

**Demographic, Technological, and
Legislative Changes:
Their Implications for State DOTs**

**Technical Appendix
Report 93.5a**

**Washington State Transportation Commission
Innovations Unit**

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Abstract

Maintenance and improvement of the nation's transportation infrastructure is an ongoing challenge. Population growth, increased reliance on the personal automobile, the "graying" of America, suburban sprawl, and the need to safeguard the environment are among the many factors that add to its complexity.

The net result is that the landscape against which policy makers must sift and weigh competing claims on transportation resources is changing. That the organizational structures of state departments of transportation (DOTs) are changing in response is obvious. The real question is "Exactly how and in response to which issues?" This research project sought to explore that question by surveying state departments of transportation directly. Surveys were mailed to all 50 state DOTs and to transportation agencies in the District of Columbia and Puerto Rico. Forty-three state DOTs responded; this technical appendix is a record of their responses.

Of the issue areas covered in the survey, the Intermodal Surface Transportation Efficiency Act was found to have had the greatest impact on the organization of state DOTs. Other important issue areas included the following: The Clean Air Act Amendments, the concept and practice of transportation demand management, intelligent vehicle-highway systems, the linkage between transportation planning and land use management, the need to develop alternative funding sources, and transit improvements. Respondents also indicated that the need for high-level technical skills, including the ability to approach problems from an intermodal perspective, to interpret regulatory policy, and to manage complex financial systems is, and will continue to be, a pressing concern.

Acknowledgments

The authors gratefully acknowledge the support of the Washington State Transportation Commission, and the many people and organizations in the public and private sectors who provided us with information. Particular thanks go to the state departments of transportation that participated in our survey. Valuable contributions to the final preparation of this report were made by the staff of the Washington State Transportation Center (TRAC) at the University of Washington.

The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Washington State Transportation Commission or the Washington State Department of Transportation. This report does not constitute a standard, specification, or regulation.

Instructions for this Survey

The Washington State Transportation Commission is studying organizational changes that are being recommended, approved, or implemented by state DOTs in response to recent transportation issues.

This survey briefly describes each issue, then asks a series of questions about your organization. To help you answer quickly, the series of questions for all issues are identical. Most questions just require you to select the appropriate answer, but some do ask for written comments. (Please use the back of the page if you run out of space.)

Examples of organizational change include the following:

- Allocating additional personnel or funding to an existing office.
- Changing the responsibilities of existing personnel and offices.
- Forming a new office.
- Reorganizing offices or divisions to address a combination of issues.
- Changing lines of communication or authority within departments or divisions.
- Changing lines of communication and coordination with other governmental agencies.
- Combining responsibility or authority for transportation tasks with other parties such as private interests or metropolitan governments.

Once you have completed the questionnaire, please return it to us by **July 19**, using the pre-addressed label.

To receive a copy of the final report, please fill in your return address at the end of the questionnaire. We would also greatly appreciate a telephone number where we can contact you if needed.

The Washington State Transportation Commission greatly appreciates your assistance, and thanks you in advance for your time and participation in this project.

**Washington State Transportation Commission
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Olympia, WA 98504-7308**

Clean Air Act Amendments of 1990

On November 15, 1990, President Bush signed the Clean Air Act Amendments. What effect, if any, has the passage of this legislation had or will it have on the organization of your DOT?

1. Has your DOT considered this issue? Please check the appropriate answer.
_____ (a) NO Ignore the rest of the questions on this page and move on to the next issue.
_____ (b) YES Go to question 2.
2. Has your DOT recommended, approved, or implemented any organizational changes in response to this issue?
_____ (a) NO Go to question 3.
_____ (b) YES Go to question 4.
3. Why has your DOT not recommended, approved, or implemented any organizational change in response to this issue? Please check the reason, then ignore the rest of the questions on this page and move on to the next issue.
_____ (a) The effect on the organization is not significant enough to warrant a change.
_____ (b) There is a lack of available funding.
_____ (c) The present organization already addresses this issue. Please specify below.
_____ (d) Other reasons. Please specify below.

Question 4 asks about changes that have been recommended, while question 5 asks about changes that have actually been approved or implemented. **NOTE:** Either question or both questions may apply. For example, resources recommended to address this issue may have been significantly larger than those actually approved or implemented.

4. What organizational changes has your DOT recommended in response to this issue? Please check all that apply and fill in the blanks where appropriate.
_____ (a) Assign responsibility for this issue to an existing employee, office, or division without allocating additional resources.
_____ (b) Dedicate new or additional personnel to this issue—Number of people _____.
_____ (c) Allocate new or increased funding for this issue—\$_____ per year.
_____ (d) Recommend other organizational changes to address this issue. Please give details below.
5. What organizational changes has your DOT approved or implemented in response to this issue? Please check all responses that apply and fill in the blanks where appropriate.
_____ (a) Assigned responsibility for this issue to an existing employee, office, or division without allocating extra resources.
_____ (b) Dedicated new or additional personnel to this issue—Number of people _____.
_____ (c) Allocated new or increased funding for this issue—\$_____ per year.
_____ (d) Approved or implemented other organizational changes to address this issue. Please give details below.
6. What were the main reasons for any of the recommended, approved, or implemented changes mentioned?

Clean Air

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments.
Alabama	60		√		√						2		√		1		√	4e. Re-assigned air quality responsibilities from urban planning to environmental section. 5e. Re-assigned air quality responsibilities (for urban areas) from Urban Planning Bureau to environmental section. 6. Changes were made to better facilitate compliance with CAAA.
Alaska	67		√	√				√										
Arizona	87		√		√										2	100K		
Arkansas	53		√	√		√												
California	92		√		√									√				6. Assigned specific responsibility and accountability.
Colorado	82		√		√										1	60K		6. To address impacts of the CAAA.

Clean Air

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Connecticut	79		√		√									√	7	1.21M	√	<p>5e. Overall responsibility was assigned to an existing Office with 2 added employees and \$100,000. A new section consisting of 5 planners (\$410,000) was set up to deal with the ECO program. Added MPO funds (\$700,000) have been added for ECO programs. We anticipate additional rideshare brokerage funding to be required. Litigation costs have not been estimated, but will be significant.</p> <p>6. The entire state has been designated non-attainment (serious/severe) for ozone. We are assisting the state EPA in development of the SIP and we have been assigned the task of implementing the ECO program. FHWA, ConnDOT and 3 MPOs are defendants in a suit filed by environmental groups. The suit concerns the conformity provisions.</p>
DC.																		
Delaware	73		√		√													5e. Department reorganization is being driven by CAAA and ISTEA.
Florida	84		√	√				√										3e. Florida law already required consideration of air quality in statewide transportation planning, and the department was already assisting each non-attainment metropolitan area with their air quality modeling. The additional requirements of the CAAA are being absorbed without significant structural changes or personnel increases.
Georgia																		
Hawaii	89		√	√		√												3e. Hawaii is an attainment area.
Idaho	57		√	√				√										3e. The issues have been addressed by the existing air quality staff within the existing environmental section of the department.

Clean Air

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Illinois	84		√		√						3				1			
Indiana	64		√		√						2		√		2		√	<p>4e. Consolidate environmental impact analysis, environmental issues for operations, and clean air into one division of environment.</p> <p>5e. As above in 4.</p> <p>6. Stronger voice for environmental policy in the agency.</p>
Iowa	60		√	√				√										<p>3e. Our project planning (including environmental analysis) staff and advanced planning (with MPOs) already deal adequately with Iowa's issues. There are no non-attainment areas in Iowa. We work with and are assisted in that by the state's Dept. of Natural Resources.</p>
Kansas	69		√	√				√										<p>3e. The issue is addressed as a part of our transportation planning activities.</p>
Kentucky																		
Louisiana	68		√	√				√										
Maine	44		√		√						2	100K	√					<p>4e. Re-organization of the Bureau of Planning to include a special CMAQ position with appropriate supervision.</p> <p>6. In order to address the requirements of ISTEA and the CAAA.</p>

Clean Air																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Maryland	81		√		√						14	800K			14	800K	√	5e. Hired new personnel to conduct data evaluation, computer modeling, enhanced vehicle emissions inspection program implementation. Provided grant to hire state personnel to implement Employee commute option program. Hired air policy/planning coordinator. NOTE: Total expenses for implementing air quality requirements (prior and new) \$2.5 million per year. The \$800,000 increase in funding will begin in FY 94 as a result of the CAAA 1990.
Massachusetts	84		√		√						2				2			5e. To coordinate responses.
Michigan	70		√		√					√			√	√			√	5e. Consolidate planning responsibility in one section. 6. Organizational and communications efficiency.
Minnesota	69		√	√				√										3e. Existing staff in Environmental Services, Central Office's Highway Programs, and Metro Division planning have all continued work on air quality and programs at an increased level. 6. Existing staff were already performing transportation air quality functions. This has increased in scope & level of involvement. In addition, a Minnesota interagency air quality/transportation planning task force has been established with significant Mn/DOT representation. Mn/DOT staff have added task force participation to existing activities.
Mississippi	47		√		√					√				√				6. The entire state of Miss is "non attainment," conformity procedures of 23-CFR770 do not apply.

