

## APPENDIX B

# Federal Transportation Conclusions and Policy Options

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### Excerpted From “Delivering the Goods”<sup>1</sup>

In 1988, following a number of national studies calling in vain for more investment in public works infrastructure, the Senate Committee on Environment and Public Works asked OTA to identify ways to change Federal policies and programs to make public works more productive and efficient. The results of this study were released in April 1991 in the OTA report, *Delivering the Goods: Public Works Technologies, Management, and Financing*. Substantial portions of the report deal with issues that underlie tiltrotor and maglev and a few are excerpted and provided below.

#### Institutional Issues

Neither DOT [Department of Transportation] nor Congress has successfully overcome strong, separate modal interests and achieved an appropriate systems approach to solving transportation problems. In Congress, only the appropriations committees have sufficiently comprehensive jurisdiction, but those committees were never intended to set transportation policy. DOT's recently published National Transportation Policy recognized this and encouraged a multimodal approach toward transportation problems. However, this encouragement is not enough; OTA concludes that unless steps are taken to institutionalize a multimodal approach within DOT, the traditional modally oriented structure will be perpetuated and the agency will not be able to address today's transportation issues effectively.<sup>2</sup>

If the Federal Government is to regain a leadership role in transportation, changes in institutional management must be made. One way to effect change would be to create surface transportation programs that support intercity passenger, urban, and freight transportation, and connections to ports and airports. Over the longer term, options include restructuring DOT in divisions by broad mode-aviation, surface and water transportation--or by function, such as metropolitan passenger and intercity freight transportation. Reforming congressional oversight as well, by developing a mechanism to coordinate or concentrate transportation authorization, will be crucial to the success of a restructured DOT.<sup>3</sup>

#### Spending Priorities

Broadening categorical grant programs to permit greater flexibility on the part of local governments in using trust fund monies, especially for maintenance programs, is probably the best way to ensure that short-term capacity and condition needs are met. Next in importance are reshaping Federal policies to encourage fair pricing and efficient infrastructure use and to increase State and local spending to raise the total national investment. Making more Federal monies available for passenger and commuter rail and mass transit are options for improving the efficiency of transportation system use. Although commuter rail and transit have long been considered primarily regional or local services, a compelling case can be made for their importance to interstate commerce, since each represents an alternative way to increase highway capacity in urban areas. Congress could also permit States and jurisdictions to use surface transportation grant funds for mass transit and passenger and freight rail improvements, if doing so is a priority to their regional or State transportation system plans.<sup>4</sup>

For the longer term, an intensive Federal effort should be started now aimed at developing and implementing a strategic policy and research agenda for transportation to evaluate the tradeoffs of alternative ways to address overcrowded intercity corridors and urban traffic congestion. This program must have funding support and participation from all the transportation modal administrations and from the industries that will benefit.<sup>5</sup>

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<sup>1</sup> U.S. Congress, Office of Technology Assessment, *Delivering the Goods: Public Works Technologies, Management, and Financing OTA-SET-477* (Washington, DC: U.S. Government Printing Office, April 1991).

<sup>2</sup> Ibid., p. 132.

<sup>3</sup> Ibid., p. 132.

<sup>4</sup> Ibid., p. 26.

<sup>5</sup> Ibid., p. 27.

## Support for Technical Innovation

Public works services are expected to be reasonably priced and reliable; they do not lend themselves to trial-and-error methods of selection. Local officials use tried and true technologies, because they do not have the analytical resources to assure the performance of a new technology and cannot afford the political or operational risk of failure. Thus, liability concerns haunt suppliers, manufacturers, and public officials as well, and manifold difficulties confront the developer of a new technology for public works. Many a technology entrepreneur is frustrated by rejection of his attempts to have his development tested, so a track record can be developed.<sup>6</sup>

Cooperative, joint efforts between private sector suppliers and government to demonstrate and evaluate new technologies for safety, durability, and long-term costs are excellent ways to spread the risk and overcome some of the difficulties of the procurement process for new technologies. OTA concludes that supporting such development and evaluation programs is an essential Federal function that has been inadequately supported in every public works field except aviation and water transportation. Increasing DOT investment in such programs for highways, mass transit, and passenger rail by 50 percent would bring substantial returns in improved public works performance.<sup>7</sup>

## Management and Institutional Priorities for Research

As a result of budget cutbacks and the lack of coordination for [research and development] R&D over the past decade, each administration's R&D has become increasingly modally oriented and focused on supporting short-term program objectives. The lack of long-range and systems-oriented R&D has left DOT unprepared to address current national needs, such as transportation-related air quality issues and urban capacity issues. While the agency is attempting to make up for these shortcomings now, developing and implementing appropriate new programs and ensuring adequate funding are major challenges.<sup>8</sup>

While DOT provides direct support for regional transportation, it commits its resources on a modal basis, with R&D support heavily skewed toward [the Federal Aviation Administration] FAA and [the Federal Highway Administration] FHWA. Data collection on travel and shipping patterns has been neglected. As a result, alternatives to current and future transportation patterns are not pursued, and one outgrowth is the dearth of R&D on intermodal connections. Both public and private transportation officials have identified the lack of information about inter-modal linkages, such as airport-ground and port-to-railhead access, as a stumbling block to developing policies that support growth and increased capacity. Revision of the current modally defined R&D is long overdue, and DOT needs to develop R&D programs to address intermodal needs and capacity enhancing transportation alternatives. Congress could require DOT to collect and analyze freight commodity and passenger flow data and to constitute and institutionalize a mechanism to ensure that all its R&D takes into account interdisciplinary and intermodal issues. Options include establishing a transportation data office or center, strengthening the R&D Coordinating Council, and creating an effective Secretary-level R&D coordinator.<sup>9</sup>

Federal public works R&D efforts tend to be low profile and are often overshadowed by the obvious problems of infrastructure upkeep and construction; R&D programs often fail to weather the first and deepest cuts when department-wide budgets shrink. In the short term, Congress may want to consider authorizing and appropriating agency R&D budgets on a separate line-item basis to guarantee executive agency commitment and greater financial stability for R&D programs.<sup>10</sup>

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<sup>6</sup>Ibid., p. 35.

<sup>7</sup>Ibid., p. 36.

<sup>8</sup>Ibid., pp. 219-220.

<sup>9</sup> Ibid., pp. 236-237.

<sup>10</sup>Ibid., p. 236.