University of Pennsylvania, B.S. in Civil Engineering University of California at Berkeley, M.S. in Civil Engineering Frank Spielberg, P.E.

As a consultant to the Federal Transit Administration, Mr. Spielberg conducted reviews of the forecasts of patronage demand prepared in support of applications for funding under the New Starts program. He also prepared a report documenting the projected and achieved costs and patronage for completed projects funded under the New Starts program and prepared draft guidance for conducting the Congressionally mandated Before and After studies of New Starts projects. Mr. Spielberg served in 2005 as Principal Investigator for research into MPO travel forecasting practices in support of a National Academy of Sciences project to document the State-of-the-Practice in metropolitan area travel forecasting (Special Report 288) and served as the principal investigator for TCRP projects B-3 and B-36, both dealing with the demand for passenger transportation services in rural communities. He has developed forecasts of commuter rail patronage for proposed projects in Little Rock AR, Kansas City MO, and Nashville TN. He has conducted transit planning and operational studies in areas as diverse as Aspen, CO; Lexington, KY; and Westchester County, NY. Mr. Spielberg was active in making transportation professionals sensitive to the concepts of Neo-Traditional Neighborhood Development and The New Urbanism. He authored several papers, made numerous presentations at professional meetings and chaired a committee of the Institute of Transportation Engineers that developed guidelines for roadway design in communities to be developed in accord with the principles of The New Urbanism.

Recent Consulting Activity

Mr. Spielberg has served as consultant for a review of proposals for commuter rail service in the Miami-Ft. Lauderdale Corridor in Florida, for a study of long-range transit needs in Fairfax County Virginia, for an NCHRP project to examine the effects of demographic and land use factors on long-range transportation investment needs, for a study of the impact of WMATA Metrorail on tax revenues in Virginia, and for the development of a long-range plan for Bus Rapid Transit in Montgomery County MD.

Comprehensive Transportation Planning

Chair of TMIP sponsored travel demand forecasting peer review panels for Cincinnati (2003), Denver (2003-04), Baltimore (2004-05), St. Louis (2006) and Boise (2007). Participated in and prepared documentation of FTA/FHWA sponsored forum to discuss acceptable methods for travel forecasting (2003). Member of Peer Review Panel for NYMTC model development (1994-2000). Conducted demand analysis for development of Multiple Occupancy Vehicle Emphasis program for the Mid-Hudson region (NY) (1995). Consultant on long-range transportation plan for the Little Rock, Arkansas region with responsibility for concept development and transit elements (1994). Developed work program for the development of a new travel demand model set for the New York metropolitan region (1992). For the Federal Highway Administration prepared a white paper on the applicability of household time and money budget constraints to travel forecasting. Developed, for Metropolitan Washington COG, a budget-constrained direct demand model for non-work transit travel. Managed several large comprehensive urban transportation studies including studies to develop transportation plans and policies for Atlanta GA, Baltimore MD, San Juan PR, Tallahassee FL, York PA and others. Developed route level transit demand estimation models for Buffalo, NY (1990) and Providence, RI (1992). Experience encompasses total system planning -- highway and transit systems analysis. Major

Mr. Spielberg expertise has been gained in over forty years work in research and applied travel forecasting, travel forecasting and transit planning. He directed the research in support of TRB Special Report 288 - State of the Practice in Travel Forecasting -, has served on numerous TCRP project panels, served as principal investigator for two TCRP projects, and served as chair of the TRB Bus Transit Systems committee.

Frank Spielberg, P.E	=	
Continued. p. 2		

focus was on developing techniques for travel projections and systems analysis. Directed the application of models and evaluation techniques for the Baltimore continuing planning program and a major environmental assessment of alternative systems. Conducted reviews (1979 and 1990) of state-of-the-art in transportation modeling for Baltimore Regional Planning Council. Directed a study of feasibility of high-speed rail service in the Atlanta-Macon Corridor.