Clean Air

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Missouri	68		√		√						4	50K	√		4	50K	√	4e. Increased involvement of several planning division employees and added 1 full time employee to planning division. Increased involvement of legal division. 5e. Approved items in #4. 6. New area that the department lacked qualified personnel.
Montana	52		√	√		√				√				√				6. Taking advantage of existing resources.
Nevada																		
Nebraska	66		√	√				√										3e. The project development division of the Department of Roads addresses this issue. Also, Nebraska has no non-attainment areas.
New Hampshire	51		√		√										1	40K		6. To help address conformity issue.
New Jersey	89		√		√						20		√	√				4e. New Bureau of employee trip deduction. 6. CAAA mandates for severe non compliance.
New Mexico																		
New York	84		√		√						5	200K		√				6. Need to develop and implement acceptable implementation plans and coordinate with the state EPA.

Clean Air																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
North Carolina	50		√	√				√										3e. The statewide planning branch of NCDOT has responsibility for carrying out the technical analysis for conformity analysis for transportation plans and programs in non-attainment areas. Coordination is carried out with the state Air Quality Agency and the lead planning organizations in the urban areas.
North Dakota	53		√	√					√									3e. We are waiting for final rules and regulations. 6. At this time we have not taken any action or made any organizational changes. Any changes that may occur will depend on final rules.
Ohio	74		√		√							1	√	√	1		√	4e. Presently reviewing needs of organizational structure to meet mandates, including data gathering and modeling. 5e. Created Office of Environmental Services and Planning (from prior separate bureaus) under Assistant Director, Chief Engineer to recognize higher level of responsibilities. 6. Meet/implement mandates of CAAA. Planning and congestion concerns.
Oklahoma	67		√	√					√									3e. Management is currently reviewing organizational changes and realignment of all functional areas.
Oregon	70		√		√					√				√				
Pennsylvania	69		√		√											2M	√	5e. The department has established a special task force of employees excused from other duties for a minimum of 1 year. This task force reports directly to the secretary. With consultant assistance through open end research agreement, the task force's charge is to develop plans and programs to comply with CAAA. Funding for contract is HPR funds. 6. Focus resources on CAAA requirements.

Clean Air																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Puerto Rico																		
Rhode Island																		
South Carolina																		
South Dakota	50	√																
Tennessee																		
Texas	80		√	√				√										3e. The planning and the environmental divisions of the department adequately cover these issues. 6. Increased need for air quality analysis necessary for TIP conformity; implementing various EPA regulations; and working on SIP development.
Utah	87		√		√						1			√				6. Increased work load, need for increased coordination with Air Quality agency and with MPOs - Extra position not implemented because of lack of funding.
Vermont	32		√	√				√										3e. Vermont DOT has sufficient capacity within its Planning Division to deal with the issues. Moreover, we have a cooperative relationship with our natural resources agency. Lastly, Vermont is in attainment with the NAAQS.
Virginia	69		√	√					√									3e. Increased workload and diversified responsibilities resulting from CAAA 1990 are currently under study. Recommendations will be developed for short and long term needs.

Clean Air

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Washington	76		√	√				√										
West Virginia	36		√	√		√												
Wisconsin	65		√		√						2.5				2.5			6. In order to participate in development of state air quality plans (more fully) and to address concerns of the environmental community.
Wyoming	65		√	√		√												3e. If the STAPPA / ALAPCO recommendations are implemented we will have to rethink the issue.

ISTEA

On December 18, 1991, President Bush signed the Intermodal Surface Transportation Efficiency Act (ISTEA), which authorized \$151 billion over six years for transportation. ISTEA offers more flexibility in the allocation of funds but also attaches new conditions on spending. What effect, if any, has ISTEA had or will it have on the organization of your DOT?

1. Has your DOT considered this issue? Please check the appropriate answer.
_____ (a) NO Ignore the rest of the questions on this page and move on to the next issue.
_____ (b) YES Go to question 2.
2. Has your DOT recommended, approved, or implemented any organizational changes in response to this issue?
_____ (a) NO Go to question 3.
_____ (b) YES Go to question 4.
3. Why has your DOT not recommended, approved, or implemented any organizational change in response to this issue? Please check the reason, then ignore the rest of the questions on this page and move on to the next issue.
_____ (a) The effect on the organization is not significant enough to warrant a change.
_____ (b) There is a lack of available funding.
_____ (c) The present organization already addresses this issue. Please specify below.
_____ (d) Other reasons. Please specify below.

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4. What organizational changes has your DOT recommended in response to this issue? Please check all that apply and fill in the blanks where appropriate.
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_____ (b) Dedicate new or additional personnel to this issue—Number of people_____.
_____ (c) Allocate new or increased funding for this issue—\$_____ per year.
_____ (d) Recommend other organizational changes to address this issue. Please give details below.
5. What organizational changes has your DOT approved or implemented in response to this issue? Please check all responses that apply and fill in the blanks where appropriate.
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_____ (b) Dedicated new or additional personnel to this issue—Number of people_____.
_____ (c) Allocated new or increased funding for this issue—\$_____ per year.
_____ (d) Approved or implemented other organizational changes to address this issue. Please give details below.
6. What were the main reasons for any of the recommended, approved, or implemented changes mentioned?

Intermodal Surface Transportation Efficiency Act (ISTEA)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Delaware	73		√		√													5e. Departmental changes are being driven by the CAAA and ISTEA.
Florida			√	√				√										3e. Florida law already required development of a statewide long range plan that is developed in cooperation with MPOs. The additional requirements of ISTEA are being absorbed without significant structural changes or personnel increases (although there is increased consultant use).
Georgia																		
Hawaii	89		√	√					√									3e. We have deferred organizational changes, pending the receipt of more information and guidelines specifying the requirements of ISTEA and its management system.
Idaho	57		√		√										1		√	5e. Appointed a bicycle/pedestrian coordinator. Elevated environmental unit to section status. 6. Required by ISTEA. Give greater emphasis to environment.
Illinois	84		√		√					√	1			√	1			6. Budget and head count restrictions caused responsibilities to be assigned to existing personnel and units.
Indiana	64		√		√												√	5e. Aligned planning, inter-modal transportation, management systems, and programming into one organization. 6. More focus on the inter-modal planning, programming, management systems work flow.

