# **Final Report**

# Case Studies of Key Policy Issues Facing U.S. Transit Systems

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# # HVDE 13-8

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This final report describes the development of teaching case studies regarding transit systems in Dallas, Seattle, and suburban Maryland. The cases describe the challenges faced by transit properties around the country: service in low-density suburbs, balancing bus and rail in larger transit systems, and improving reverse-commute services to achieve equity goals.						
The teaching cases are designed to be used in a variety of graduate curricula and have been tested on masters-level courses in transportation planning and policy and Harvard Unviersity. The cases have been entered into the Kennedy School of Government's case distribution system so that they are widely available.						
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# Final Report to the University Transportation Center Region 1

# On the completion of the grant no. HVDE13-8 Jose A. Gomez-Ibanez, Principal Investigator

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### **Objectives**

The objective of this project was to develop three teaching cases on contemporary problems facing the U.S. urban mass transit industry. The cases are designed for use in graduate programs in transportation sciences, planning, public administration, and business administration or in executive programs for officials from the transit industry and metropolitan planning agencies.

The case method has long been used in professional education, particularly in schools of law, business, and public administration. A case typically describes a decision that an executive must make, and students are asked to come to class prepared to discuss the course of action they would recommend. Case teaching involves the students more actively in learning and gives them practice in judging the conflicting forces that weigh on a decision and in developing a well-reasoned course of action.

Unfortunately, there are relatively few teaching cases that deal with the problems of the contemporary urban transit industry. The tradition of case writing and teaching is strongest in schools of business administration, and most business schools ignore the transit industry because most transit enterprises are in the public rather than the private sector. Schools of public administration and planning also develop cases, but the volume of cases produced is more modest and cases dealing with the transit industry are relatively rare and tend to be very dated.

# **Products**

This project resulted in the research, drafting, and testing of three new cases on challenges facing contemporary transit managers. The cases were selected to raise three of the most pressing issues facing transit managers and planner:

- the challenge of designing high-quality and cost-effective public transit service in low density suburbs (*DART's Suburban Service*),
- the balance between rail and bus transit in larger metropolitan areas (*Sound Move*), and
- the problems of providing reverse commuting services that connect poor inner city neighborhoods with job opportunities in the suburbs (*Career Caravan*).

Drafts of the cases were tested on two classes of a masters-level course in transportation planning and policy at Harvard. The course draws public policy and public administration students from the Kennedy School of Government, planning students from the Harvard Design School and MIT, transportation science students from MIT, and business administration students from the Harvard Business School and MIT.

All three cases have been entered into the Kennedy School of Government's case distribution system so that they are widely available. To encourage instructors to adopt the cases, teaching notes were also developed for two of the three cases and are available to teaching faculty through the Kennedy School's case program. The cases are described briefly below and copies are attached to this report.

### **DART's Suburban Service**

This case is set in the spring of 2000, when planners at Dallas Area Rapid Transit (DART), the regional public transit agency serving the Dallas metropolitan area, had to decide whether to cancel or modify a poorly performing bus route serving the suburban cities of Garland and Rowlett. The route, number 383, was typical of many that DART operated in the suburbs. The decision about route 383 raised basic questions about DART's strategy as a public agency, and particularly whether it could design suburban services that were useful and cost-effective enough to maintain the political and financial support it received from Dallas' suburbs.

The fact that route 383 is performing so poorly—losing \$27 per passenger, for example—encourages students to think about more radical service and political strategies for the agency. The case allows students to debate the cost, service, and ridership consequences of shifting to smaller buses, changing headways, substituting dial-a-ride services, or even abandoning cross-town service in the suburbs altogether. The goal is to get students to appreciate botthe the technical and political constraints facing transit managers in the suburbs.

#### Sound Move

This case is set in the fall of 1996, when residents of three counties along Puget Sound in northwestern Washington prepared to vote on whether to fund a \$3.9 billion transit package to address the region's increasingly serious traffic congestion. Just 20 months earlier, voters had decisively rejected a more costly and ambitious 16-year project featuring 68 miles of light rail and an extensive commuter-rail system. Responding to that failure, the Puget Sound Regional Transit Authority, the measure's sponsor, had slashed the original project's cost by 40 percent; cut the light rail portion to a first phase of less than 25 miles running primarily through Seattle; and substituted express buses and carpool lane improvements outside of Seattle where fewer residents wanted rail.

This case is designed for use primarily to stimulate a discussion of the merits and politics of new rail transit systems in US metropolitan areas. In particular, the case forces

students to consider why many metropolitan areas choose to build new rail-transit systems as a solution to their traffic and environmental problems even though the data often suggest such systems will have little impact on travel patterns, traffic congestion, land use, or air quality. The case can also be used in economics courses to illustrate issues in benefit-cost analysis

The case is written in three parts. The A case provides the basic history of the rail debate in Seattle leading up to the referendum in November 1996. The B case provides more details on the competing benefit-cost analyses that were released by proponents and opponents of the rail proposal in the months immediately before the election. The B case is designed to be assigned with the A case in courses where students already have some familiarity with the debates over rail transit and where the instructor wishes to discuss the details of the benefit-cost analyses. Finally, there is a short sequel that can be handed out at the end of class. The sequel explains that the voters approved the rail plan in 1996, but that the project ran into trouble several years later when the construction bids for a key rail tunnel came in way over budget. The cost overruns and resulting freeze of federal funds revived criticism that the rail project was unrealistic and, as of 2001, the region was once again debating whether the project should go forward

# Career Caravan

This case is set in the summer of 2000, when Bob Embry, the President of the Abell Foundation, asked two consultants to evaluate the performance Career Caravan, a job-to-work transportation program that his foundation was helping to fund. Career Caravan took low-income residents of West Baltimore to jobs in suburban Howard County, Maryland. The idea was that good jobs were more plentiful in the suburbs than in the central city, but that Baltimore's public transit system did not serve dispersed suburban employment centers well and many inner city residents did not have driver's licenses or own cars. But Mr. Embry was concerned that "reverse commute" programs like Career Caravan cost roughly \$2,000 per client-year to support. Moreover, the transportation expense was in addition to the cost of job training to make the clients, many of whom had never been employed before, "job ready."

The case is designed to support a discussion of how much the isolation of inner city poor from suburban jobs contributes to urban unemployment and the alternative methods for linking inner city residents with suburban jobs. Qualitative and quantitative data in the case suggests that lack of access to suburban jobs might be responsible for only a modest part of the unemployment. The case also describes the problems that Carreer Caravan is having in providing a reasonably high quality and cost-effective transportation service, and supports a discussion of alternative methods of provision.

### **Attachments**

- *DART's Suburban Service*, KSG case no. 1696.0, 9 pages of text plus 13 pages of exhibits.
- DART's Suburban Service, KSG case no. 1696.2, 16 pages of text.
- Sound Move (A): The Debate Over Seattle's Regional Transit System, KSG case no. 1639.0, 20 pages of text plus 16 pages of exhibits.
- Sound Move: The Debate Over Seattle's Regional Transit System (Sequel), KSG case no. 1639.1, 2 pages of text.
- Sound Move (B): The Debate Over Seattle's Regional Transit System, KSG case no. 1640.0, 3 pages of text plus 4 pages of exhibits.
- Sound Move: Teaching Note, KSG case no. 1639.2, 17 pages of text plus one page of exhibits.

Career Caravan, KSG case no. 1695.0, 11 pages of text plus 6 pages of exhibits.