Transit System Planning and Alternatives Analysis

Directed travel forecasting for analysis of proposed Downstate Commuter Rail (Delaware) (2004). Conducted study for FTA of projected and achieved values for New Starts ridership, capital cost and operating cost (2002). Project manager Charlottesville VA TDP (2004), for collection and analysis of WMATA bus passenger data related to analysis of proposed light rail alternatives in the District of Columbia (2004), for Route 1 Corridor Bus Studies in Northern Virginia (2001), Comprehensive Transit Operations Analysis, Westchester County, NY (2000); Transit Development Program for Rockland County, NY (1999); Transit Service Needs Assessment for New Castle County, Delaware and Cecil County, Maryland (1995-97). Participant in studies in support of the Kansas City Metropolitan Transit Initiative (1999) and the Commuter Rail Feasibility Studies (2001). Provided on-call technical support on a range of transit planning topics to the Mass Transit Administration, Maryland (2000). Provided assistance to Chesterfield County, VA, for development of new transit services implemented in 2001. Provided task order based transit planning services to DelDOT Planning from 1996 through 1999. Tasks have included planning of transit services related to I-95 reconstruction, site location studies for a DART First State Maintenance Facility and analysis of Park-Ride needs. Directed analysis of functional needs for DART First State local bus operations and intercity bus operations as part of planning studies for the Wilmington DE train station area. Provided task order-based transit planning and analysis services to Tidewater Regional Transit, Norfolk, VA (1997-2000). Directed study of downtown transit center and parking garage in Poughkeepsie, NY (1991). Conducted Case Studies and participated in handbook development for TCRP B-6, Improving Transit Connections for Enhanced Suburban Mobility (1995-96). Principal investigator for Transit Cooperative Research Project on Demand Forecasting for Rural Passenger Transportation (1993-94). Provided assistance to UMTA in review of Alternatives Analysis projects (1990-1995). Consultant on development of strategic transit plans for Eau Claire, Wisconsin and Pocatello, Idaho (1994). Directed preparation of Statewide Public Transportation Needs Assessment and Action Plan for the Arkansas Governor's Task Force on Public Transportation (1991-92). Project director for Westchester County, New York, Year 2010 Strategic Transit Plan (1993). Directed feasibility analysis for downtown shuttle, Colorado Springs, CO (1990). Conducted analyses of Potomac River High Speed Ferry Service (1988 and 1999). Directed development of Prince William County, Virginia, Six Year Transit Development Plan (1988-89). Directed feasibility analysis of passenger rail service, Little Rock, Arkansas (1987). Directed travel demand element of Alternatives Analysis for Indianapolis (1985). Consultant on demand analysis for Denver RTD Systems Planning study (1984) and Corridor Technology Assessment (1985). Directed Alternatives Analysis for Madison WI (1981) and detailed operations transition analysis (1985). Developed suburban service transit demand model and budget analysis software for Henrico County, Virginia (1986). Directed Net Income Analysis Studies for the Washington Metropolitan Area Transit System (WMATA), 1971 and 1974. Directed transit systems planning study in San Juan, PR (1974). Responsible for patronage reasonableness analysis and corridor identification, transit systems long-range study in Denver CO (1984). Project manager for UMTA study of Dual-Mode Transit, Orange County CA (1974).

Frank Spielberg, P.E	
Continued. p. 3	

Bus Maintenance

Directed FTA study of bus maintenance needs and developed facility-planning guidelines. Directed development of Capital Facilities Plan for Southeastern Pennsylvania Transportation Authority (SEPTA). Conducted for WMATA analysis of costs of a proposed closing of the Northern Garage. Provided transit needs analysis for design of bus maintenance facility, Fairfax County, Virginia. Prepared functional plan for transit maintenance facility, Prince William County, VA. Responsible for maintenance contracting analysis, Mississauga, Ontario. Conducted assessment of bus storage and maintenance functional needs and alternative facility site evaluation, El Dorado County, CA and Hickory, NC. Co-author of TCRP Synthesis on Regulatory Impacts on Design and Retrofit of Bus Maintenance Facilities.

Transportation Systems Management (TSM)

Directed market research and marketing program development for Transportation Management Program in the Cross-Westchester Expressway Corridor, Westchester County, NY (1990). Directed Market Research elements of a Suburban Mobility Study, Little Rock, AR (1991). Prepared strategic plan for the Greater BWI Commuter Transportation Center (1989). Directed SG work on Federal Highway Administration research project on "Integrated Traffic Operations Systems". For the Office of the Secretary of Transportation directed a study of the effectiveness of alternative strategies for affording priority to high-occupancy vehicles. On FHWA research project, developed model for predicting transit and carpool demand for implementation of Reserved Freeway Lane. As part of DOT carpool/vanpool program at time of 1973-74 energy crisis evaluated carpool matching procedures and programs. Participated as lecturer in Carpooling seminars for industry sponsored by the Highway Users Federation.

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Education	University of Pennsylvania, B.S. in Civil Engineering

University of Pennsylvania, B.S. in Civil Engineering University of California at Berkeley, M.S. in Civil Engineering

Affiliations

Institute of Transportation Engineers, Chair, Committee 5P-08, Traffic Engineering Considerations for Neo-Traditional Neighborhood Design.

Past Member, Transportation Advisory Commission, Fairfax County, Virginia.

Institute of Traffic Engineers, Past Chairman of Planning Applications Division, ITE Department 6, Past Chairman of "Use of Census Data for Transportation Planning."

American Society of Civil Engineers.

Transportation Research Board, past Chair Bus Transit Systems Committee, Past - Member "Urban Goods Movement" Committee.

Congress for The New Urbanism.

Frank Spielberg, P.E.	
Continued, p. 4	

Registrations

Registered Professional Engineer in the District of Columbia and California, Virginia, Retired professional engineer in Maryland and California.