Intermodal Surface Transportation Efficiency Act (ISTEA)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Iowa	60		√		√					√	1	1		√				<p>4e. These (b,c) were requested through the legislative budget process, but were not provided due to reductions in overall state government.</p> <p>6. Better internal coordination and use of available resources; Policy consistency among various program functions.</p>
Kansas	69		√		√						6			√	1			<p>4e. Recommended 1 new position for the statewide long-range plan and 5 new positions to implement the new requirements for management systems. Recommended reassigning duties of an existing employee to become bicycle coordinator.</p> <p>5e. A new position was assigned to coordinate and develop the statewide long-range transportation plan. Additionally, an existing employee was reassigned duties to become the bicycle coordinator.</p>
Kentucky																		
Louisiana	68		√		√						30				13			
Maine	44		√		√								√					<p>4e. Redirect current personnel to the areas of planning and environment to meet the federal requirements. This will also result in a redirection of resources to these areas.</p> <p>6. To address the increased requirements of ISTEA and CAAA as well as the state's new "Sensible Transportation Policy Act."</p>

Intermodal Surface Transportation Efficiency Act (ISTEA)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Maryland	81		√		√									√			√	<p>5e. Department formed ISTEA implementation task force consisting of representatives from all modes of transportation. Also special working groups were formed within modes to address specific areas of legislation (i.e., STP allocation of funds, transportation enhancements).</p> <p>6. Major change from previous law required attention of special work groups to help implement change such as taking advantage of new flexibility provisions. Maryland DOT was able to implement change through work groups because of department's multi-modal structure.</p>
Massachusetts	84		√		√						10		√		10		√	<p>5e. Reassigned planning and capital offices from highway department and other operating agencies to secretary of transportation office. Established statewide planning unit. Established positions for bicycle, open space, and inter modal planning.</p> <p>6. To deal with additional responsibilities of ISTEA.</p>
Michigan	70		√		√					√				√				<p>6. Need to address ISTEA, but cannot increase staff at this time.</p>
Minnesota	69		√		√					√			√	√			√	<p>4e. Decentralize planning & program functions to districts. See attached "Directions for Transportation Planning and ISTEA Implementation" newsletter.</p> <p>5e. Restructured central management. Central management to be broad, more diverse, strategic and create a framework for Mn/DOT. Decentralize operations to implement and work within the framework.</p> <p>6. Change in focus from "building a system" to "operate and improve" a system that receives more decentralized management. Quality improvement training allows teams to participate in problem solving.</p>

Intermodal Surface Transportation Efficiency Act (ISTEA)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Mississippi	47		√	√			√											
Missouri	68		√		√					√	10	600K	√	√	10	600K	√	<p>5e. Planning Division has added 1 assistant division engineer, 2 inter-modal planners, 1 air quality planner, 4 engineer positions. Other divisions have added engineers and legal staff.</p> <p>6. Need additional man hours to accomplish activities required by ISTEA.</p>
Montana	52		√		√						12						√	<p>5e. Centralized all planning functions in a single division.</p> <p>6. Improved coordination, communication, and efficiency.</p>
Nevada																		
Nebraska	66		√		√										1	50K		<p>5e. One management level individual was dedicated to the scenic enhancement program and IVHS. Additional changes may be necessary. A new division, combining project programming and project scheduling was created. Several personnel shifts were made to improve the planning effort.</p> <p>6. These are new programs of an interest to a range of groups. A focal point for these groups was needed to illustrate department's dedication to these programs.</p>
New Hampshire	51		√		√					√				√				

Intermodal Surface Transportation Efficiency Act (ISTEA)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
New Jersey	89		√		√					√	10M			√		10M	√	5e. Reorganized and created a division to focus on data demands for management systems. 6. Management systems, long range plan, MPO coordination requirements.
New Mexico																		
New York	84		√		√						16							6. Need to enhance interactions with MPOs.
North Carolina	50		√		√			√										3e. Office of Programming has an existing Federal Aid Administration Unit.
North Dakota	53		√		√						1				1			4e. Additional person may be added. 6. Additional staff time was needed to develop state wide plan: Management systems.
Ohio	74		√		√						2				2		√	4e. Significant needs in our Bureau of Planning which is presently restructuring and may require additional staff. 5e. 1. Created ISTEA policy committee comprised of senior management staff to set and implement policy. 2. Created Office of Environmental Services and Planning (from prior separate bureaus) under assistant director. Chief Engineer to recognize higher level of responsibility and added planning staff. 6. Need/implement mandates of ISTEA: change over to new federal funding structure; create STIP/TIP; define criteria and allocate Enhancement program; de-fine/implement management systems.

Intermodal Surface Transportation Efficiency Act (ISTEA)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Texas	80		√		√						6		√		6		√	<p>4e. A larger staff to do programming and scheduling.</p> <p>5e. Fundamental change in the way that the department deals with MPOs, especially TMAs.</p> <p>6. Increased workload and legislative mandate.</p>
Utah	87		√		√						8				8			6. Increased workload.
Vermont	32		√		√								√				√	<p>5e. In Anticipation of ISTEA the Vermont DOT created a planning division (formerly part of engineering) and began to recruit individuals with community planning background and experience.</p> <p>6. State legislative impetus, coupled with an anticipated response to ISTEA.</p>
Virginia	69		√		√								√	√	2		√	<p>4e. The most significant organizational changes are expected to be implemented as a result of the Management Systems requirement. Final regulations not yet published so we do not know the full extent of compliance. However, we have already invited in-house initiatives in the pavement management area and contracted with consultants to develop a new for traffic monitoring system. In short, ISTEA Management System are expected to require Virginia DOT to spend significantly more funds and human resources. Do not presently have the in house staff and equipment to meet ISTEA requirements.</p> <p>5e. Focused staff efforts for services to MPOs.</p> <p>6. Increased federal requirements of ISTEA for planning and grant administration.</p>

Intermodal Surface Transportation Efficiency Act (ISTEA)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Washington	76		√		√						8			√	2	400K		<p>5e. Originally a team of four persons was assembled to provide recommendations on how to implement ISTEA requirements. After 15 months the team continued to work together on a less formal basis. Each team member worked within his/her division on implementation issues. A monthly meeting for discussion and adoption of recommendations from the team is continuing. An ISTEA steering committee was organized containing representatives from the WSDOT as well as many outside transportation agencies and interests. WSDOT provided funding (\$250,000) for that steering committee to develop a handbook describing the process to distribute the funds.</p> <p>6. ISTEA requirements were a dramatic change in the way WSDOT did business. Flexibility came with numerous requirements for coordination and cooperation with outside agencies. The ISTEA approach allowed a few people to concentrate their efforts on the integration of these new requirements into WSDOT.</p>
West Virginia	36		√		√								√	√			√	
Wisconsin	65		√		√					√	6			√	6			<p>5e. In planning alone.</p> <p>6. Wider range of activities required under ISTEA.</p>
Wyoming	65		√		√									√	3		√	<p>5e. More personnel will be assigned as management systems are developed. Organizational changes primarily in the planning and local government coordination area to address the additional planning requirements and enhancement programs.</p> <p>6. Increased mandates for data collection, public and local government involvement and the management system.</p>

New Transportation Technologies

During the past few years, development of Intelligent Vehicle Highway Systems (IVHS) has advanced rapidly. What effect, if any, have new transportation technologies like IVHS had or will they have on the organization of your DOT?

1. Has your DOT considered this issue? Please check the appropriate answer.
_____ (a) NO Ignore the rest of the questions on this page and move on to the next issue.
_____ (b) YES Go to question 2.
2. Has your DOT recommended, approved, or implemented any organizational changes in response to this issue?
_____ (a) NO Go to question 3.
_____ (b) YES Go to question 4.
3. Why has your DOT not recommended, approved, or implemented any organizational change in response to this issue? Please check the reason, then ignore the rest of the questions on this page and move on to the next issue.
_____ (a) The effect on the organization is not significant enough to warrant a change.
_____ (b) There is a lack of available funding.
_____ (c) The present organization already addresses this issue. Please specify below.
_____ (d) Other reasons. Please specify below.

Question 4 asks about changes that have been recommended, while question 5 asks about changes that have actually been approved or implemented. NOTE: Either question or both questions may apply. For example, resources recommended to address this issue may have been significantly larger than those actually approved or implemented.

4. What organizational changes has your DOT recommended in response to this issue? Please check all that apply and fill in the blanks where appropriate.
_____ (a) Assign responsibility for this issue to an existing employee, office, or division without allocating additional resources.
_____ (b) Dedicate new or additional personnel to this issue—Number of people_____.
_____ (c) Allocate new or increased funding for this issue—\$_____ per year.
_____ (d) Recommend other organizational changes to address this issue. Please give details below.
5. What organizational changes has your DOT approved or implemented in response to this issue? Please check all responses that apply and fill in the blanks where appropriate.
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_____ (c) Allocated new or increased funding for this issue—\$_____ per year.
_____ (d) Approved or implemented other organizational changes to address this issue. Please give details below.
6. What were the main reasons for any of the recommended, approved, or implemented changes mentioned?

