

## TRB Policy Studies (Division B)

October 21, 1999

### Studies Underway

### Sponsor

Effectiveness of Vehicle Emission Inspection and Maintenance Programs

EPA

*This study will assess the effectiveness of vehicle inspection and maintenance (I/M) programs for reducing mobile source emissions, and, to the extent practicable, it will take into consideration the effectiveness of I/M programs for improving air quality. The study will recommend possible approaches for improving I/M programs.*

Evaluating Double Hull Tanker Design Alternatives

US Coast Guard/DOT

*This study will develop a rational and systematic methodology for evaluating the oil outflow performance of alternative tanker designs in the event of a collision or grounding. The study will also assemble required data on spills, accidents and crashworthiness of tankers and illustrate how the methodology may be applied.*

Evaluation of the Congestion Mitigation and Air Quality Improvement Program

FHWA

*This congressionally mandated study will evaluate the impact of the CMAQ program on motor vehicle emissions and potential improvement in air quality in metropolitan areas. It will also examine CMAQ project cost effectiveness with respect to congestion mitigation and alternative strategies for reducing emissions. Finally, the study will include recommendations on improving program effectiveness and expanding its scope to address new National Ambient Air Quality Standards.*

Freight Capacity for the Next Century

TRB, NCRHP, FHWA, US Army Corps of Engineers

*The committee will review projections of freight demand over the next two to three decades, compare these projections with estimates of available infrastructure capacity, identify possible shortfalls in capacity for efficient freight movement, and identify research needs. The committee will attempt to reach consensus about the extent and nature of capacity shortfalls and likely consequences of failing to act and will define policy options that merit attention. The study will cover freight capacity offered by highways, railroads, waterways, airports, and port landside facilities.*

National Policies and Expectations Affecting Public Transit:

An International Comparison

TCRP

*The aim of this project is to help answer the question: what would it take to revitalize public transit in the U.S.? The study committee is comparing U.S. public policies, cultural attitudes, and preferences about urban form, transit, and highways with those of other western industrialized nations that continue to have high levels of transit service and demand. The report will identify some of the key differences in policies and other conditions affecting transit use internationally.*

Research and Technology Coordinating Committee

FHWA

*The committee identifies and critiques current [FHWA] R&D emphasis areas and provide policy-level recommendations on the overall direction of the federal program. In*

*doing so it establishes a continuing channel for independent assessment and oversight for federal highway research programs and policy.*

- Review of EPA's MOBILE Source Emissions Factor Model EPA  
*The study will review EPA's Mobile Source Emissions Factor (MOBILE) model, which is used to estimate the potential effects of measures to control motor vehicle emissions under the Clean Air Act. The study will consider the adequacy of the model's input data, assumptions, structure, and results. The study will also consider how the model can be improved.*
- Review of the Federal Railroad Administration R&D Programs FRA  
*In February 1996, TRB convened a committee to carry out a Congressionally-mandated project, "Assessment of the Federal High-Speed Ground Transportation (HSGT) Research and Development Program". The FY1998 U.S. DOT Appropriations Act included a request that the TRB review process be expanded to include "... a systematic analysis of the entire FRA research and development program. A reconstituted panel should also analyze the research development management structure and approach and the current direction and allocation of moneys devoted to the various program areas."*
- Review of the Federal Transportation Science and Technology Strategy, Phase III RSPA  
*This 3-year project was established to review and comment upon the Federal Transportation Science and Technology (S&T) Strategy as it continues to unfold. Specific tasks include review of the proposed federal role in the plan's strategic partnership initiatives, review of up to two of the partnerships, and, in the final year, a review of the entire strategic planning process for federal transportation science and technology development. The committee's scope is being expanded to include review of the USDOT R&D plan.*
- Review of the Intelligent Vehicle Initiative ITS Joint Program Office (DOT)  
*This committee will provide an annual review of the Intelligent Vehicle Initiative (IVI), which will initially include commenting upon goals, program design and operation, the strategic plan, and individual program elements. As the program matures, the focus will shift to review of individual partnerships, program operations, and progress on achieving program goals.*
- Study of Future Strategic highway Research Program FWHA  
*As requested by Congress, this study will "determine the goals, purposes, research agenda and projects, administrative structure, and administrative needs for a new strategic highway research program."*
- Review of USDOT ITS Standards Program ITS Joint Program Office (DOT)  
*This project will review the U.S. Department of Transportation's ITS standards program, the objective of which is to accelerate the development of ITS standards and to support their use by public-sector agencies as a means of promoting compatibility and interoperability among ITS systems throughout the nation.*

Study of the Regulation of Weights, Lengths, & Width of Commercial Motor Vehicles    FHWA  
*This study will review the federal regulate of the dimensions of commercial motor vehicles (trucks and buses). It will consider whether changes to the regulations are advisable and evaluate how changes would affect the economy, the environment, safety, and service to communities.*

School Transportation Safety    NHTSA  
*This project will determine what inferences can be drawn about the relative safety of different modes of transporting students to school and school-related activities. The project will consider transportation by all modes (school bus, transit bus and rail, passenger van, private vehicles, bicycles, and walking). It will emphasize student transportation by transit vehicles compared with traditional school buses.*

Surface Transportation Environmental Research Advisory Board    FHWA  
*In TEA-21, Congress called upon the USDOT to create an "Advisory Board" to recommend environmental and energy conservation research, technology, and technology transfer activities related to surface transportation.*

#### Pending Studies

Contracting Out Transit Services    FTA  
*This project will study the effects of contracting out, including competitive award to public agencies, of mass transportation operations and administrative function. The study will review existing literature to determine what is known about the effects on cost, availability and level of service, efficiency, safety, quality of services provided to transit-dependent populations, and employer-employee relations.*

Study of the Public Sector Requirements for Small Aircraft Transportation System    NASA  
*This project will review the assumptions about future travel demand that underlie the justifications for a Small Aircraft Transportation System and will identify public-sector infrastructure investments that would be necessary for the SATS concept to be realized in the early decades of the next century.*

#### Completed Studies

Managing Technology Transfer: A Strategy for the Federal Highway Administration    FHWA  
*The report reviews the changing priorities of the nation's highway program and urges FHWA and state and local highway agencies to find ways to ensure that research products are implemented, recognizing the innovation does not occur unless new products, process, and methods are put to use.*

#### Entry and Competition in the U.S. Airline Industry:

Issues and Opportunities    Office of Aviation and International Affairs, USDOT  
*This study updated those aspects of a previous TRB study dealing with aviation service and safety since deregulation that reviewed the nature and extent of competition in the airline industry. The scope included assessing trends in city-pair competition, dominance at airport hubs, proposed alliances among air carriers, entry of new carriers, allegations of predatory pricing, and barriers to competition such as travel agent*

*commission overrides, frequent flier programs, and restrictions on entry at airports due to airport and air traffic capacity constraints.*

**Improving Surface Transportation Security: A Research and Development Strategy** DOT  
*The study examines the vulnerabilities of the surface transportation systems, identifies ways to improve the system's security, and recommends a strategy for research and development.*