

DEPARTMENTAL
INFORMATION
EXCHANGE

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WASHTO STATE TRANSPORTATION SYSTEMS AND AGENCIES: SIMILARITIES, DIFFERENCES, AND A CASE FOR COOPERATION

PROBLEM STATEMENT

The member departments of transportation (DOTs) in organizations such as the Western Association of State Highway and Transportation Officials (WASHTO) often come from very diverse states. Similarities and differences in state economics, demographics, and politics, as well as in the actual transportation departmental structures, can result in either cooperation or conflict.

Databases constructed to analyze the characteristics of the states and their transportation departments can identify possible sources of conflict and cooperation between members of transportation groups like WASHTO. Analyses from this type of database *reveal common areas of interest* in transportation policy, thus allowing particular groups of state DOTs within a region to *predict common areas of concern*.

OBJECTIVES

The Texas Transportation Institute (TTI) conducted study 1217, *Comparing WASHTO State Transportation Systems and Agencies*, in cooperation with the Texas Department of Transportation (TxDOT) and the Federal Highway Administration (FHWA) to construct a database containing the following state information:

- economics
- demographics
- fiscal-political conditions
- transportation system conditions
- characteristics, organizational responsibilities, and policy concerns of state DOTs.

Researchers then analyzed the database for:

- 1) similarities and differences among WASHTO states;
- 2) possible correlations between aspects of WASHTO and the responsibilities and policy priorities of WASHTO transportation agencies;



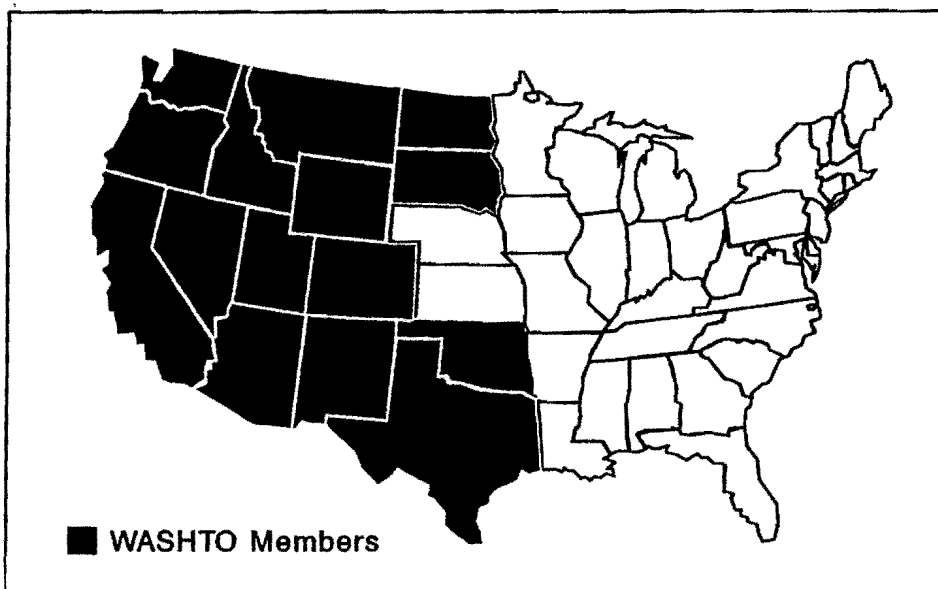
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Research Summary
Report

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3) cooperative and mutually beneficial projects for WASHTO members; and

4) areas of transportation policy common to WASHTO/WASHTO state coalitions.

FINDINGS

Similarities and Differences

Analysis of the WASHTO states database (including: California, Nevada, Oregon, Washington, Idaho, Montana, Wyoming, Utah, Colorado, North Dakota, South Dakota, Arizona, New Mexico, Oklahoma, and Texas) revealed several major similarities and differences, with the following highlights emerging:

- Compared with the rest of the U.S., WASHTO states are becoming

slightly more manufacturing-oriented, and as measured by the composition of their Gross State Products (GSPs), they are increasing their historic dependence on the extraction of nonrenewable raw resources.

- WASHTO states' highway mileage per 1000 vehicles registered declined approximately 20 percent during the 1980s.

- Almost 90 percent of the WASHTO transportation agencies had their mission statements changed in recent years. Also, all WASHTO agencies included in this analysis had/have a research program in place.