New Transportation Technologies																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Alabama	60		√		√					√				√				6. Recommendation from FHWA Alabama Division Office. Advanced planning for congestion management system.
Alaska	67		√	√		√												
Arizona	87		√		√									√				
Arkansas	53		√	√		√												
California	92		√		√						1				1			
Colorado	82		√		√								√		12	1M		<p>4e. CDOT has recommended building a traffic operations center (TOC) which is under final design now. It should be operational in late 1996. The interim TOC will form the base for the permanent TOC. The permanent TOC will require 12 new positions initially and 7 more in its first 3-5 years of operation. TOC cost = \$8 million.</p> <p>5e. In FY 93, CDOT created 2 positions for IVHS in Denver region's traffic section. In FY93, CDOT established an IVHS operations branch in HQ to direct multi regional and statewide IVHS activities. In FY94, added 12 positions to the IVHS operations branch to implement an interim TOC.</p> <p>6. CDOT is a decentralized organization with most functions assigned to our regional offices but for items fully in their region. We are centralizing the multi-regional activities of IVHS under HQ IVHS Operations Branch such as the TOC. The Regions will still operate those IVHS activities in their own regions that do not cross region boundaries. Some regional staff will be located in the TOC.</p>

New Transportation Technologies

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Connecticut	79		√		√						1	1	√		1	1	√	5e. A. Provide a new office with responsibility for IVHS, freeway management, etc. B. Provide a "Strategic Information Committee" with oversight responsibility for new technology.
D.C.																		
Delaware	DID NOT REPLY TO THIS PART OF THE SURVEY																	
Florida	84		√	√				√										3e. Florida has been addressing this issue for a number of years.
Georgia																		
Hawaii	89		√	√				√										3e. Pursuit of IVHS has been mainly in our metropolitan area of Honolulu, under the auspices of the MPO. Investigation work has been going on but on a preliminary scale, where the state and county agencies have been participating under their existing structure.
Idaho	57		√	√		√												
Illinois	84		√		√						4				3			6. Illinois DOT has established an IVHS section.
Indiana	64		√	√		√		√										3e. We want to look at IVHS issues as an alternative to added capacity and incorporate IVHS solutions in our current processes.

New Transportation Technologies																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Iowa	60		√		√					√		1						5e. Research and Technology transfer support staff have been substantially reduced during a reduction in force program. As a result, to expand emphasis in this area, we have developed a new partnership with the Transportation Center at Iowa State University. They are managing many projects under contract with the department. We are also jointly developing partnerships with the private sector (several large technology-oriented companies) and the "IVHS Enterprise" effort.
Kansas	69		√		√					√		50K		√		50K		5e. 1 year FHWA grant. 6. KDOT has taken a lead role in an interagency group that is looking at all areas of motor carrier regulation as well as IVHS applications in that area. This effort is spurring change in other state agencies as well as KDOT.
Kentucky																		
Louisiana	68		√	√														
Maine	44		√		√	√												3e. The level of traffic densities in the state of Maine do not reflect the need for a significant IVHS effort. 6. To assure maximum use of new technologies in the state that would be productive, low cost, energy efficient solutions to transportation problems.
Maryland	81		√		√									√			√	5e. Utilized existing human resources to form IVHS unit. In process of constructing new traffic operations center. Participating in multi-state IVHS corridor program. 6. To take advantage of new Technology that will maximize efficient use of existing road capacity.

New Transportation Technologies																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Wisconsin	65		√		√						1							4e. One now more expected later. 6. Clearly defined responsibility. Recognize the importance and future of IVHS
Wyoming	65		√		√									√		50K		6. Beginning implementation of IVHS/CRO.

Increased Interest in High Speed Ground Transportation

Tilting train technology can increase speeds on some existing tracks to 150 mph. Magnetic levitation allows trains to travel at speeds of up to 300 mph. Several states are considering high speed rail options. What effect have developments in high speed rail in your state had or will they have on the organization of your DOT?

1. Has your DOT considered this issue? Please check the appropriate answer.
 (a) NO Ignore the rest of the questions on this page and move on to the next issue.
 (b) YES Go to question 2.
2. Has your DOT recommended, approved, or implemented any organizational changes in response to this issue?
 (a) NO Go to question 3.
 (b) YES Go to question 4.
3. Why has your DOT not recommended, approved, or implemented any organizational change in response to this issue? Please check the reason, then ignore the rest of the questions on this page and move on to the next issue.
 (a) The effect on the organization is not significant enough to warrant a change.
 (b) There is a lack of available funding.
 (c) The present organization already addresses this issue. Please specify below.
 (d) Other reasons. Please specify below.

Question 4 asks about changes that have been recommended, while question 5 asks about changes that have actually been approved or implemented. NOTE: Either question or both questions may apply. For example, resources recommended to address this issue may have been significantly larger than those actually approved or implemented.

4. What organizational changes has your DOT recommended in response to this issue? Please check all that apply and fill in the blanks where appropriate.
 (a) Assign responsibility for this issue to an existing employee, office, or division without allocating additional resources.
 (b) Dedicate new or additional personnel to this issue—Number of people _____.
 (c) Allocate new or increased funding for this issue—\$_____ per year.
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 (d) Approved or implemented other organizational changes to address this issue. Please give details below.
6. What were the main reasons for any of the recommended, approved, or implemented changes mentioned?

Transportation Demand Management (TDM)

TDM discourages the use of single-occupant vehicles (SOVs) by increasing the direct cost of SOVs relative to high-occupancy vehicles. One example: Commute Trip Reduction laws, which require employers to reduce their employees' use of SOVs. What effect, if any, have developments in TDM measures had or will they have on the organization of your DOT?

1. Has your DOT considered this issue? Please check the appropriate answer.
 (a) NO Ignore the rest of the questions on this page and move on to the next issue.
 (b) YES Go to question 2.
2. Has your DOT recommended, approved, or implemented any organizational changes in response to this issue?
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 (d) Approved or implemented other organizational changes to address this issue. Please give details below.
6. What were the main reasons for any of the recommended, approved, or implemented changes mentioned?

Transportation Demand Management (TDM)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Alabama	60		√		√									√				6. This will be one area for serious consideration in developing of a Congestion Management System .
Alaska	67		√	√		√												
Arizona	87		√	√				√										
Arkansas	53		√	√		√												
California	92		√	√				√										3e. We have an Office of Traffic Improvement - created in 1989 to address TDM and TSM.
Colorado	82		√		√											100K		6. New legislation - ISTEA and CAAA.
Connecticut	79		√	√				√										3e. ConnDOT has actively pursued these strategies for more than 20 years. The only recent change involves the ECO program required in severe non-attainment areas by the CAAA. These original changes are covered in that section of the questionnaire.
D.C.																		
Delaware	DID NOT RESPOND TO THIS PART OF THE SURVEY																	
Florida	84		√	√				√										3e. Florida has been addressing this issue for a number of years. (In a rapid growth state such as Florida, TDM is an integral part of growth management).

Transportation Demand Management (TDM)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Missouri	68		√		√					√				√			√	5e. Added responsibility to existing position of planning and transportation division. 6. Needed designated person to follow this issue.
Montana	52		√	√		√												
Nevada																		
Nebraska	66	√																
New Hampshire	51		√	√				√										
New Jersey	89		√		√						20			√				6. State and federal mandates, extreme congestion, air quality problems.
New Mexico																		
New York	84		√		√										10	600K		6. The expansion of the INFORM system on Long Is, the increased activity of TRANSCOM, and a general focus on this approach lead to expanding investments which are expected to grow in future years.
North Carolina	50		√	√				√										3e. Responsibility assigned to existing staff prior to any recent changes.

Transportation Demand Management (TDM)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
North Dakota	53	√																
Ohio	74		√		√						1				1			5e. Created a Congestion Management Coordinator to develop a congestion management system. 6. The need to address congestion management system.
Oklahoma	67	√																
Oregon	70		√	√			√						√					3e. Funding is limited, and the department has not yet been willing to reallocate resources from other activities to beef up the current TDM efforts. 4e. Staff has proposed increased levels of activity. There is interest but no firm support for these changes. 5e. The department has identified new TDM related goals for the fiscal year and assigned responsibility for meeting those goals to specific organizational units of the DOT. 6. Recommended changes by staff would emphasize ODOT's state wide role in managing more effectively the state transportation system. Department goals are directed at more internal change.
Pennsylvania	69		√		√												√	5e. The department has established a special task force excused from other duties for minimum of 1 year. The main duty of the group is to develop plans and programs to comply with CAAA of 1990, including TDM issues. 6. To focus resources on CAAA requirements.

