in these historic, archaeological, and cultural resources is critical to Minnesota's continued growth and prosperity; and (4) respond to the needs of Minnesota communities; and

WHEREAS, FHWA, the Council, the OSA, the Corps, the MHS, Mn/DOT, and the SHPO aspire to engage in meaningful, long term planning for the protection of historic and archaeological properties and, toward that end, desire to: (1) develop a comprehensive and efficient process for all Section 106 undertakings; (2) simplify procedural requirements to the maximum extent possible; (3) eliminate unnecessary paperwork; (4) affirm the role of SHPO, MHS, and OSA to the extent required; (5) devote a larger percentage of time and energies to identifying transportation-related concerns that may affect historic and archaeological properties; and (6) continue creating innovative programs to address those problems; and

WHEREAS it is desirable to integrate and streamline project reviews under parallel state and federal historic preservation and environmental laws.

NOW, THEREFORE, the FHWA, Mn/DOT, the Council, the Corps, the OSA, the MHS, and the SHPO agree that the Federal-Aid-Highway Program shall be administered in accordance with the following stipulations to satisfy the FHWA Section 106 responsibility for all aspects of the program.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

1. **Applicability and Scope.** This PA sets forth the process by which FHWA, with the assistance of Mn/DOT, will meet its responsibilities under Section 106 of the NHPA and regulations set forth in 36 CFR 800 as amended adopted to implement that act. For the purposes of this PA, the definitions for terms appearing in 36 CFR 800.16(a) through (y) inclusive shall be employed whenever applicable.

(A) Applicability. This PA shall apply to all FHWA undertakings administered under its Federal-Aid Highway Program in Minnesota.

(B) Scope. The objective of this PA is to render more efficient the methods by which FHWA and Mn/DOT review individual undertakings that may affect historic properties and to establish the process by which FHWA, the Council, the SHPO, the OSA, the Corps, the MHS, and interested persons will be involved in any such review.

2. **General Requirements.** In compliance with its responsibilities under the NHPA and as a condition of its award of any assistance under the Federal-Aid Highway Program to Mn/DOT, FHWA shall require that Mn/DOT carry out the requirements of 36 CFR 800 inclusive, all applicable Council standards and guidelines, or the requirements set forth in this PA, for all FHWA undertakings. FHWA will insure that Mn/DOT observes the following requirements.

(A) Employment of Qualified Personnel. For the purpose of implementing this agreement, Mn/DOT shall continue to employ qualified professional staff who meet the requirements of 36 CFR 61, Appendix A. At a minimum, the professional staff shall consist of the Chief Archaeologist and Historian.

(B) Guidelines and Highway Program Development Process. In addition to the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68), Mn/DOT will use the Highway Project Development Process (HPDP) manual to assist in the implementation of this PA.

(C) Coordination of Project Review Among Mn/DOT Divisions, Counties, and Municipalities. Mn/DOT HPDP manual and State Aid Manual will detail procedures for Section 106 review of FHWA undertakings.

(D) Education. FHWA and Mn/DOT, in collaboration with SHPO and the OSA will provide a significant public education and interpretation component in its undertakings whenever appropriate.

(E) Training. FHWA and Mn/DOT will collaborate with SHPO and the OSA in ensuring periodic training for Mn/DOT, County, and Municipal personnel to assure compliance with Section 106 responsibilities and applicable State legislation. Creative initiatives are encouraged.

(F) Annual Evaluation. FHWA, Mn/DOT, OSA, and SHPO shall meet every year to evaluate the agreement, suggest revisions to its provisions, and to evaluate the quality of the resource identification and protection activities carried out under the agreement. After the initial period, evaluations shall take place annually, by February 15. Project reporting will be accomplished electronically through Mn/DOT's cultural resource database tracking system. If any party concludes that performance under the agreement is less than satisfactory, the parties shall consult to improve performance, and meet again within six months to evaluate improvements.

(G) Delegation. Responsibility for any findings regarding (i) determination that an undertaking exists; (ii) the potential area of an undertaking's effect; (iii) the eligibility of archaeological or historic properties to the NRHP within the project's area of effect; (iv) determinations of effect; (v) interpretation of the Secretary of the Interior's Standards for Historic Preservation Projects; (vi) conformance with the Mn/DOT HPDP manual shall rest with Mn/DOT's CRU.

(H) Innovative Programs Envisioned. To facilitate historic and archaeological preservation planning and actions, Mn/DOT will continue to promote progressive programs and activities of mutual interest to, and in consultation with, FHWA, SHPO, OSA, or other consulting parties. Examples of programs envisioned may include: (i) analysis and synthesis of past data accumulated through Mn/DOT/FHWA projects; (ii) statewide thematic or other surveys of historic properties; (iii) statewide predictive models; (iv) improved data management and access; (v) development of historic contexts and preservation priorities; (vi) identification and survey of properties considered eligible for the NRHP; (vii) consultation with Native American groups and (viii) preparation and implementation of relevant preservation or management plans.

