

Public Transit Planning And Evaluation

23 February 2010

The Victoria Transport Policy Institute is an independent research organization dedicated to developing innovative solutions to transport problems. Our work helps expand the range of impacts and options considered in transportation decision-making, improve evaluation methods, and make specialized technical concepts accessible to a larger audience. VTPI has helped design and evaluate public transportation programs in a variety of institutional and geographic conditions. Below are examples of our work.

Public Transit Benefits Evaluation

Performed analysis of the full benefits of public transportation, including public health and economic development. Analyzing the degree to which current planning accounts for full benefits. (Client: American Public Transportation Association. Project Manager: Robert Padgette. Time Period: December 2008-November 2009.)

Connected Urban Development

Serves as a special advisor on transportation and land use planning for the *Connected Urban Development* program (www.connectedurbandevelopment.org), which uses advanced technologies to improve mobility options in major cities, including personal handheld navigation devices, electronic public transit information and payment systems, and road pricing. (Client: Cisco Systems and the Clinton Foundation. Project Manager: Nicola Villa. Time Period: August 2007- ongoing.)

Transit Improvement Valuation Study

Investigated public transit service improvement valuation. Analyzed the value transit passengers place on factors such as comfort, convenience and reliability; identified ways to quantify these factors by adjusting travel time unit costs; identified how such improvements affect travel behaviour. (Client: TransLink. Project Manager: Don Buchanan. Time Period: January-February 2007.)

National Study on Car-Less and Special Needs Evacuation Planning

Coauthoring a study and best practices guide on the evacuation of car-less and special needs people during major disasters. Includes research of previous disaster evacuations, stakeholder surveys and analysis of best practices. (Client: Federal Transit Administration. Project Manager: Professor John Renne. Time Period: January 2006-January 2010.)

Improving Provincial Transit Pass Program

Evaluated provincial program that provides subsidized transit passes to lower-income seniors and people with disabilities. Reviewed the programs goals and objectives, investigated opportunities to improve service delivery, helped develop long-term strategic objectives, and provided specific program improvement recommendations. (Client: British Columbia Ministry of Employment and Income Assistance. Project Manager: Jeanette Gault. Time Period: August-December 2006.)

Rail Transit Benefits Study

Performed a comprehensive evaluation rail transit impacts on transportation system performance in U.S. cities. Produced the report *Rail Transit in America: Comprehensive Evaluation of Benefits*, and presented results at the Transportation Research Board annual meeting, January 2005. (Funding: American Public Transportation Association. Time Period: Sept.-Dec. 2004.)

Evaluated Transit Investment Criticism

Evaluated the paper “Light Rail: Boon or Boondoggle” by Molly D. Castelazo and Thomas A. Garrett, which argues rail transit is economically inefficient and more costly than alternative transportation improvement investments. Prepared a detailed report that identifies various errors and omissions in Castelazo and Garrett’s paper (www.cmt-stl.org/images/litman.pdf). (Client: Citizens for Modern Transit [www.cmt-stl.org]. Time period: July-August 2004).

Public Transit Economic Evaluation

Produced a report identifying the net benefits of potential public transit improvements in Colorado Springs. Created a comprehensive framework for evaluating public transit improvements. Identified examples of successful transit projects in similar cities, identified ways to maximize transit benefits, and responded to common criticisms of public transit investments. (Client: City of Colorado Springs [www.springsgov.com]. Time period: January – March 2004).

Transit Station Parking Strategy

Developed parking policies and planning practices for implementation at new rail transit stations in Southern California. This included developing an evaluation process to prioritize parking improvements, creating a menu of potential parking management strategies, and helping to establish a planning process to determine which strategies are suitable for implementation at each site. (Project Manager: Robin Blair. Client: Los Angeles Metropolitan Transportation Authority [www.metro.net]. Time Period: January-July 2003).

Transportation and Social Exclusion Research

Wrote and presented a paper titled *Social Inclusion As A Transport Planning Issue in Canada* (www.vtpi.org/soc_ex.pdf), at a seminar at the University of Westminster in London, April 3-4, 2003 as part of a study to evaluate transport-related social exclusion issues in various countries. (Project Manager: Professor Karen Lucas, University of Westminster. Client: Federation Internationale de l’Automobile [www.fiafoundation.com]. Time Period: January – April 2003.)

Transit Elasticity Values Review

Reviewed and summarized information on transit price, service and cross-elasticities for modeling and planning applications in the Vancouver, BC region. (Client: TransLink. Time Period: March 2002.)