Transportation Demand Management (TDM)

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Puerto Rico																		
Rhode Island																		
South Carolina																		
South Dakota	50	√																
Tennessee																		
Texas	80		√	√					√									3e. TxDOT is presently studying the issue.
Utah	87		√	√		√												
Vermont	32		√	√					√									3e. We are beginning to discuss the issue with our sole MPO.
Virginia	69		√		√						1	1.1M		√	1	1.35M	√	5e. We have reorganized the department; partly to assign staff to address TDM issues. 6. Compliance with CAAA OF 1990, improve air quality, Governor's Energy Plan, ISTEA, and reduced congestion on the highways.

Congestion Pricing

The cost of providing peak-hour capacity on the road network has focused renewed interest on congestion pricing. By allowing toll road facilities on some federally funded highways, ISTEA legislation has recognized the role that congestion pricing may play. What effect, if any, has the increasing interest in congestion pricing had or will it have on your DOT?

1. Has your DOT considered this issue? Please check the appropriate answer.
 (a) NO Ignore the rest of the questions on this page and move on to the next issue.
 (b) YES Go to question 2.
2. Has your DOT recommended, approved, or implemented any organizational changes in response to this issue?
 (a) NO Go to question 3.
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3. Why has your DOT not recommended, approved, or implemented any organizational change in response to this issue? Please check the reason, then ignore the rest of the questions on this page and move on to the next issue.
 (a) The effect on the organization is not significant enough to warrant a change.
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 (c) The present organization already addresses this issue. Please specify below.
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4. What organizational changes has your DOT recommended in response to this issue? Please check all that apply and fill in the blanks where appropriate.
 (a) Assign responsibility for this issue to an existing employee, office, or division without allocating additional resources.
 (b) Dedicate new or additional personnel to this issue—Number of people _____.
 (c) Allocate new or increased funding for this issue—\$_____ per year.
 (d) Recommend other organizational changes to address this issue. Please give details below.
5. What organizational changes has your DOT approved or implemented in response to this issue? Please check all responses that apply and fill in the blanks where appropriate.
 (a) Assigned responsibility for this issue to an existing employee, office, or division without allocating extra resources.
 (b) Dedicated new or additional personnel to this issue—Number of people _____.
 (c) Allocated new or increased funding for this issue—\$_____ per year.
 (d) Approved or implemented other organizational changes to address this issue. Please give details below.
6. What were the main reasons for any of the recommended, approved, or implemented changes mentioned?

CONGESTION PRICING

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Georgia																		
Hawaii	89		√	√					√									3e. While we have studied congestion pricing measures we have not opted to implement any of these measures at this time.
Idaho	57	√																
Illinois	84	√																
Indiana	64	√																
Iowa	60	√																
Kansas	69	√																
Kentucky																		
Louisiana	68	√																
Maine	44	√																3e. State's only toll road is not part of state government.

CONGESTION PRICING

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Maryland	81		√	√				√										3e. The MDOT organization includes the Maryland Transportation Authority which is responsible for all toll facilities within Maryland.
Massachusetts	84		√	√					√									3e. No identified project under agency jurisdiction at present. Actions will come from other units (state wide planning, IVHS).
Michigan	70		√	√					√									3e. The Michigan State Transportation Commission presently does not favor additional tolled or surcharge-priced facilities, except in unusual circumstances.
Minnesota	69		√	√		√	√	√										
Mississippi	47	√																
Missouri	68									√				√				
Montana	52	√																
Nevada																		
Nebraska	66	√																
New Hampshire	51		√	√					√									3e. Early phase of study.

CONGESTION PRICING

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
New Jersey	89		√	√		√		√										
New Mexico																		
New York	84		√	√					√									3e. Enough has not been evaluated about this issue to allow the department to reach conclusions about organizational changes at this time.
North Carolina	50		√	√		√												
North Dakota	53	√																
Ohio	74		√	√					√									3e. Ohio's congestion is such that no serious discussions about congestion pricing has occurred. 5e. CP is one of the many future TDM strategies that will be considered for future use.
Oklahoma	67	√																
Oregon	70		√		√									√			√	5e. Authorized the use of \$50,000 of federal HPR funds for outside study of congestion pricing (economic, policy issues, implementation concerns). 6. A) Transportation Commission interest in topic. B) Regional interest (Portland MPO) and federal pilot project application.

Increasing Interest in Transit to Preserve Mobility in Urban Areas

More urbanized areas are investigating the option to build or extend transit systems to preserve mobility in congested areas. What effect, if any, have developments in transit had or will they have on the organization of your DOT?

1. Has your DOT considered this issue? Please check the appropriate answer.
 (a) NO Ignore the rest of the questions on this page and move on to the next issue.
 (b) YES Go to question 2.
2. Has your DOT recommended, approved, or implemented any organizational changes in response to this issue?
 (a) NO Go to question 3.
 (b) YES Go to question 4.
3. Why has your DOT not recommended, approved, or implemented any organizational change in response to this issue? Please check the reason, then ignore the rest of the questions on this page and move on to the next issue.
 (a) The effect on the organization is not significant enough to warrant a change.
 (b) There is a lack of available funding.
 (c) The present organization already addresses this issue. Please specify below.
 (d) Other reasons. Please specify below.

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4. What organizational changes has your DOT recommended in response to this issue? Please check all that apply and fill in the blanks where appropriate.
 (a) Assign responsibility for this issue to an existing employee, office, or division without allocating additional resources.
 (b) Dedicate new or additional personnel to this issue—Number of people _____.
 (c) Allocate new or increased funding for this issue—\$_____ per year.
 (d) Recommend other organizational changes to address this issue. Please give details below.
5. What organizational changes has your DOT approved or implemented in response to this issue? Please check all responses that apply and fill in the blanks where appropriate.
 (a) Assigned responsibility for this issue to an existing employee, office, or division without allocating extra resources.
 (b) Dedicated new or additional personnel to this issue—Number of people _____.
 (c) Allocated new or increased funding for this issue—\$_____ per year.
 (d) Approved or implemented other organizational changes to address this issue. Please give details below.
6. What were the main reasons for any of the recommended, approved, or implemented changes mentioned?

Transit																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Alabama	60		√		√									√				5e. Will be considered as part of new management systems.
Alaska	67		√	√				√										
Arizona	87		√	√					√									3e. Transit planning and development is managed at the MPO level.
Arkansas	53		√	√		√												
California	92		√	√					√									3e. Our state has a small role in Transit planning currently. We are assessing the situation to determine how we can increase our leadership role.
Colorado	82		√		√					√	2			√				
Connecticut	79		√	√				√										3e. ConnDOT's organization includes a Bureau of Public Transportation with operational responsibilities for ride-share programs, bus systems and rail systems. Planning for all modes is provided by the Bureau of Policy and Planning.
D.C.																		
Delaware	DID NOT RESPOND TO THIS PART OF THE SURVEY																	
Florida	84		√	√				√										3e. Florida law and the department's own objectives, have required increased emphasis on transit for many years (the State Road Department became the Department of Transportation, including transit in 1969).

Transit																		
State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Maine	44		√		√							60K						4e. Redirect a position to the Bureau of Planning as well as retaining the current urbanized area MPO process. 6. Attempt to maximize the transit wherever possible as a means to provide a more balanced transportation system and reduce reliance on the SOV.
Maryland	81		√	√				√										3e. The MDOT is a true multi-modal dept. Systems level, multi-modal planning is performed by the headquarters planning office with implementation and operation of Transit services performed by the Mass Transit Administration.
Massachusetts	84		√	√				√										3e. Transit support unit already exists within EOTC.
Michigan	70		√	√				√										3e. MDOT already has a Bureau of Urban and Public Transportation.
Minnesota	69		√		√	√												6. Separate agencies plan and manage the Minneapolis/St. Paul area transit systems.
Mississippi	47	√																
Missouri	68		√		√					√				√			√	5e. Assigned responsibility to existing positions of Planning and Transportation Division. 6. The department will work with the MPOs through the Planning Division.
Montana	52		√		√						2				2			

Transit

State	urban %	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	Comments
Oregon	70		√		√					√	1	75K						4e. ODOT's reorganization addresses this issue along with other changes.
Pennsylvania	69		√	√					√									3e. The question has been raised, but no specific recommendations or revisions have resulted at this point in time. It is still under consideration.
Puerto Rico																		
Rhode Island																		
South Carolina																		
South Dakota	50	√																
Tennessee																		
Texas	80		√	√				√										<p>3e. Texas Metro Transport Authority (MTA) receives dedicated local sales taxes to fund transit services. These funds are used to build or extend transit systems, capital purchases, operating, etc. However, TxDOT in conjunction with MPOs coordinates and approves capital projects eligible for CMAQ and STP funds in rural and urbanized TMA areas.</p> <p>5e. The Division of Public Transportation, was created by administrative order in 1988.</p> <p>6. The recognition of transit as a player in the transportation system of the state.</p>

Other Issues

Please rate the following issues by their influence on the organization of your DOT, on a scale of 1 to 5 (1 = no effect; 5 = strong effect). If the issue has influenced or is expected to influence the organization of your DOT, please give a brief description of the change. Also, if a combination of these issues resulted in organizational change, please note it.