- Two-thirds of the WASHTO transportation agencies are contemplating new sources of revenue

for highways and public transportation.

- Over 83 percent of the states with international borders are undertaking some form of cooperative transportation project with Canada or Mexico, while slightly less than half of all WASHTO states are conducting interstate cooperative projects.

Correlations

In searching for correlations between WASHTO state similarities and differences and the characteristics of WASHTO transportation agencies, analysis carried out using the WASHTO database and survey responses provided evidence of two important correlations — WASHTO transportation agencies in states with high rates of economic growth over the last two decades tended to have responsibility for more transportation modes than did agencies in low growth states. High-growth WASHTO states (Far West and Southwest BEA regions) had the only increase in highway expenditures, and when the Far West and Southwest were combined, had the largest average decrease in highway mileage per 1000 vehicles registered. This indicates that these highway systems are under more stress than any other areas in WASHTO. Yet high-growth states and the Far West and Southwest had the highest overall average scores in the measurement of transportation department policies and responsibilities and in pro-active environmental policies. They also regarded themselves as policy innovators and in the area of research, development, and technical initiatives, appeared to have more

Economic Growth	Population Growth	State Fiscal Climate	Agency Transportation Policies	Agency Environmental Policies
High	High growth and more migration to metropolitan areas.	Studying new ways to raise revenue for transportation.	High scores in measurement of transportation department policy, with many transportation research and development programs and high multi-modality scores.	High pro-active scores.
Low	Only 1/7 that of 2 leading regions.	22% decline in tax revenues. No new revenue raising ideas.	Low multi-modality scores. No transportation research and development.	Low pro-active scores.

Researchers examined various aspects of economic growth and correlated these with transportation policy.

highly developed research programs, links with state university researchers, and technology transfer programs. All transportation departments in high-growth states and the Far West and Southwest were studying new ways to raise additional revenue for transportation projects.

The WASHTO Plains states (North and South Dakota), both belonging to the medium- and low- economic growth category, had population growth of only one-seventh that of the two leading regions, witnessed a net out-migration, and had the smallest increases in the percent of their populations moving into metropolitan areas. They also had the worst fiscal climates, with a 22 percent decline in tax revenues. Regarding their transportation agencies, the Plains states had the lowest multimodality scores, a measure of degree to which a WASHTO transportation agency has administrative and fiscal responsibility for more than one transportation mode. These scores

were derived from a survey (carried out as part of this study) of WASHTO state transportation agencies. The Plains states also showed the lowest pro-active environmental policy scores (the degree to which the agency takes active measures to prevent or mitigate environmental damage caused by its construction projects or other activities), and the lowest overall environmental policy scores. Neither of the states was contemplating new ways of raising transportation revenue.

CONCLUSIONS

Several major areas of mutual concern in transportation policy emerge from this study, all of which are also subjects that might serve as mutually beneficial, cooperative projects for coalitions of WASHTO states:

1. Since all states but two saw highway mileage per 1000 vehicle registrations drop over the last decade, and only four WASHTO

states (those in the high-growth category) were able to increase their expenditures for highways, it might benefit WASHTO states to carry out studies concerning whether to follow traditional supply-side or newer demand-side approaches to accommodating increased vehicle volume and vehicle miles traveled. In this area, transportation economists and engineers are beginning to examine demand-management strategies including the use of toll roads, congestion pricing, and new urban planning, as well as land-use management techniques designed to emphasize multimodal approaches to transportation planning and system management.

2. Investigate and share alternative revenue sources, other than traditional sources like the gasoline tax, for highways and other transportation modes. Shared results may produce pilot projects.

3. Establish more pro-active, mitigative environmental policies.

WASHTO states with particularly good pro-active environmental policies and strategies—i.e., those in the Far West and Rocky Mountain states—could provide leadership by sharing their experience in this area.

4. Conduct joint research and mount cooperative projects on all or some of the issues discussed

above. Clearly, high-growth states which share a number of important similar economic and geographic characteristics, as well as similar low-growth states, could benefit from pooling resources.

—Prepared by Kelly West, Science and Technology Writer, Texas Transportation Institute.

The information described in this summary is reported in detail in TTI Research Report 1217-1F, "Comparing WASHTO State Transportation Systems and Agencies," William Luker, Jr. and Dock Burke, November 1991. The contents of the summary do not necessarily reflect the official views of TxDOT or the FHWA.

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