3. **Documentation.** Documentation assembled by Mn/DOT's Cultural Resources Unit to support any Section 106 finding shall be consistent with 36 CFR 800.11. Copies of supporting documentation shall be forwarded (or will be available electronically) as generated to FHWA, SHPO and the OSA as applicable.

A. Types of Documentation. The required documentation supporting findings of effect and eligibility to the NRHP will be incorporated into Mn/DOT's electronic database system. Mn/DOT shall make available to the FHWA, SHPO and OSA copies of all identification, evaluation, treatment and data recovery reports, survey forms, digital survey information, and other relevant resource information as they are generated and as required under provisions of applicable Minnesota statutes and OSA policies.

B. GIS Systems. Current Mn/Model procedures for incorporating pertinent documentation into GIS systems will be used. Mn/DOT, SHPO, Corps, OSA and the MHS will share technology and information providing mutual access to site data, historic contexts, and other information pertaining to cultural resource sensitivity analysis and/or site predictive modeling.

4. **Requirements for Project Review by FHWA and Mn/DOT.** For all FHWA undertakings reviewed pursuant to this PA, FHWA and Mn/DOT shall observe the following requirements:

A. Determination of Undertaking and Assessment of Area of Potential Effect. Pursuant to 36 CFR 800.3 and 800.4, the Mn/DOT Cultural Resource Unit shall (i) determine whether proposed projects, activities, or programs constitute an undertaking; and (ii) establish the undertaking's area of potential effects.

B. Identifying Historic Properties. Pursuant to 36 CFR 800.4, Mn/DOT's Cultural Resources Unit shall identify historic and archaeological properties that may be affected by the undertaking and gather sufficient information to evaluate the eligibility of these properties for the NRHP. Identification of historic and archaeological properties shall follow the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716), and agency programs, including Mn/Model, Mn/DOT's statewide farmstead study, statewide historic bridge study, statewide historic roadside structures study, and others as they are developed, to meet the requirements of Section 110(a)(2) of NHPA.

C. Public Participation and Notification. Mn/DOT shall, through opportunities afforded by the project development process, use existing procedures to solicit public participation early in the project planning process and consistent with 36 CFR 800.3.

D. Evaluating Historic and Archaeological Significance. For any undertaking that may affect properties that have not been previously evaluated for eligibility to the NRHP, Mn/DOT shall apply the National Register Criteria (36 CFR 60.4), and shall make an appropriate finding regarding eligibility pursuant to 36 CFR 800.4(c). Mn/DOT shall notify FHWA and any interested person that this finding has been made and shall make available copies to SHPO of adequate documentation to support that finding for inspection by the public. Prior to any finding of eligibility or non-eligibility, Mn/DOT may consult with SHPO regarding application of the criteria contained in 36 CFR 60.4.

E. Finding of No Historic Properties Affected. If Mn/DOT finds that either there are no historic properties present or there are historic properties present but the undertaking will have no effect on them as defined in 36 CFR 800.16(i), Mn/DOT shall make a formal finding of No Historic Properties Affected.

F. Findings of No Adverse Effect. For any undertaking that includes, within the area of potential effects, listed or eligible properties that will not be adversely affected by the undertaking, as defined by the Criteria of Adverse Effect set forth in 36 CFR 800.5(a), Mn/DOT shall make a formal finding of no adverse effect and specify those conditions, if any, that shall be imposed to secure that finding. FHWA and Mn/DOT shall ensure that specified conditions are met. Mn/DOT shall notify FHWA and any interested person that

this finding of no adverse effect has been made and shall make available adequate documentation to support that finding to SHPO for inspection by the public (36 CFR 800.5(c). Prior to any finding of no adverse effect, Mn/DOT may consult with SHPO regarding application of the criteria per 36 CFR 800.3(3).

G. Finding of Adverse Effect. For any undertaking that includes, within the area of potential effects, listed or eligible properties that will or may be adversely affected by the undertaking, as defined by the Criteria of Adverse Effect set forth in 36 CFR 800.5(a), Mn/DOT shall make a formal finding of adverse effect. When a finding of adverse effect has been made, Mn/DOT shall, at a minimum, evaluate in consultation with consulting parties (per 36 CFR 800.6) alternatives to the project that would avoid any adverse effect and document them in the project files. If no such alternatives exist, Mn/DOT shall undertake all possible steps to minimize or mitigate the adverse effect, taking into account the requirements of the Secretary of the Interior's Standards for the Treatment of Historic Properties.

