



## STREETCAR SYSTEM



### WHY STREETCARS, WHY NOW?

Pedestrian circulation and connectivity drives urban development. Cities across the world have recognized the benefits of streetcars and are heavily investing in these pedestrian-friendly and environmentally-conscious systems to efficiently and reliably take people where they need and want to go. These efforts have catalyzed urban revitalization, redevelopment, and economic growth.

### MODERN STREETCAR

Modern streetcar systems are highly efficient urban circulators that are larger than buses, but smaller than light rail vehicles. They run on fixed rails embedded in public streets and move with the flow of traffic. They integrate with existing urban environments and street corridors, are ADA compliant, have low-floor boarding areas that are flush with existing sidewalks, and do not require dedicated rights-of-way.

### CATALYST FOR INVESTMENT

With highly visible rails installed in the street, a permanent, dependable streetcar system will assure investors and financial partners that their investments have permanent access to public transit and a steady flow of patrons and tenants. This benefit gives property owners the ability and confidence to invest in projects that will enhance Downtown.

### MAJOR BENEFITS FOR ALL OF DOWNTOWN

The Downtown L.A. Streetcar will create additive value and stimulate development above and beyond Downtown's forecasted level of growth.



**\$1.1 billion**  
in new development



**675,000 ft<sup>2</sup>**  
of new office space



**2,600**  
new housing units



**9,300** new jobs



**3,600**  
new residents



**\$24.5 million**  
in new annual spending



**5,800** new hotel  
room bookings per year



**\$47 million**  
in new city revenue

*Data prepared by AECOM.*



### INCREASING LONG-TERM ECONOMIC COMPETITIVENESS

The Downtown L.A. Streetcar is a powerful way to spur redevelopment and community revitalization. Some areas along the proposed alignments have received tremendous investment, yet many areas still need significant attention to realize their full potential. Rehabilitating historic buildings and constructing new in-fill development is a critical step towards connecting Downtown's fragmented communities and neighborhoods.

### CONNECTING NEIGHBORHOODS

After nearly a decade of unprecedented growth and revitalization, Downtown L.A. has a number of burgeoning communities, established cultural and entertainment venues, diverse office and commercial districts, and increasing pedestrian activity. While Downtown has regional bus and rail connections, transit connectivity is limited between neighborhoods and major destinations. The streetcar will connect Downtown and enable it to function as a cohesive, easy to navigate 24/7 urban core.

Streetcar schedules will be integrated into real-time transit maps, available on mobile phones and the internet, so riders know exactly when and where streetcars arrive and depart. This will allow riders to conveniently make transit connections and encourage automobile drivers to park once and circulate around Downtown L.A. via public transit.

### ROUND THE CLOCK ACTIVITY

High-volume pedestrian foot traffic throughout the day and night will support local businesses. Heightened pedestrian and storefront activity will translate into increased sales, higher lease rates, active uses in upper floors, and a diversity of consumer options. With a wide variety of businesses occupying Downtown's retail spaces, urban living will become more sustainable and convenient.

## STREETCARS PRODUCE RETURN ON INVESTMENT

### Portland

- » Over \$3.5 billion in economic development
- » 55% of all development in downtown Portland within one block of a streetcar line

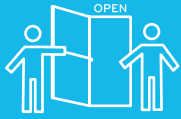
### Seattle

- » Over 2,000 residential units
- » Vacant land within three blocks of the streetcar line increased by a median of 123%, whereas the city median was 53%

### Tampa

- » Over \$1 billion of new development along streetcar route
- » Property near Tampa's Convention Center increased in value by 313% over a six year period

*Source: Brookings Institute; Fort Worth Streetcar Feasibility Study*



## BUSINESS DEVELOPMENT



### INCREASING BUSINESS VISIBILITY AND VITALITY

The streetcar will directly support existing and future Downtown businesses by delivering thousands of passengers to major destinations every day. Increased connectivity between major entertainment, retail, and business districts will make the streetcar an especially viable vehicle for attracting a new audience to Downtown’s entertainment, businesses, cultural, and historic districts.

#### STREETCARS HELP ACTIVATE RETAIL SPACES AND HISTORIC BUILDINGS

With Portland as an example, the Downtown L.A. streetcar has the potential to reactivate historic buildings and redevelop underutilized parcels. Such redevelopment will be spurred by increases in real estate values, encouraging property owners to realize additional revenue by developing, enhancing, and improving buildings. In addition, the streetcar will make the occupancy of ground floor spaces more economically viable and lead to the reactivation of storefronts to enhance pedestrian and sidewalk experiences.

#### STREETCARS STIMULATE REDEVELOPMENT AND PRODUCE A RETURN ON INVESTMENT

Portland’s initial four-mile couplet stimulated major interest in streetcar development. To date, the city’s streetcar network has generated \$3.5 billion in private investment, led to the construction of 10,000 new transit-oriented housing units, and substantially cut vehicle miles traveled in the Portland metro area. These results demonstrate that a streetcar can help revitalize communities and neighborhoods while providing significant economic and development returns city-wide. The potential to generate similar revitalization in Downtown L.A. is even greater.



By 2035, the Streetcar will support **\$24.5 million** in new annual retail sales from new employees, business visitors, residents, and leisure visitors, including:



**\$10.5 million** in new annual spending from new Downtown residents

**\$7.0 million** in new annual retail sales from office workers and business visitors



**\$6.1 million** in new annual spending from new leisure and convention visitors

**\$900,000** in new annual spending on 5,800 new hotel room night bookings

### A PLATFORM FOR PROGRESS

The streetcar will allow employers to better connect with the region’s workforce. As more transit projects come on-line, such as the Expo Line, more people will have easy access to employment opportunities. And with increased access, the streetcar will help Downtown establish itself as the region’s center of sustainable urban living, business, entertainment, and culture. Taken together, these features will attract a diverse mix of tenants, businesses, and investment.

#### A MORE CREATIVE, DIVERSE, AND ENERGETIC WORKFORCE INCREASES COMPETITIVENESS

Attracting and retaining employees – especially creative employees who desire vibrant live/work experiences – requires a diverse urban environment. The Downtown L.A. streetcar system will connect major entertainment, business, and residential nodes together to spur the type of entrepreneurial investment needed to attract this workforce. In turn, the streetcar will directly position Downtown to fiercely compete for skilled, educated, and in-demand employees throughout the region.





## DEVELOPMENT HAPPENS AROUND STREETCARS

Other cities have seen significant mixed-use development within a few blocks of their streetcar systems. Much of this development was propelled by the level of pedestrian and retail activity that the streetcars generated throughout the day and night. And with strong ridership, business owners and developers have worked to convert thousands of daily riders into loyal customers along fixed, highly predictable routes.

### REDUCED PARKING NEEDS EQUALS COST SAVINGS AND DEVELOPMENT OPPORTUNITIES

Location and transit proximity can save tenants significant amounts of money by reducing parking costs. With on-site parking reaching into the hundreds of dollars per month per space, reducing a tenant's parking demand by even a few spaces will produce substantial savings, lower the cost of doing business, and increase the attractiveness of Downtown.

Parking lot owners and operators, however, won't lose out. Both Portland and Seattle discovered their streetcar systems increased parking demand late into the night and on weekends – more people started to park once and then circulate around by streetcar. What's more, parking lots can be redeveloped to capture even more value.

### STREETCARS STIMULATE TOURISM

Streetcars attract tourists because they connect major destinations together and are easy for novice riders to use and understand. The Downtown L.A. streetcar will provide service to major tourist and cultural destinations, including the Convention Center, L.A. LIVE, Dorothy Chandler Music Pavilion, Walt Disney Concert Hall, and MOCA. By traveling to the places that people want to go, the streetcar will capture riders that are willing, ready, and excited to engage in Downtown L.A.'s depth of entertainment, cultural, and shopping experiences.

## RETURN ON INVESTMENT

### Portland

- » Over \$3.5 billion in economic development
- » 55% of all development in downtown Portland within one block of a streetcar line
- » 75% of newly constructed downtown Portland residential development within two blocks of the streetcar line
- » Over 4.2 million sq. ft. of retail, office, and commercial development

### Seattle

- » Over 2,000 residential units
- » Vacant land within three blocks of the streetcar line increased by a median of 123%, whereas the city median was 53%
- » Relocation and retention of several corporate headquarters

### Tampa

- » Over \$1 billion of new development along streetcar route
- » Property near Tampa's Convention Center increased in value by 313% over a six year period
- » Major events at Tampa's convention centers and entertainment destinations generate significant ridership

### Little Rock

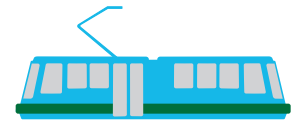
- » Over \$260 million in private and public projects within two blocks of the streetcar line, including the construction of 2,740 residential units

*Source: Brookings Institute; Fort Worth Streetcar Feasibility Study*





## CASE STUDIES



goLAstreetcar.org

### PORTLAND

The opening of Portland's first streetcar line in 2001 played an instrumental role in catalyzing development in the city's downtown. Coupled with a major re-development initiative, the streetcar system connected numerous neighborhoods and business districts. This connectivity stimulated major investment in real estate, urban parks, and infrastructure.

#### IN PORTLAND'S PEARL DISTRICT AND CENTRAL BUSINESS DISTRICT, THE STREETCAR STIMULATED SIGNIFICANT REDEVELOPMENT, INCLUDING:

- » 140 projects valued at \$3.5 billion, including 10,000+ housing units and 5.4 million sq. ft. of retail, office, and hotel space
- » New development along the streetcar route has been built to 90% of allowable density
- » Since 1997, when the streetcar was announced, 55% of all development in Portland's Central Business District occurred within one block of the streetcar system
- » Significant creation of affordable housing, with Portland reaching its 20 year affordable housing goal in 7 years

#### IN PORTLAND'S SOUTH WATERFRONT REDEVELOPMENT PROJECT AREA, THE STREETCAR:

- » Spurred a highly ambitious redevelopment effort producing 5,000 jobs and 3,000 housing units, including a high-tech medical research campus
- » Connected downtown to the region's largest research hospital, Oregon Health and Science University
- » Enabled real estate developments to successfully finance and sell LEED Platinum residential, commercial, and retail products
- » Generated significant public infrastructure investment in sustainable streets, parks, and riverfront greenways

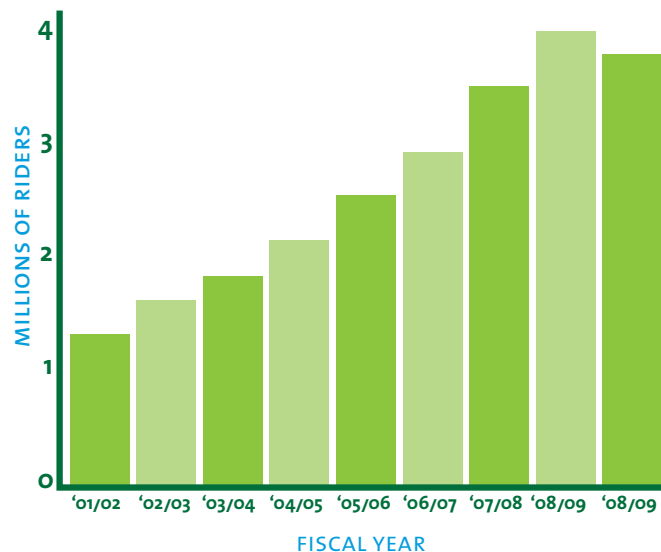
#### ECONOMIC DEVELOPMENT STUDIES HAVE REVEALED THAT:

- » *Before* the streetcar alignment was announced, developers built at 30% of allowable density and land within a block of the alignment captured only 19% of all development in the Central Business District
- » *After* the streetcar alignment was announced, developers built at 90% of allowable density within one block of the alignment, 75% within two blocks of alignment, and 40% three blocks further away; these same blocks captured 55% of all new development

#### SIGNIFICANT LESSONS WERE LEARNED FROM THE PORTLAND STREETCAR EFFORT, INCLUDING:

- » Private sector financing was instrumental in funding initial streetcar development and public improvements
- » Initial success demonstrated a market demand for higher densities and mixed-uses and clearly illustrated parking requirements can be reduced near streetcar lines
- » Livable, high-density communities require affordable housing, parks, and attractive public spaces to create vibrant destinations
- » Streetcars have a tangible financial impact on city revenues, as Portland's initial \$100 million investment produced over \$3.5 billion in economic development and investment along the first streetcar line

#### ANNUAL PORTLAND STREETCAR RIDERSHIP





## SEATTLE *South Lake Union*

Seattle's original South Lake Union Line was completed in December 2007, on time and within budget, with a substantial portion of the line being operational within three months of ground breaking.

### THE INITIAL PERIOD OF DEVELOPMENT ACTIVITY, FROM 2005-2010, GENERATED:

- » 4.2 million sq. ft. of retail, office, and commercial development – of this, 377,000 sq. ft. was new retail space providing neighborhood services
- » Over 2,000 residential units
- » Retention and relocation of corporate headquarters, small businesses, and entrepreneurs

### THE RELOCATION OF MAJOR BUSINESSES, INCLUDING:

- » Corporations: Amazon.com (1.7 million sq. ft. world headquarters), Microsoft, Whole Foods, Pan Pacific Hotel
- » Health Care: Group Health Cooperative Headquarters, Fred Hutchinson Cancer Research Center, and the University of Washington
- » Foundations: Bill & Melinda Gates Foundation
- » R&D: start-up and established biomedical firms, including Seattle Biomedical Research Institute, Merck & Co., and the University of Washington School of Medicine

### CRITICAL LESSONS FROM SEATTLE:

- » Streetcars can serve both existing and emerging “main streets” in different neighborhoods and business districts, and work best when they link distinct areas together
- » Major destinations and attractions substantially benefit from streetcar service, as both locals and tourists gain easier access to in-demand destinations
- » Bicycles, buses, and automobiles easily integrate with streetcar systems
- » Streetcars encourage public and private investment in pedestrian amenities and urban streetscapes to improve sidewalks, promote retail shopping, dining, etc.
- » Thoughtful design and engineering can expedite construction and minimize impacts to existing utilities

## TAMPA *TECO Line*

Tourists love streetcars because they're attractive, easy to use, and connect popular destinations. Tampa redeveloped its historic waterfront streetcar system to connect its major tourist destinations – including its convention center, cruise terminal, sports arena, and retail district. A streetcar extension is currently under construction to better connect the streetcar to downtown Tampa.

### AT A COST OF \$57.6 MILLION AND A LENGTH OF 2.4 MILES, THE TAMPA STREETCAR HAS HELPED GENERATE:

- » \$1 billion of new development
- » 313% increase in commercial land values
- » 608% increase in industrial land values
- » 2,740 residential units

### UNLIKE PORTLAND AND SEATTLE, THE TAMPA STREETCAR PRIMARILY SERVES TOURISTS AND MAJOR EVENTS VIA DIRECT ACCESS TO:

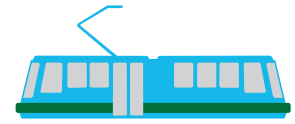
- » Tampa's modern cruise terminal
- » The Tampa Convention Center and associated hotels
- » A large regional shopping center
- » Waterfront pedestrian and recreational parks
- » A navel museum
- » The Florida Aquarium

## TAMPA'S STREETCAR RIDERSHIP PEAKS DURING SPECIAL EVENTS

- » **SUPER BOWL XLII:** 45,000 riders in two days
- » **6TH ANNIVERSARY OF TAMPA STREETCAR:** 14,600 in two days
- » **GASPARILLA PIRATE FESTIVAL:** 12,300 riders in one day
- » **WOMAN'S 2008 FINAL FOUR:** 15,000 riders in one week



## SUSTAINABILITY



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### POWERED BY RENEWABLE ENERGY *(nearly silent operation)*

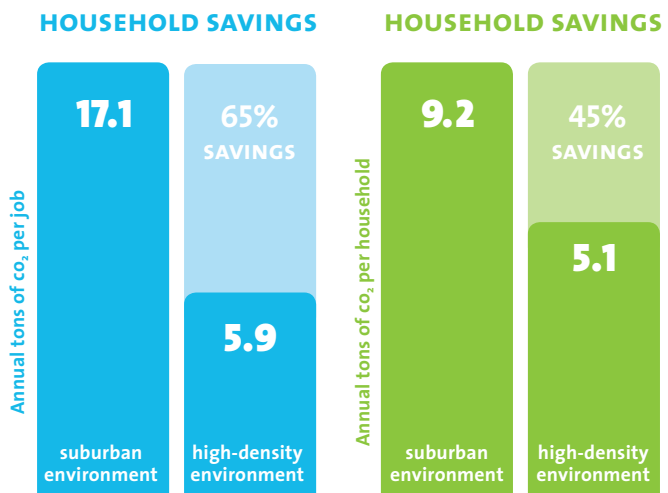
Streetcars run entirely on electricity that can be purchased from sustainable and renewable sources. This ensures that they emit zero point-source emissions while operating, and as an added benefit, electric propulsion systems are virtually silent.

#### SUSTAINABLE POWER

The streetcar will integrate solar power systems into the maintenance facility. This will enable the streetcar system to reduce its carbon footprint, increase the use of sustainable power, and set an example for other streetcar systems.

#### CARBON GAS REDUCTION

Streetcars reduce carbon gas emissions by making urban living easier, move accessible, and convenient for live/work activity. Recent studies have revealed that streetcars and mixed-use development reduce emissions for both employees and households. Overtime, these savings are significant.



Source: E.D. Hovee & Company, LLC

### TRANSIT ORIENTED DEVELOPMENTS NEED TRANSIT TO BE SUCCESSFUL

Very few Transit Oriented Developments (TODs) in L.A. have direct access to the region’s public transportation network. The streetcar will integrate all of Downtown’s residents with subway, light rail, and bus lines. By connecting Downtown’s major neighborhoods and districts, the streetcar will allow more sites to accommodate TOD projects, help reduce automobile dependence, and facilitate sustainable urban living.

#### STREETCARS PROMOTE SUSTAINABLE DESIGN

The presence of streetcar riders and increased sidewalk activity will make pedestrian design and transit accessibility a central focus of development. Other cities with streetcars have found that human scale design that accommodates streetcars and riders attracts customers, businesses, and tourists. For developers and building owners, including streetcars in future development and rehabilitation will contribute to long-term financial profitability.

#### AN ATTRACTIVE AND ACTIVE TRANSIT CORRIDOR

Development and transit activity has flourished along streetcar corridors in other cities. In Downtown L.A., the streetcar will catalyze and attract neighborhood-focused businesses that serve residents and tourists alike. Bridging the gap between transit providers and consumers is critical to reducing the need for automobiles, promoting active lifestyles, and supporting neighborhood businesses.

#### MULTI-MOBILITY INTEGRATION

Making connections on public transit is challenging. The streetcar will Downtown transit connections seamless by directly interfacing with the regional transportation network, including numerous bus routes, rail lines, and multi-mobility hubs. Combined, the streetcar and mobility hubs will offer an integrated suite of first and last mile transportation services.



## PEDESTRIAN CAPACITY

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Great streets have ample spaces for pedestrians. Active pedestrian spaces promote safe streets because they put "eyes on the street" as people carry out everyday activities. This promotes public safety while simultaneously promoting sustainable lifestyles, public health, and economic development.

Downtown Los Angeles has a number of remarkable streets and pedestrian spaces, but most lack basic amenities and have suffered from significant neglect. The streetcar will play a vital role in rehabilitating these streets to create great places for residents, tourists, and businesses.

## THE STREETCAR WILL HELP IMPLEMENT AB32/SB375 IN DOWNTOWN

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AB32 and SB375 set high standards to reduce California's greenhouse gas emissions. The streetcar is a critical transportation tool that will help Downtown reduce its emissions by increasing transit circulation, capacity, and ridership. Much of Downtown's traffic is for internal circulation (i.e. parking lot to parking lot); removing even a fraction of this traffic will help ease gridlock, get automobiles off the road, and support multi-modal transportation alternatives.

## STREETCARS PROMOTE HEALTHY, WALKABLE COMMUNITIES

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Streetcars amplify the benefits of pedestrian-scale communities, as they extend the distance a person can comfortably walk. Walkable communities promote healthy urban living by encouraging active lifestyles, creating connections between community members and neighborhood services, and promoting safety.





## TRANSIT & MOBILITY



### THE LAST MILE SOLUTION

The streetcar will provide the “last mile” solution needed to integrate Downtown’s current and future rail, bus, and parking facilities together into an innovative, efficient, and modern circulation system. At their core, streetcars are urban circulators that close the “last mile” gap between a transit rider’s stop and their final destination.

In Downtown, this means people will be able to circulate between destinations and transit networks with ease. This level of connectivity will enable people to visit entertainment, cultural, and civic destinations – such as the Disney Concert Hall, Civic Center, L.A. LIVE, Staples Center, etc. – while being able to shop, dine, work, and have fun in Downtown’s burgeoning arts, entertainment, and business districts.

#### LESS TRAFFIC, MORE PRODUCTIVITY

Removing the stress of a daily commute increases productivity and makes getting to work an active experience. The streetcar enhance the local economy and improve labor mobility by improving access to areas critically underserved by rail transit. The streetcar system will be especially helpful for those who choose not to, or are unable to, use an automobile as their primary means of transit.

### IMPROVING DOWNTOWN TRANSPORTATION

Connecting to existing bus, subway, and light rail service, the streetcar will distribute and circulate people throughout Downtown. The streetcar will provide direct connections to the Red, Purple, Gold, Blue, Expo, and Regional Connector light rail/subway lines, in addition to numerous bus lines. More and better connections will enhance Downtown’s transit and pedestrian experience for the area’s 500,000+ employees and 40,000+ residents.

#### LESS PARKING, MORE CIRCULATION

People drive between meetings and appointments because they lack an effective and dependable urban circulator. The streetcar is the solution that will allow people to park once and circulate around without the hassle of an automobile.

#### LIMITED SURFACE IMPACTS + FAST CONSTRUCTION = COST EFFECTIVENESS

With streamlined construction methods, streetcar systems have consistently proven that they can be built on-time and on-budget while minimally disrupting businesses. Streetcars are designed to integrate with the existing urban environment, can be constructed quickly, and flow with traffic in a shared right-of-way.



### **STREETCARS PROMOTE WALKABILITY AND ACTIVE SIDEWALKS**

Streetcars help define and emphasize a neighborhood's distinctive character while focusing and shaping development. The streetcar will extend the walkability of Downtown by making more areas accessible to pedestrians. Increased street-level activity will promote sidewalk activity, reduce noise pollution, and activate underutilized spaces.

### **LEARNING FROM OTHER CITIES' SUCCESSSES: RIDERSHIP EXCEEDS PROJECTIONS**

Given the popularity of other streetcar systems, it's anticipated the streetcar will be heavily used. Portland initially projected 2,800 daily riders when the city's first line opened, with the actual figure currently surpassing 10,000 riders per day. Tacoma's streetcar system similarly exceeded ridership projections, but multiplied across their entire transportation network – 178,000 yearly boardings leaped to 800,000. Phoenix's recently opened light rail system projected 26,000 daily riders, with actual daily ridership over 33,000. Results have been similar across the U.S., and streetcars have proven themselves capable of attracting and retaining riders.

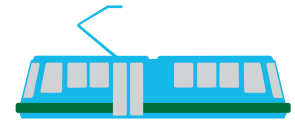
L.A. boasts an additional consideration: our Downtown is substantially denser than most cities with successful streetcar systems and has incredible transit needs and connections. A streetcar system that circulates people around Downtown will undoubtedly have significant ridership.

### **CREATIVE USE OF TECHNOLOGY**

Streetcars are permanent fixtures of the urban environment and effortlessly integrate with real-time transit technology. Streetcar stops will have real-time screens displaying arrival and departure times, online applications displaying current route information, and other wayfinding services to make riding the streetcar an enjoyable and predictable experience. For business owners, this is incredibly powerful as riders will be able to stay a few extra minutes, make an additional purchase, and still know exactly when the next streetcar will arrive.



## TYPICAL FUNDING SOURCES



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### FEDERAL FUNDING

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The Downtown L.A. streetcar project is actively working with the federal government and congressional representatives to secure federal funding. Federal funding is, however, much easier to receive once a local match has been identified and secured.

*Federal funding typically comes from these programs:*

#### NEW STARTS & SMALL STARTS

These two programs are used to fund streetcar construction costs. Both programs typically fund \$25 to \$50 million, or 10 to 50%, of construction costs. Securing funding, however, requires applications to go through a discretionary allocation process that is constricted by the federal budget and complex ranking/scoring metrics.

Only a few streetcar systems have successfully secured funding through these programs.

#### EXEMPT GRANTS

Exempt grants are a statutory component of the New Starts program, but are usually limited to \$25 million or less. Once awarded, projects are often ineligible for future federal funding. Exempt funds have few strings attached and are awarded on a discretionary basis.

Many streetcar systems have successfully secured Exempt Grants.

#### *Recent Federal Funding Awards:*

- » Atlanta – \$46.6 million (TIGER II)
- » Charlotte – \$25 million (Exempt Grant)
- » Cincinnati – \$25 million (Exempt Grant)
- » Dallas – \$23 million (TIGER)
- » New Orleans – \$45 million (TIGER)
- » Salt Lake City – \$26 million (TIGER II)
- » St. Louis – \$25 million (Exempt Grant)

### LOCAL FUNDING

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#### TAX INCREMENT FINANCING DISTRICTS

Redevelopment agencies use tax increment financing (“TIF”) districts to fund catalytic redevelopment projects. TIF districts allow redevelopment agencies to fund current projects with future proceeds from property taxes.

Many cities have used TIF districts to finance a portion of their streetcar systems.

#### LOCAL IMPROVEMENT DISTRICTS / ASSESSMENT DISTRICTS

The terminology varies by state, but assessment districts are typically used to pay for streetcar capital or operational costs. Each property owner within a specific boundary pays a rate, usually determined by a combination of factors such as distance to route and developed square feet, on an annual basis. In California, an assessment rate is fixed for the duration of the district.

Many cities have used assessment districts to fund a portion of their streetcar systems.

#### COMMUNITY FACILITIES DISTRICTS

Like assessment districts, community facilities districts (“CFD”) assess an annual special tax on real estate. The major difference is that CFD’s can adjust the tax rate annually, whereas assessment districts can’t. CFD’s typically have maximum rate ceilings. Annual adjustments ensure that new real estate projects are added to the district; this can lower the tax rate as future projects are developed.

CFD’s are unique to California.