Rating Scale:				
1	2	3	4	5
No effect				Strong effect

- 1. Changing Demands on the Labor Force**
Technological advances, legislation, and other challenges facing transportation may affect the skills required in the transportation field. What additional skills do you think your DOT may need in the future, and what effect, if any, do you expect changing skills requirements to have on the organization of your DOT?
Rating _____ Details:
- 2. Increasing Diversity of the Labor Force**
Nationally, the 1990 Census shows that 24 percent of the population considers itself to be of minority status. Researchers predict that the nation's labor force will become even more diverse in the future. What effect, if any, will increasing diversity in the labor force have on the organization of your DOT?
Rating _____ Details:
- 3. Increasing Number of Elderly**
The elderly now make up a greater percentage of the U.S. population than ever before. The number of Americans age 65 or older was 16.7 million in 1960; in 1990 that figure had risen to 31.2 million; it is expected to rise to 52.1 million by the year 2020. What effects, if any, will the increasing percentage of elderly Americans have on the organization of your DOT?
Rating _____ Details:
- 4. Increasing Congestion During Off-Peak Periods and Weekends**
The percentage of non-commute trips has increased. In many areas congestion is now common during off-peak hours and on weekends. What effects, if any, could increasing congestion during off-peak hours and on weekends have on the organization of your DOT?
Rating _____ Details:
- 5. Increasing Recognition of the Effect of Land Use on Transportation**
Continuing development of suburban areas has led to an increase in suburb-to-suburb trips. The result is increasing travel demand in suburban and inter-city areas. What effect, if any, will increased travel demand in these areas have on the organization of your DOT?
Rating _____ Details:

6. Need for More Funding

Reduced federal funding has left 10 percent of U.S. roads and 42 percent of bridges rated deficient. Privatization, toll roads, and bond issues are among the strategies used for generating the revenues needed for improvements. What effect, if any, do you expect alternative funding approaches to have on the organization of your DOT?

Rating_____ Details:

7. Were any major trends that may affect the organization of your DOT in the 21st century not covered by the issues in this questionnaire? If so, please list them and note how you believe they will affect your DOT.

8. Please list any reports prepared by your department that have recommended organizational changes to address any of the issues identified in this survey or identified by you in the previous question.

9. Please attach an organizational chart and highlight any changes you have mentioned.

Mailing address for final report:

Contact name and telephone number:

Thank you again for your time and effort. Please return the questionnaire by July 19, using the pre-addressed label.

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Alabama	60	4	2	2	4	1	4	<p>Skill - CADD utilization, PC use etc. requires flexibility of existing workforce to adapt to new tools.</p> <p>Diversity - Not really experiencing this.</p> <p>Elderly - Working mothers more of an issue than elderly.</p> <p>Off-peak - Require closer look at other modes of transportation (intermodal).</p> <p>Fund - To handle toll funding etc. (in the future).</p> <p>Other issues - 1. Political intervention. 2. Ethics questions.</p>
Alaska	67	2	2	2	2	2	2	
Arizona	87				5	2	3	Other issues - ADOT is reorganizing to meet objectives of downsizing and flattening of the organization.
Arkansas	53	2	3	3	3	2	2	Elderly - Will require more rural public transportation to accommodate increasing number of retirees. Also could increase the need for facilities to accommodate additional tourists.
California	92	1	1	1	1	1	1	<p>Fund - We have had an Office of Privatization since 1989.</p> <p>Other issues - Clean Water Act.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Colorado	82	5	5	4	5	5	5	<p>Skill - Continuous quality improvement requires the work force to remain current in the above mentioned areas.</p> <p>Diversity - Strategic plans being developed will incorporate issues of diversity.</p> <p>Elderly - An aging work force is another component of diversity to be addressed through strategic plans.</p> <p>Off-peak - Increased staffing levels to keep up with construction and maintenance demands.</p> <p>Land - Will need to increase emphasis on new technologies to accommodate demands on the system.</p> <p>Fund - The gas tax is becoming less and less effective as a source of revenue for transportation improvements, so CDOT will probably be examining alternative funding sources to meet increasing demands.</p>
Connecticut	79	5	2	4	1	1	5	<p>Skill - ConnDOT suffers from an aging employee base. New employees trained in current technologies have not been added. As a result we have, and will continue to, increase our dependence on consultants and vendors.</p> <p>Diversity - ConnDOT has initiated a diversity program to familiarize employees and managers with the issue. Diversity will significantly effect the way we conduct our business, but it is not anticipated to impact the organizational structure.</p> <p>Elderly - We expect that elderly and handicapped transportation programs will require greater resources. In addition, it will become increasingly important to make design modifications to accommodate a more elderly citizenry.</p> <p>Off-peak - ConnDOT's principal concern remains weekday peak period commuter traffic. Specific projects have been implemented to provide relief for recreation traffic, but these have been addressed within the existing organization.</p> <p>Land - These phenomena have been occurring for many years. They make it more difficult to serve our customers but, lacking totally new technology, they cannot be expected to produce organizational change.</p> <p>Fund - Alternative funding sources will be a prerequisite for this agency to function. Alternative fueled and fuel efficient vehicles will reduce our principal funding source. The specific approach will evolve and coalesce over time.</p> <p>Other - Environmental concerns and increased citizen participation. While both of these have produced a more responsible transportation agency, they greatly increase costs and risk creating a stalemate situation when irresponsibly utilized by special interest groups.</p>

Other Issues								
State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
D.C.								
Delaware	DID NOT RESPOND TO THIS PART OF THE SURVEY							
Florida	84	4	3	3	1	2	2	<p>Skill - There will be a need for improved skills related to all aspects of computer usage, as well as communications, conflict resolution, and multimodal/intermodal systems management.</p> <p>Other issues - No; Florida has been dealing with all the issues for a number of years.</p>
Georgia								
Hawaii	89	4	1	2	2	2	3	<p>Skill - The department is heavily engineering oriented in staffing for its decision making positions. A reorganization would be needed to provide for individuals with skills in such areas as transportation planning (to meet the expanded planning requirements of ISTEA), in computer systems or informational systems (to expand on technology transfer), and in human behavior (to pursue non-infrastructure type programs such as TDM measures).</p> <p>Diversity - As the "melting pot of the world" we already have a diverse labor force.</p> <p>Off-peak - More TSM and TDM programs need to be pursued which would probably require more non-engineering type skills.</p> <p>Fund - Need more financial planners.</p>
Idaho	57	2	1	1	1	1	1	Skill - Computer literacy is expected to increase
Illinois	84	NO INFORMATION GIVEN FOR THIS PART OF THE SURVEY						

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Indiana	64	4	2	1	1	1	2	<p>Skill - Focus on modeling, management systems, planning concepts, demand management, new tech., funding, organizational efficiency supported by new organization.</p> <p>Diversity - Little effect on organization structure, significant impact on training requirements i.e. diversity training for employees and management.</p> <p>Other issues - Cost will have us continually reviewing the services offered. We will consider privatization combinations with local services, etc.</p>
Iowa	60	4	3	4	3	5	2	<p>Skill - New technical skills to take advantage of new technical advances and to increase the quality and productivity of our work and work force.</p> <p>Elderly - Changing demand for services (e.g., transit) and impact on highway design, operations, and regulations including driver licensing. Need for training/education of older drivers to cope with continuing to drive for personal mobility - an effort on our part to help them remain mobile.</p> <p>Off-peak - Prepared to manage issue, not a major concern.</p> <p>Land - TDM, land use controls, and even growth management, will become key issues for us in the future. A proactive corridor preservation program (including existing corridors) will be critical.</p> <p>Fund - Short term not significant. First challenge may be using new technologies for more appropriate charges for trucking use of the road system. A new challenge will be the electric automobile.</p> <p>Other issues - Higher public expectations compounded by lower support (both staff and capital budget), for the next several years.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Kansas	69	5	3	3	2	3	3	<p>Skill - Technical complexity of most positions will increase. All employees will require additional specialized training. Greater need for communication skills.</p> <p>Diversity - Labor force will continue to diversify. Unsure what effect this will have on organizational structure.</p> <p>Elderly - Increased emphasis on public transportation. Need to provide critical services in rural areas. Traffic engineering and signing standards will need to reflect the needs of elderly drivers.</p> <p>Off-peak - Unsure what, if any, will be.</p> <p>Land - Increased emphasis on urban and metropolitan planning will require additional resources and time.</p> <p>Fund - KDOT is currently utilizing bonding in its highway program. Kansas Turnpike Authority, a separate agency, administers toll roads. Currently see few opportunities for privatization in the state.</p>
Kentucky								
Louisiana	68	3	1	1	1	1	1	<p>Skill - Job requirements continue to change in order to conform with technological advances.</p> <p>Other issues - Failure by state government to increase revenues have in the past, and may continue to reduce the size of the organization.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Maine	44	4	2	2	2	5	3	<p>Skill - The state's STPA requires a TDM, multi-modal analysis be conducted prior to any highway widening to accommodate through capacity. This will require new skill levels in land-use planning, TDM, TSM, and multi-modal levels to properly respond to these requirements.</p> <p>Diversity - Not completely known at this time. The state, by law, is an equal opportunity employer.</p> <p>Elderly - More emphasis will need to be placed on ways to serve the elderly, including improving signing, transit services, rest areas, etc.</p> <p>Off-peak - Not a major issue at this point in time.</p> <p>Land - Considerable emphasis is being placed on comprehensive land use plans and their implications on transportation requirements. The department proposes to hire a land-use environmental planner.</p> <p>Fund - This department will be seeking ways to increase funding levels and will investigate options available. However, we do not anticipate a major increase in funding from any of these sources.</p> <p>Other issues - Ability to retain qualified personnel due to governmental cut backs.</p>
Maryland	81	2	2	2	2	2	2	
Massachusetts	84	4	2	1	2	4	5	<p>Skill - More computer and system/operations skills changing from pure construction to operating of modal facilities. Big change in highway mission.</p> <p>Diversity - No expected change on DOT's labor force.</p> <p>Off-peak - Already experiencing congestion during off-peak hours and weekends.</p> <p>Land - Working with MPOs to better integrate land use and transportation planning.</p> <p>Fund - Already experiencing serious funding shortfalls. Examining other approaches to meet needs.</p>
Michigan	70	3	2	2	3	3	3	<p>Skill - MDOT is already moving to the leading edge in information technology.</p> <p>Off-peak - More resources may be necessary in areas of greater population densities.</p> <p>Fund - There may need to be additional resources committed to contract management.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Minnesota	69	2	2	2	4	4	2	<p>Skill - Established a human resource planning council within Mn/DOT to recommend actions.</p> <p>Diversity - Preparation for welcoming and accommodating more diversity in the work force.</p> <p>Elderly - Increased consideration in planning and traffic engineering.</p> <p>Off-peak - Increased staff and operations.</p> <p>Land - Decentralization of planning will create more direct awareness of land use transportation interdependencies.</p> <p>Fund - Increased planning and consideration underway.</p> <p>Other issues - Re-engineering of the way we do business. Quality improvement philosophy, empowerment of employees and release of "cultural style" central management.</p>
Mississippi	47	4	3	3	4	4	5	<p>Skills - Communication and computer skills will be very important.</p> <p>Elderly - Design changes will be important as well as maintenance such as signing and pavement marking.</p> <p>Off-peak - Construction and maintenance are the most involved.</p> <p>Land - Stress on designs and Right of Way Agents to design within existing ROW or to acquire ROW.</p> <p>Fund - Release of federal funds is needed as we have little hope for alternative funding approaches.</p> <p>Other issues - Privatization will take many of our positions and privatization will make it difficult to acquire new ones.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Missouri	68	5	3	3	4	4	5	<p>Skill - Will need to add staff to cover all modes; inter modal planning, air quality, public involvement, legal (ADA, drug testing, etc.), human resources, and property acquisition.</p> <p>Diversity - Will have to continue to recruit minority employees. Difficult to do when competing with the private sector.</p> <p>Elderly - May change some of the design standards to accommodate the older traveler. Unsure of any changes to the organization of the department.</p> <p>Off-peak - Change in travel patterns will have to be considered in our planning process. These types of changes will be concentrated in urban areas, so much of this will be addressed in the MPO planning process.</p> <p>Land - This will be a factor as we develop our statewide transportation plan. It will also be a major factor in the metro areas as they debate the decline of the urban core vs. new circumferential.</p> <p>Fund - We have started a process to look at alternative and innovative methods to fund the state's transportation needs. MHTD organizational changes will not be known until we know if any different funding approaches are adopted.</p> <p>Other issues - Much more involvement with special interest groups as they become more involved with transportation issues.</p>
Montana	52	2	1	2	1	4	1	<p>Skill - There will be a need for continuous mandatory training programs.</p> <p>Elderly - There will be a need for more transit in some regions of the state.</p> <p>Land - It has become necessary to more actively consider land use issues in project development in some regions of the state. There are more staff resources needed to get environmental approval in those cases.</p>
Nevada								

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
New York	84	4	2	2	5	5	4	<p>Skill - Need for ability to use computers and other sophisticated equipment will affect most staff, including maintenance workers.</p> <p>Diversity - Department has already strived to open its jobs to minority employees and women. Growth in the numbers of such employees should not have a major impact on our organization.</p> <p>Elderly - NY State already has a higher than average concentration of elderly citizens and has transit and other programs to address those needs.</p> <p>Off-peak - The state has high congestion areas around NYC and the department is making major adjustments to its programs (INFORM, HOVON, LIE, TRANSCOM, etc.) to address these and other congestion issues.</p> <p>Land - This is a subset of the above problem.</p> <p>Fund - Incentives are not yet strong enough to force substantial use of these alternative fund sources, but as tax generating funding tightens further, use of alternative funding will increase and affect our department organization.</p> <p>Other issues - Shift from gasoline to alternative fuels will cause funding issues. Telecommuting may change the definition of "highway" and greatly affect our organization.</p>
North Carolina	50	3	2	3	1	3	2	<p>Skill - DOT work force of interstate era is now retiring. Recent grads are evaluated for employment on skills and training outside of the engineering field.</p> <p>Diversity - Recruitment of qualified minorities meets internal objectives for departmental strategic planning.</p> <p>Elderly - Organizational effect minimal. Scope of traffic engineering and safety functions changing to address an increase in elderly drivers.</p> <p>Off-peak - Off-peak congestion not a problem in N.C.</p> <p>Land - Zoning regulations in some urbanized areas promote higher density for better transit usage.</p> <p>Fund - N.C. is responsible for all roads in the state. Progressive legislation provides for a 3 to 1 ratio of dedicated highway trust funds to federal funds.</p> <p>Other issues - Fuel tax evasion may require additional investigative and audit personnel to augment Dept. of Revenue fuel tax collection unit.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
North Dakota	53	3	1	2	1	1	1	<p>Skill - We will continue to recruit new employees with computer skills and train existing employees in the computer area. The change to the metric system will also require training. I don't foresee this resulting in changes to the organization.</p> <p>Diversity - In the near future the effect will be minimal. We currently have a low percent of minorities in the state. We have a human resource plan that outlines our goals for hiring minorities.</p> <p>Elderly - The major impact is that many of the management people in the DOT are reaching retirement age and there will be a turnover of personnel in this area.</p> <p>Fund - The effect will be minimal. We have stayed with traditional user fees as our major source of state revenue.</p>
Ohio	74	1	2	2	2	3	3	<p>Skill - Skills are available in Ohio workforce.</p> <p>Diversity - Greater emphasis on cultural diversity.</p> <p>Elderly - More concern for abilities of the elderly to be able to appropriately/adequately utilize various transportation opportunities.</p> <p>Off-peak - Consideration for construction schedules to reflect user needs.</p> <p>Land - Congestion/air quality/movement of transportation users.</p> <p>Fund - Exploring options requires staff resource commitment and significantly more interaction with the private sector.</p>
Oklahoma	67	3	3	2	1	1	3	<p>Skill - Innovations in personal computer software and Intergraph capabilities will lessen the need for draftsmen and increase the need for personnel skilled in the use of computers.</p> <p>Diversity - New hires will include a higher percentage of minorities and women. DOTs will face unparalleled challenges in finding professionally and technically qualified minorities to meet the required diversity.</p> <p>Elderly - May tend to increase the need and planning for modes that respond to the elderly's requirements.</p> <p>Fund - Top management will be required to keep abreast of funding eligibility and possibilities and actively work toward packaging and coordinating projects toward that end. A recent example in this state has been the use of turnpike soft-match off-sets.</p>