H. Emergency Situations. This document prescribes review processes for two classes of emergency situations. The first class exists when (1) the undertakings are operations that are responding to a disaster or emergency declared by the President or governor, and that are responding to immediate threats to life or property, or (2) that are responding to immediate threats to life or property that are declared emergencies by the U.S. Secretary of Transportation in consultation with Mn/DOT, and (3) corrective measures are initiated within 30 days after the disaster or emergency has been formally declared. Review in these emergency situations shall utilize the review process described in Section 4, but with a shortened timeframe for participation by the SHPO, consulting parties, and the general public as time permits. Written notification of the emergency action being considered shall be provided to the SHPO. This emergency notification shall include brief descriptions of the significance of the resources involved, the nature and anticipated effect of the emergency action on the resource(s), and the anticipated timeframe available for comment. The second class of emergencies as defined by immediate rescue and salvage operations conducted to preserve life or property such as necessitated by natural disaster or other catastrophic event, are exempt from the provisions of Section 106 and this Programmatic Agreement.

I. Discovery During Construction. If previously unidentified archaeological or historic sites are discovered during construction that portion of the project will stop immediately. Mn/DOT's Cultural Resources Unit will immediately contact the SHPO and OSA. No further construction, in that portion of the construction project, will proceed until the requirements of 36 CFR 800.13 have been satisfied. FHWA and Mn/DOT will consult with the SHPO, MHS and OSA, as applicable, to record, document and evaluate National Register eligibility of the site and the project's effect on the site, and to design a plan for avoiding or mitigating adverse effects on a potentially eligible site.

J. Treatment of Human Remains. In accordance with State laws that protect unmarked burials, if previously unidentified remains are discovered during construction, that portion of the project will stop immediately. The remains will be secured as found and protected by the project engineer. The project engineer will immediately consult with Mn/DOT's Cultural Resources Unit. Mn/DOT's Cultural Resources Unit will develop a reburial plan in consultation with the OSA, SHPO, FHWA, and if appropriate with Native Americans. FHWA, Mn/DOT, and the OSA will ensure that the treatment and reburial plan is fully implemented. Avoidance and preservation in place is the preferred option for treating human remains. Consistent with applicable State legislation, OSA is the lead agency for such cases.

5. Supplementary Review. This Programmatic Agreement is intended to provide for complete, thorough, and streamlined review of Federal-Aid Mn/DOT and local agency

transportation projects. It is agreed that the formal supplementary review process described below is intended for use in circumstances of significant disagreement only. For the purpose of informal consultation, the SHPO and OSA may at their discretion, consult via telephone, memo, or in a meeting with Mn/DOT's Cultural Resources Unit. If, for any undertaking, formal written comment or formal written objection, so titled, is made within 30 days by FHWA, Mn/DOT, SHPO, OSA, the Council, or any consulting party, to any findings made by Mn/DOT's Cultural Resources Unit, all parties shall consult, as appropriate. If, after consultation, agreement on federal undertakings cannot be reached regarding any such findings, any party may request the project be reviewed pursuant to the procedures identified in 36 CFR 800.7 with reference only to the subject of the dispute. The responsibility of Mn/DOT, FHWA, SHPO and OSA to carry out all actions under this agreement, other than those that are the subject of the dispute, will remain unchanged.

6. **Dispute Resolution.** Should any party to this agreement object within 30 days to any actions proposed pursuant to this agreement not covered by Section 5 (Supplementary Review), FHWA, Mn/DOT, SHPO, OSA, and the objecting party shall consult to resolve the objection. If the objection cannot be resolved, FHWA and Mn/DOT shall request comment from the Council pursuant to 36 CFR 800.7. FHWA and Mn/DOT in accordance with 36 CFR 800.7(4) will take any Council comment provided in response to such a request into account with reference only to the subject of the dispute. The responsibility of Mn/DOT, FHWA, OSA, and SHPO to carry out all actions under this agreement, other than those that are the subject of the dispute, will remain unchanged.

7. **Amendment.** Any party to this PA may terminate it by providing thirty (30) days written notice to the other parties, provided that the parties will consult during the period before termination to seek agreement on amendments or other action that would avoid termination. In the event of termination, the FHWA shall comply with 36 CFR 800 with regard to the individual undertakings covered by this PA.

8. **Duration.** This PA will be in effect for five years from the date of execution, with renewal upon agreement by all parties.

Execution and implementation of this PA evidences that the FHWA has satisfied its Section 106 responsibilities for all individual undertakings of the Federal-Aid Highway Program in Minnesota.

FEDERAL HIGHWAY ADMINISTRATION

BY: _____ Date: _____
Name and title of signer:

ADVISORY COUNCIL ON HISTORIC PRESERVATION

BY: _____ Date: _____
Name and title of signer:

MINNESOTA STATE HISTORIC PRESERVATION OFFICER

BY: _____ Date: _____

Name and title of signer:

CORPS OF ENGINEERS

BY: _____ Date: _____
Name and title of signer:

MINNESOTA DEPARTMENT OF TRANSPORTATION

BY: _____ Date: _____
Name and title of signer:

MINNESOTA OFFICE OF THE STATE ARCHAEOLOGIST

BY: _____ Date: _____
Name and title of signer:

MINNESOTA HISTORICAL SOCIETY

BY: _____ Date: _____
Name and title of signer: