Streetcars and Economic Development

The dynamic linkage between them
Streetcars and Economic Development...the linkage between them

Connecting People | Shaping Places

This monograph provides a review of the manner in which U.S. and Canadian cities are using streetcars as urban circulators and to support and intensify downtown retail and redevelopment – connecting people and shaping places. It also compares those efforts with bus shuttles and other transit circulator types.

Background

Prior to World War II, most North American cities, including many small and medium-sized ones, were served by streetcar systems. The streetcar was a principal means of transportation for office and industrial commuters, and it provided circulation and connection to downtown retail, entertainment, sports, employment, and civic destinations. The streetcar was a connecting mode for circulation – connecting residents to downtown and local circulation within downtown and its destinations.

The streetcar systems were also typically constructed as private ventures or as what is now called public/private partnerships. These ventures might involve developers, electric utilities and expansion-minded city governments. As a private initiative, one of the principal results was residential development, often-now refereed to as the “streetcar suburbs”. In effect, streetcars began shaping patterns of development from their very inception.

These two powerful assets – connecting and shaping – were attributes of the streetcar that helped define the face of urban America for fifty years.

However, in the post-World War II era, a dramatic transition occurred. In the space of two decades, almost all of these systems were dismantled. This sweeping change was hastened by several factors, especially:

- The flight to suburbia, supported by federal housing policies, the construction of the interstate highway system, and a booming postwar economy, coupled with racial and other cultural factors;
The condition and location of the streetcar lines. They were in poor condition after years of deferred maintenance and investment. Operationally, they often ran down the middle of streets with passengers boarding and de-boarding onto the street surface. This reinforced the perception that they were obsolete in the automobile age. The development-oriented genesis of many streetcar lines was, ironically, part of their undoing. Having served their principal purpose of supporting development, they were easily left behind by development interests after the neighborhoods built out.

The successful effort by National City Lines (NCL). A shell corporation created by General Motors, Standard Oil and Firestone Tires, National City Lines systematically bought and closed streetcar systems across the country, replacing them with GM buses. It was perfectly timed and capitalized to buy up often weak and failing streetcar companies. NCL was eventually investigated by the U.S Justice Department and fined $5,000 for conducting a “commercial conspiracy.”

The Light Rail Revolution

In the intervening fifty years, many North American cities have implemented light rail systems, with universal success in terms of ridership. These systems are usually designed to carry large volumes of suburban commuters to downtowns, and they are often aligned parallel to major highway corridors. In many cases, especially Portland, Denver, and Dallas, light rail has also sparked major new investments in downtown office, housing and retail projects. Some specifics:

- Twenty years ago, Portland’s central business district was a typical tired downtown, with fading retail and rising office vacancy rates, when compared to suburban office parks. Today, the light rail system, MAX, carries 50,000 passengers a day to a downtown rated as one of the most livable in America. Office vacancy rates are now lower than suburban ones, and rents are higher. The best, most attractive retail in the region is in Portland’s downtown. Over $2 billion of development has been constructed around downtown station areas.
In Dallas, the opening of the DART light rail starter line sparked a real estate renaissance, with a premium being paid for properties along the line. "Many investors have come to look at proximity to the DART light rail stop as offering a competitive advantage for their properties," said Jeff Stone, senior managing director of Holliday Fenoglio Fowler LP. Over $1.3 billion in development has been completed.

Denver’s LoDo (Lower Downtown) has emerged as one of the country’s most successful new urban neighborhoods. It use the new light rail line, the Lower Platte River, and Coors Field (a downtown baseball stadium), and the successful 16th Street transit mall, to anchor this booming revitalized urban neighborhood.

These cities and others have realized the benefits of connectivity in an era when capital and talent are mobile, and quality of life is the most durable economic strategy. A livable, sustainable community – a world class city – needs world class transportation, and light rail has been a very effective strategy in reaching that goal.

Despite light rail’s many virtues, it is not a transit panacea.

- Projects are often built with separated trackways, often difficult to fit into a lively urban streetscape; the physical size of the vehicles often is not in scale.

- Average speeds are high, a necessity if the system is to move suburban commuters or shoppers rapidly to downtown. Stops are often a half-mile or more apart, limiting convenient access.

- Cost is substantial, usually falling in the range of $45 - 75 million per mile; since federal funding typically covers no more than 50% of the capital cost of these projects, high cost is a challenge for many communities.

- Disruption during construction: digging up downtown streets for a period of many months is an issue and can threaten the viability of local businesses.

From a downtown point of view, even a successful light rail systems restore only half of the functions of the old
streetcar lines: connecting. They serve as an excellent regional connectors, speeding large numbers of people to and from the downtown area. As local circulators, they are not as efficient. Because of their scale, high cost, and infrequent stop spacing, light rail lines cannot function as an effective downtown circulator...that is not their design purpose.

Because of these factors, it is unlikely that most planned light rail systems will be able to provide service to all areas that need premium transit. Some other form of transit is needed to serve the population density and trip generation that redevelopment can bring. To keep up with the pace of urban redevelopment now underway nationally, and to serve a larger area, streetcar lines have the potential to complement and extend the reach of the light rail systems. **Light rail is the trunk line, and the streetcar is the distributor.**

## The Bus “Trolley”

In a number of U.S. cities, attempts have been made to restore the downtown circulation function through bus shuttles. In some cases, buses are styled to resemble antique trolleys. These trolleys have been only partially successful. The theory, in many cases, was that tourists would use these buses to circulate from hotels and convention centers to downtown destinations, that residents would park-and-shop, or workers would connect to regional commuter rail systems. These systems have generally not met their goals for several reasons:

- **A bus is a bus** – Despite the trolley-like decoration, people can still detect a diesel bus, and rightly or wrongly, many middle and upper-income Americans avoid riding buses. So, the trolley circulators have not attracted the number and type of riders anticipated.

- **Still not quite sure where it goes** – Tourists have not fully embraced the circulators, despite the fact that they were the target market for many of these programs. For both the reason cited above and the concern about routes and schedules, visitors and convention attendees are wary of getting onto the local bus trolley.
• **Volume and capacity**— With high floors, single doors and limited size, trolley-style buses carry far fewer passengers than a light rail or streetcar vehicle, taking longer to load and unload.

As a result, bus circulators, even state-of-the-art projects like Orlando’s *Lynmo* system, do little more than move transit-dependent riders and some commuters from park-and-ride lots in slightly better style. Except for Denver’s lavish 16th Street transit mall, bus trolleys have not had a notable effect on office or retail environments.

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**Enter the Modern Streetcar**

Starting with Portland’s Central City Streetcar project, a “new” transit and development prototype has emerged. It has re-established transit’s traditional role — *connecting and shaping*.

The Portland project uses modern European tram vehicles to serve a five-mile loop. The loop traverses a somewhat declining portion of an otherwise healthy downtown, activates a large redevelopment area adjacent to downtown, and serves a dense, close-in neighborhood. Along the way, it connects a major hospital, an urban university campus, a performing arts center, and many other cultural and commercial venues. Importantly, it seamlessly interconnects with the MAX, the regional light rail system.

Ridership has quickly exceeded all projections, and the streetcar is now running over 7,000 per day, even with the somewhat meager 13-minute frequency between vehicles. The character of the ridership is dramatically different from typical bus ridership. A wide variety of riders frequent the streetcar — professionals, tourists, downtown residents, and university students.

One of the streetcar’s most important features is its cost per mile. While light rail ranges from $45 to $55 million per mile, the streetcar averages $15 million per mile. At 80% of the capacity of light rail, the streetcar becomes a high capacity, affordable urban circulator.
Despite its ground-breaking reputation, the Portland project is not really new, in two senses:

- **The streetcar circulator tied to successful redevelopment goes “back to the future”** in rediscovering the use of a neighborhood-scale transit project to shape and catalyze a change in the development pattern. This was the concept behind many of the original streetcar lines.

- **European cities did not discard their urban trams** in the postwar era; they were maintained and their city centers remained healthy. Modern trams still run, carrying large volumes of passengers, supporting an urban lifestyle that never waned.

Since the Portland project opened in 2001, a number of cities have embarked on similar ventures. Two of them have been completed, one in Tampa, Florida, the other in Tacoma, Washington. Both have already seen similarly dramatic results in terms of economic and redevelopment impact. There are now more than 75 streetcar initiatives across the US and Canada in the planning stage, ranging from large cities like Seattle, WA, Vancouver, BC, Atlanta, GA and Charlotte, NC to smaller cities like Winston-Salem, NC and Lake Oswego, OR.

**Economic Development**

As the *connecting* attributes have been demonstrated, the *shaping* capacity is also being recognized. Four short case studies demonstrate the economic development potential delivered by the streetcar. Because of the frequency of stops — every two to four blocks — development patterns are linear in nature, paralleling the streetcar line. This provides a consistent urban development form. Portland, Tampa, Miami, and Atlanta stories accent the *shaping* abilities.

**Portland, OR** - From its very inception, the streetcar was seen first and foremost as a redevelopment tool. Its backers organized a nonprofit corporation that built and now operates the line. The corporation is made up of developers, retailers and property owners, as well as city government officials. They have succeeded.
The $55 million streetcar line has sparked over $1.5 billion (and growing) in new development, making it probably the best municipal investment anywhere in recent times. The Pearl District, located along the streetcar line within a designated redevelopment site, is the nation’s most successful new urban residential and retail neighborhood. It’s now common to see residents walk out of their $500,000 Pearl District condominiums and catch the streetcar downtown to shop, to the airport, or to attend class at Portland State University. The condominiums would not have existed but for the streetcar, and the streetcar would not have been there but for the condominiums.

**Tampa, FL** - In Tampa, its 2.5 mile line has stimulated over $600 million in public projects, and a correspondingly robust $700 million in private projects. The path of the streetcar line has awakened the Channelside District, a former industrial area near the port, and it has served to reenergize Ybor City, Tampa’s historic Cuban quarter. Channelside is now converting warehouses to lofts, and new mixed use projects, including high rise residential towers, are announced almost daily. For the first time in over a century, close-in downtown housing is appearing. Mixed use and entertainment venues are providing exciting destinations that complement the Florida Aquarium, the Cruise Port, and the Convention Center. Centro Ybor, a mixed use entertainment center, straddles the streetcar line, connecting it to the other tourist venues.

**Miami, FL** – The City of Miami has also initiated a 7.5 mile streetcar line from downtown, north to the emerging Design District. While in the design stage, economic development studies have been prepared that estimate the long-term redevelopment potential. Along the proposed route is an abandoned rail yard (similar to Portland’s Pearl District), and the line will transverse it. Along the line are existing and planned destinations, and the streetcar’s connecting ability is shaping future development patterns and forms. In fact, the initial estimate of new private is $3.5 billion. Among the anticipated changes are mixed use, high density residential, and arts and entertainment uses.
Atlanta, GA - Over the past ten years, Atlanta has enjoyed a net increase in population growth after 40 years of out-migration. Concurrent with national trends, the City is seeing a rebirth of its inner city neighborhoods. Of the recent regional condominium activity, 90% of the sales have occurred in the center city. Aggravated by increasing congestion, the re-urbanization of central Atlanta is in full bloom. With this activity came the realization that another means of moving residents and visitors was needed. Likewise, many inner city destinations were not connected by convenient, reliable transit. These destinations include universities, hospitals, high density infill projects, sporting venues, offices, retail, and entertainment and tourist activities.

Growth has paralleled Peachtree Street, from Downtown through Midtown to Buckhead. It is along this spine that Atlanta Streetcar, Inc. (a private, non-profit) envisions a 10.7 mile streetcar line. Fueled by a public-private partnership approach, the line is anticipated to catalyze some $4.4 billion in development and redevelopment. Based on a detailed economic analysis, new investment will be found in transit-oriented village development, revitalized urban neighborhoods, entertainment, specialty commercial, and a wide range of residential types.

Funding the Streetcar

While the idea of a modern streetcar system is extremely attractive, funding them is more difficult. Two things are certain: each one is different, and each one is complex. Portland employed over seven different fund sources, and Tampa employed 35! This makes the issue current and compelling. What is the current practice?

In general, the early feasibility work is being funded locally, often by private interests. This approach is both pragmatic (available federal funds are limited for feasibility studies) and strategic (the Federal Transit Administration [FTA] is favorably impressed by local initiative). Local champions of these projects are generally advised to avoid the entanglement of federal involvement in early development of these projects, but HDR holds frequent briefings with FTA staff as the project develops.
Capital funding for engineering design and construction is being raised through a combination of federal funds through FTA and local funding based on the projects’ economic impact. A substantial impact on retail sales, property values, or development intensity creates the opportunity to recapture a portion of that added value. The mechanisms being used or considered to do this include tax increment financing, local benefit districts, and development impact fees. Other more generalized local revenue sources are also being used, including sales tax increments, parking revenue bonds and other bonding mechanisms.

Properly conceived and designed, a streetcar project generates such positive economic impacts, it is possible to derive a major portion of its capital cost from the economic benefits it creates. For example, the South Lake Union streetcar project planned in Seattle is expected to raise half its capital cost through a local improvement district assessment on benefited properties along and near the line.

On the federal front, HDR is in continuing conversations with FTA Administrator Jenna Dorn and others staff about the agency’s role in funding these projects. HDR is also involved with the New Starts Working and the Community Streetcar Coalition in drafting language and provisions for the “Small Starts” program as part of the current Transportation Reauthorization bill now being debated in Congress.

Earl Blumenauer, a member of Congress from Portland, is being assisted by HDR, as well as other members and staffs of relevant Congressional committees, in their efforts to pass specific legislation creating a dedicated streetcar program within FTA. The Administration’s current proposal takes a different tack, raising the federal share of a Small Starts project up to $75 million and promising less bureaucratic review criteria than those applied to traditional Section 5309 New Starts transit projects. Jenna Dorn is also talking about revising the TIFIA loan program to make it more usable for projects like these.

The bottom line of all this will be an enhanced ability of the FTA to fund streetcar projects, probably through some version of an improved Small Starts Program. Meanwhile,
as the economic benefits of these projects continue to prove out; local financing mechanisms based on value capture will continue to play a growing role in providing the local matching funds.

Therefore, communities that go through a feasibility study process and develop a strong concept for a streetcar project can reasonably expect to implement their plans. Given the experiences of Portland, Tampa, Tacoma, Miami, and Atlanta, communities will reap substantial benefits, including less congestion, more convenient circulation, and increased retail sales, housing sales, and property values.

In support of locally-driven initiatives, a Community Streetcar Coalition has been formed, consisting of cities, transit agencies, and streetcar advocates, to advance this technology nationally. The Coalition is advising Congress and the FTA in advancing the streetcar concept through a “Small Starts” set-aside as the principal federal funding source.

**Summary**

In summary, streetcar projects like those discussed are the first of a national wave of similar efforts. Streetcars are more effective in supporting downtown development than light rail, and at one third the cost of light rail. Streetcars are often the “appropriate technology” for midsize cities. They are highly popular with residents, workers, and visitors, adding character and quality to life at street level. They support the urban lifestyle that is critical to attracting and retaining young professional workers, and which is increasingly preferred by retiring Baby Boomers.