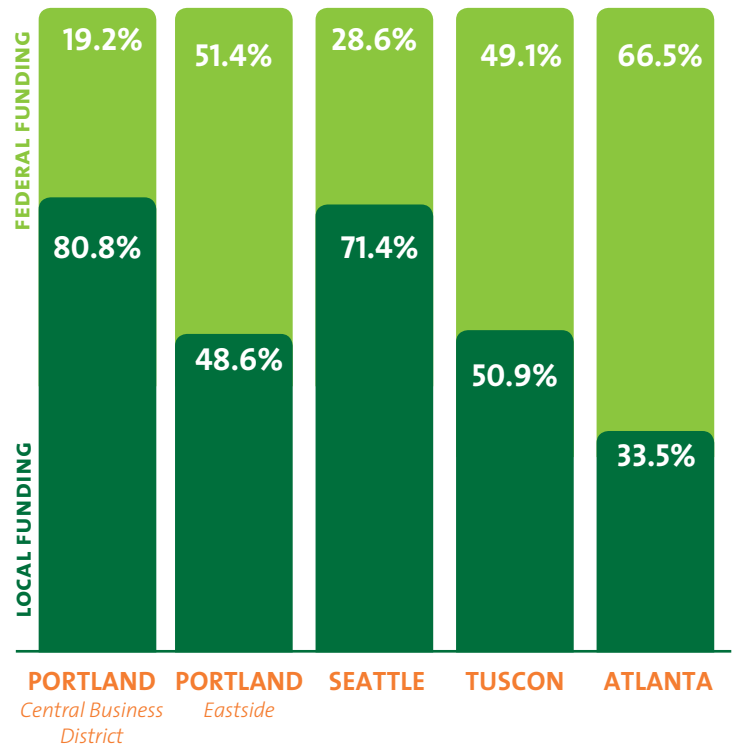




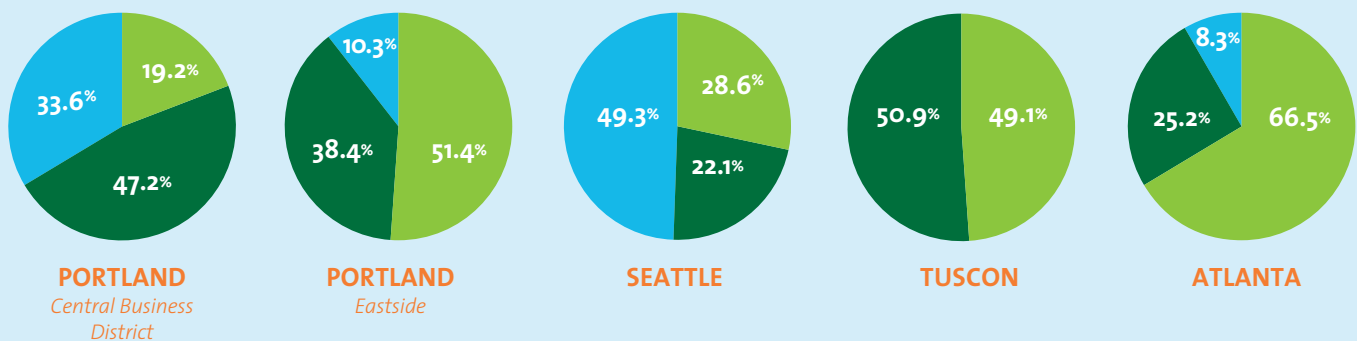
## THE IMPORTANCE OF A LOCAL MATCH

The Federal Transit Administration supports the development of modern streetcar systems, but before they're willing to commit funds, cities need to prove they have a local source of matching funds. A local match usually pays for 40 to 50% of total capital and construction costs. Local matching funds typically come from both public and private sources as streetcar benefits accrue to both sectors. Once local funds are secured, federal funding tends to quickly follow.

### LOCAL V. FEDERAL FUNDING SPLIT



## PUBLIC, PRIVATE, AND FEDERAL STREETCAR FUNDING



■ PUBLIC   
 ■ FEDERAL   
 ■ PRIVATE