



The Purpose, Function, and Performance of Streetcar Transit in the Modern U.S. City: A Multiple-Case-Study Investigation

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The streetcar has made a remarkable resurgence in the United States in recent years. Yet there is remarkably little work on its transportation role. This study examines the modern-era streetcars in Little Rock, Memphis, Portland, Seattle, and Tampa to answer a series of questions.

1. What was the purpose of streetcar development?
2. How do planners, developers, business people, and other key actors assess the streetcar performance?

How does the streetcar perform as transportation when assessed using indicators such as ridership, service productivity, and cost effectiveness?

Study Methods

This research project employed a combination of quantitative and qualitative methods.

The quantitative methods included the use of descriptive statistics to consider streetcar ridership, service levels, cost effectiveness, and service productivity over time. It also compared those statistics with other transit services operated in each city, using data obtained from those transit agencies and the National Transit Database.

The qualitative methods included documentary review and key informant interviews. The authors used key document reviews to develop baseline knowledge of the history of streetcar development, the characteristics of streetcar service, and the areas of controversy or consensus around the streetcar in each city. The authors used key informant interviews with planners, developers, business people, and other key actors in each city to better understand the perspectives each set of actors brought into the streetcar decision-making process in their cities.

Findings

The authors learned that the streetcar's primary purpose was to serve as a development tool, a second objective was to serve as a tourism-promoting amenity, and transportation objectives were largely afterthoughts except in Portland, and to a lesser degree, Seattle. Key informants in every city regarded the streetcar as a development "catalyst." They characterized the streetcar as a symbol of a "permanent" public commitment to the area in which it operated. This commitment reassured developers and business owners that it was now "safe" for them to make their own economic investments in these locations. In Little Rock and Tampa, the streetcar's role as an attraction for visitors also emerged through the key informant interviews. Most informants had a very positive view of the streetcar's overall performance.

In Portland, transportation objectives were also important considerations in streetcar planning decisions, and its streetcar has much higher ridership and better overall performance than the other cities.

The authors learned that Portland was by far the standout transportation performer among the cities, with the highest ridership, the most productive service, and among the most cost effective service. By contrast, Little Rock and Tampa emerged as the poorest performers. Portland was the city whose streetcar was planned and operated closest to the ideal suggested by the literature with respect to alignment location, transit network coordination, fare policy, service policy, and the rider market that is served. Planners in Portland approached the streetcar as a transportation and a development tool, and they made decisions accordingly.

Policy Recommendations

Planners and policymakers should think very carefully about the purpose of streetcar development when making decisions about alignment, service levels, fare policies, and level of coordination with other transit services. If the streetcar is intended to play a transportation function, these decisions should be made in ways that increase the streetcar's rider appeal.

Many advocates point to Portland's experience and then proceed as if it could be easily replicated elsewhere. But the authors suggest that Portland's experience is the result of a unique combination of external factors (population and employment patterns, real estate market conditions) and local decisions (development policy, financial decisions, other public investments, alignment location and length, operation decisions, fare policy) that may or may not be applicable elsewhere.

Finally, communities must think much more carefully about potential long-term consequences of streetcar decisions. The opening of a streetcar might necessitate later cuts in bus services, for example, when budgets tighten. Additionally, the decisions made early on about seemingly trivial things, such as the type of vehicle to operate (modern, replica, or vintage) can have significant consequences for operations and finances later on.

About the Authors

Jeffrey Brown is Associate Professor and Luis Enrique Ramos is a doctoral candidate in Urban and Regional Planning at Florida State University. Hilary Nixon is Associate Professor in Urban and Regional Planning at San Jose State University.

To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/project/1201.html



Image of Streetcar in Portland, Oregon

Photo Reference: Portland Streetcar, Inc. (PSI). "Image of Streetcar in Portland, Oregon." No date. Provided by Julie Gustafson of PSI via email communication on June 16, 2014.