Vanpool Program Development Opportunities

Examined ways to improve and expand vanpooling in the Puget Sound region. This project involved refining estimates of vanpool market potential, identifying strategies to increase vanpool formation and improve vanpool program operations. The project included research on other transportation demand management strategies that support and encourage vanpool use. (Project Manager: 2Plus, Inc. Client: Washington State DOT. Time Period: Dec. 2001 to March 2003.)

Rail Transit System Evaluation

Comprehensive evaluation of a proposed light rail system in the Victoria region. This project included identifying and quantifying the incremental benefits and costs of the proposed rail

Victoria Transport Policy Institute

system, including impacts on travel patterns, traffic congestion, consumer costs, economic development, land use patterns, road safety and pollution emissions. Produced the *Light Rail Economic Opportunity Study* (www.islandtransformations.org/pages/05.php). (Client: Island Transformations, www.islandtransformations.org), funded by the Province of British Columbia. Time Period: November 2001 to September 2002)

Mobility Benefits of Passenger Transport

Performed a detailed analysis of the mobility benefits of passenger transport. This project involves examining the social benefits of public transit services, identifying methods to quantify these benefits, and developing a framework for evaluating them in transportation planning applications. (Project Manager: Booz-Allen & Hamilton, New Zealand. Client: TransFund New Zealand. Time Period: May to December 2001.)

Evaluated Public Transit Benefits

Evaluated the benefits of public transit improvements on the Lion's Gate Bridge, Vancouver, BC. (Client: B.C. Transportation Financing Authority. Time Period: May 1998.)

Evaluated Tax Exempt Transit Benefits

Evaluated transportation and economic impacts of making Canadian tax law more favorable to transit commuting. (Client: Transit Advocacy Project. Time Period: Sept. 1996 to January 1997.)

Transit Benefit Analysis

Comprehensive study of the benefits of transit service in the Victoria region. (Client: BC Transit. Time Period: January to April 1996.)

Publications

Todd Litman (2004), "Transit Price Elasticities and Cross-Elasticities," *Journal of Public Transportation*, Vol. 7, No. 2, (www.nctr.usf.edu/jpt/pdf/JPT_7-2_Litman.pdf), pp. 37-58; at www.vtppi.org/tranelas.pdf.

Todd Litman (2004), *Rail Transit In America: Comprehensive Evaluation of Benefits*, VTPI (www.vtppi.org); at www.vtppi.org/railben.pdf.

Todd Litman (2005), *Evaluating Public Transit Benefits and Costs*, VTPI (www.vtppi.org); at www.vtppi.org/tranben.pdf.

Todd Litman (2005), *Terrorism, Transit and Public Safety: Evaluating the Risks*, VTPI (www.vtppi.org); at www.vtppi.org/transitrisk.pdf.

Todd Litman (2005), *Evaluating Rail Transit Criticism*, Victoria Transport Policy Institute (www.vtppi.org); at www.vtppi.org/railcrit.pdf.

Todd Litman (2006), *Smart Congestion Reductions II: Reevaluating The Role Of Public Transit For Improving Urban Transportation*, VTPI (www.vtppi.org); at www.vtppi.org/cong_reliefII.pdf.

Todd Litman (2008), "Valuing Transit Service Quality Improvements," *Journal of Public Transportation*, Vol. 11, No. 2, Spring, pp. 43-64; at www.nctr.usf.edu/jpt/pdf/JPT11-2Litman.pdf; a more complete version is at www.vtppi.org/traveltime.pdf.

Todd Litman (2008), *Build for Comfort, Not Just Speed: Valuing Service Quality Impacts In Transport Planning*, VTPI (www.vtppi.org); at www.vtppi.org/quality.pdf.

Todd Litman (2009), *Evaluating Transportation Economic Development Impacts*, VTPI (www.vtppi.org); at www.vtppi.org/econ_dev.pdf.

Todd Litman (2010), *Raise My Taxes, Please! Evaluating Household Savings From High Quality Public Transit Service*, VTPI (www.vtppi.org); at www.vtppi.org/raisetaxes.pdf.

Lyndon Henry and Todd Litman (2006), *Evaluating New Start Transit Program Performance: Comparing Rail And Bus*, Victoria Transport Policy Institute (www.vtppi.org); at www.vtppi.org/bus_rail.pdf.

Todd Litman and Tom Rickert (2005), *Evaluating Public Transit Accessibility: 'Inclusive Design' Performance Indicators For Public Transportation In Developing Countries*, Victoria Transport Policy Institute (www.vtppi.org); at www.vtppi.org/tranacc.pdf.

VTPI (2010), *Online TDM Encyclopedia*, Victoria Transport Policy Institute (www.vtppi.org/tdm).

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