Other Issues

State	Urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
South Carolina								
South Dakota	50	2	2	2	1	2	2	Other issues - The questionnaire does not address sparsely populated rural areas and the concerns of people in those areas. How are you handling Central and Western Washington outside the urbanized areas?
Tennessee								
Texas	80	5	5	4	1	3	3	<p>Skill - Future challenges will necessitate high computer literacy particularly in design and construction. There will be more of a demand for increased research, knowledge, and skills in material services and the environment. There will also be a need for highly polished skills in communication, inter personal relationships, planning and problem solving, and analysis of policies and legislative issues. Developing training curriculum and providing it will be critical to our responsiveness and ability to meet professional development needs of our workforce.</p> <p>Diversity - TxDOT is certainly striving for a positive effect. Diversity in the workforce will bring together people with different professional talents, cultures, and ethnic backgrounds. This diverse workforce should provide various insights, ideas, and perspectives to the overall mission of the agency.</p> <p>Elderly - The increase in elderly drivers will place more emphasis/resources on traffic safety programs and roadway improvements targeted toward this group. After they can no longer drive, there will be an increased need for public transportation services especially in rural areas.</p> <p>Off-peak - Minimal effect, though the department is involved in traffic management systems.</p> <p>Land - The department is increasing its interaction with MPOs who play an integral role with local government jurisdictions in land use and transportation system planning.</p> <p>Fund - The dept. has been involved in a number of alternative funding programs for transportation improvements e.g. transportation corporations, road utility districts, etc. These programs, while they can meet certain, small-scale, local needs for transportation facilities, will play a very minor role in funding the operation and improvement of a large-scale transportation program as implemented by TxDOT.</p> <p>Other issues - Increase public awareness about the environmental concerns; (2) increasing and competing demands for federal and state funds; (3) a national emphasis on inter-modalism; and (4) NAFTA/international commerce.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Utah	87	4	3	1	4	3	5	Other issues - Alternative fuel use, changing modes, and auto occupancy.
Vermont	32	2	4	3	2	5	5	Land - The Vermont DOT recently initiated its Transportation Planning Initiative. Fund - Ability to match federal funds is questionable.
Virginia	69	5	4	4	3	3.5	4	<p>Skill - Generally, it appears that at every skill level in the organization there will be a greater need for increased computer literacy. This includes skills in highway and structure CADD work to operating maintenance equipment to setting up road signs. To keep pace with technological advances, we will need to recruit people who have current skills and provide ongoing training to upgrade the skills of all employees. Rapid changes in technology, coupled with a general trend of "downsizing" government, may also lead to fewer unskilled/semi-skilled workers and more outside contracting.</p> <p>Diversity - In Virginia's rural areas the population mix is not changing rapidly, so at the local levels diversity alone may not create substantive changes in the way business is conducted. However, in urban areas increasing diversity will require changes in our recruitment practices to ensure that we are attracting qualified minorities. Secondly, managers will need to become more aware and capable of 1) managing people with diverse cultural backgrounds, and 2) effectively communicating with the public, recognizing the diversity in the audiences we serve.</p> <p>Elderly - Virginia's Transportation Research Council has completed a study of the needs of elderly drivers. The organization's sensitivity to those needs will be reflected in our approach to serving the public. Internally, the greatest impact is on our succession plans. We need to find ways to retain an adequate number of skilled professionals (maybe beyond normal retirement age), while competing for and developing the "next generation" of employees.</p> <p>Land - In areas with increasing urban/suburban development, VDOT is placing greater emphasis on transportation/land-use planning capabilities at local VDOT offices. For example, the feasibility of assigning additional capabilities in these areas in northern VA is currently under study.</p> <p>Fund - Virginia's General Assembly has given funding for new projects through debt and special financing. One example is the privatization initiative for the Dulles Toll Road extension. The Budget Division has reorganized and hired more staff to meet increasing needs in these areas.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Washington	76	4	3	2	3	3	4	<p>Skill - Stronger credentials will be required in modal planning, modeling (particularly traffic and environmental) and enhanced skills to support IVHS, TDM, design, and materials.</p> <p>Diversity - It is obvious that the DOT workforce will be more diverse and have more minorities. The change is currently under way. In the WSDOT's TRIP Division, during the past 2 years, when protected group members are referred for a vacancy, a group member is hired 70 percent of the time. The problem will be finding minority employees and progress will not meet the expectations that many hold. There is little evidence that the increase of minorities into management is any cause for concern.</p> <p>Elderly - Very little, there has been a recognition for some time that the aging population must be accommodated in design, signing, access, etc.</p> <p>Off-peak - The demand for additional capacity will increase. This could be particularly profound for the ferry system. The long lead time in acquiring new boats and the great difficulty in sitting or improving terminals should be cause for concern, much of the off-peak travel will occur on city arterials. It should be anticipated that the cities will look to the state for relief.</p> <p>Land - The Growth Management Act and the State Transportation Policy Plan have started the linkage between transportation planning and land use. The trend will certainly continue, WSDOT will have to take a more disciplined approach and acquire higher levels of expertise.</p> <p>Fund - From an organizational impact point of view, alternative funding (tolls, bond public/private) probably will not have a significant impact. WSDOT has efforts underway to address these issues. The need for additional funding traditional or alternative, is cause for concern. Unless new revenues are forthcoming, a slow down in right-of-way acquisition, design and plans will occur.</p> <p>Other issues - The privatization of traditional programs is a possibility. Should this happen, organizations will obviously have to downsize.</p>
West Virginia	36	3	2	2	1	2	2	<p>Skill - Recruitment and in-house training.</p> <p>Diversity - Already positioned to reflect social and ethnic diversity fairly.</p> <p>Off-peak - WV is primarily a rural state that does not have a high population/sq. mile; off-peak congestion has not proved to be a consideration.</p> <p>Land - Already have a strong transportation planning capability.</p> <p>Fund - Privatization may have some potential- neither toll roads or bond issues are felt to have much potential.</p> <p>Other issues - Telecommuting.</p>

Other Issues

State	urban %	Skill Rating	Diversity Rating	Elderly Rating	Off-peak Rating	Land Rating	Fund Rating	Comments
Wisconsin	65	3	3	3	4	4	3	<p>Elderly - More emphasis on public transportation could have organizational impacts. Driving license processing, marking and signing of highways are examples where changes might be needed.</p> <p>Land - 1. This could impact planning divisions and relationships with local units and other state agencies. Already a state land-use task force has been created. 2. Has necessitated employment of additional land use planners.</p>
Wyoming	65	4	3	3	1	2	1	<p>Land - Land use controls in scenic or resort areas such as Jackson Hole are having a major effect on transportation in those localities. It is not yet a major statewide problem.</p> <p>Fund - While we need more funding, our relatively low traffic volumes and long stretches of highway make toll roads and privatization impractical.</p> <p>Other issues - The trend toward system preservation rather than new construction will continue. The trend toward privatization will continue. Organization charts will continue to become flatter. Our field construction and maintenance operations will be combined on a local rather than district level.</p>