

Gold Medal Winner  
**Portland Streetcar Project**  
Portland, Oregon



This is an excerpt from:

# Reinventing Downtown

2005 Rudy Bruner Award for Urban Excellence



BRUNER FOUNDATION, INC.

ROBERT SHIBLEY, AIA, AICP

WITH

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## Portland Streetcar Project At A Glance

# What is the Portland Streetcar Project?

*"...an active participant in the continuing development of a high quality, livable environment in the City of Portland by supporting streetcar development serving high density areas and by delivering safe, reliable, clean, cost-effective transit services."*

(Portland Streetcar, Inc. Mission Statement, June, 2001)

- Three miles of double track streetcar linking five districts on the west side of Portland, Oregon for a capital cost of \$72.9 million.
- Thin slab and rail section innovations allowing for economical rail infrastructure with minimal impact during system construction.
- \$2,287,854,000 of private investment within the local improvement districts for the Portland Streetcar system.
- A spine of four parks (two are complete) flanked by the double track and mixed-use neighborhoods replacing approximately seventy acres of reclaimed brownfields.
- A planned streetcar route that will create a circulator loop linking east and west Portland across the Willamette River.

# Project Goals

- Create a high quality transit service as an incentive for high density mixed-use development within the Central City.
- Connect major attractions in the Central City including Legacy Good Samaritan Hospital, the Pearl District, the Cultural District, Portland State University, RiverPlace, and South Waterfront with high quality transit.
- Develop rail transit that operates in mixed traffic and on existing rights-of-way at lower cost than light rail transit.
- Develop rail transit that fits the scale and traffic patterns of existing neighborhoods.
- Reduce short inner-city auto trips, parking demand, traffic congestion and air pollution.

## Project Chronology

**1972** Portland's *Downtown Plan* calls for North-South transit on 12th Street as a downtown "circulator."

**1985** "North West Triangle Report" adopted by City Council, calling for the rezoning of the River District.

**1987** Commissioner of Public Works Earl Blumenauer's speech to the Council on his transportation vision includes reference to streetcars as an option for the Central City circulator.

Portland Development Commission (PDC) becomes a major property owner north of the Central Business District (CBD)

in the River District Urban Renewal Area with acquisition of Union Station and its surrounding thirty acres.

**1988** Portland's *Central City Plan* calls for vintage trolley on 12th street.

**1989** City of Portland approves master plan for Hoyt Street Yards, advocating mixed-use development.

**1990** City initiates "Streetcar Feasibility Study" and Citizen's Advisory Committee (CAC).

**1992** City receives \$900,000 federal HUD grant with local match, with Senator Hatfield's support.

**1972**  
Portland's *Downtown Plan* calls for North-South downtown transit.

**1990**  
City initiates "Streetcar Feasibility Study" and Citizen's Advisory Committee (CAC).

**1995** Senator Mark Hatfield earmarks \$5 million in FTA funds for TriMet to implement the streetcar.

Portland Streetcar, Inc. is selected to design, build, operate and maintain the streetcar.

**2000** (January) City and TriMet enter into intergovernmental agreements to provide funding assistance and services to the Portland Streetcar project.

**2005**  
Streetcar service to RiverPlace begins.

**1987**  
Cmsr. Blumenauer's speech to the Council references streetcars in the central city.

**1992**  
City receives \$900,000 federal HUD grant for streetcar.

**1996-1999** 1,311 units of housing and 400,000 square feet of mixed-use constructed in the Pearl District.

Construction begins in May on streetcar section from Legacy Good Samaritan Hospital to PSU.

**2001**  
Substantial completion in January with vehicles starting to arrive in April.  
Passenger service starts in July.

**1993** Hoyt Street Properties acquires forty acres from Burlington Northern Railroad adjacent to PDC property.

**1994** *River District Development Plan* approved. Work begins on the River District Development Agreement.

PDC reports first of River District private development projects – Pearl Lofts (twenty-seven condominium units).

**1995** Senator Mark Hatfield earmarks \$5 million in FTA funds for the streetcar through regional transportation agency (TriMet).

City issues RFP to design, build, operate and maintain the streetcar.

PDC reports second of River District private development projects – Hoyt Commons (forty-eight condominium units).

Portland Streetcar, Inc. is selected to design, build, operate and maintain the streetcar.

**1997** (March) Two years of negotiation conclude with adoption of a Memorandum of Understanding with Hoyt Street Properties on River District Development.

**1999** PDC reports that from 1996 through 1999, there were 1,311 units of housing and approximately 400,000 square feet of mixed-use commercial space constructed in the Pearl District.

Housing is a mix of townhouses, condominiums, seniors housing and rental units.

Hoyt Street Properties development agreement amended increasing density.

Construction begins in May on streetcar section from Legacy Good Samaritan Hospital to Portland State University.

Notice to proceed given in September to the Inekon Group (Czech Republic) to manufacture streetcar vehicles.

**2000** (January) City and TriMet enter into Intergovernmental Agreements to provide funding assistance, personnel and other services as needed to the Portland Streetcar project.

**2001** Substantial completion in January with vehicles starting to arrive in April. Passenger service starts in July.

**2004** PDC reports that from 2000 through 2003, 1,218 units of housing were completed.

**2005** Streetcar service to RiverPlace begins.

## KEY PARTICIPANTS INTERVIEWED

SAM ADAMS, *Commissioner of Public Utilities, City of Portland*

BRUCE ALLEN, *Senior Development Manager, Portland Development Commission (PDC)*

HENRY A. ASHFORTH III, *Chief Executive Officer, Ashforth Pacific, Inc.*

GREG BALDWIN, *Partner, Zimmer, Gunsul Frasca Partnership*

EARL BLUMENAUER, *U.S. Congressman for Oregon's 3rd District*

MICHAEL BOLLIGER, *President, Bolliger and Sons; business owner interested in Eastside extension; past chairman of Citizen's Advisory Committee (CAC) for Portland Streetcar; member CAC*

JOHN CARROLL, *Chairman, Chairman of the Board, PSI*

DIKE DAME, *President, Williams and Dame Development, Inc.*

KAY DANNEN, *Community Relations Manager, Shiels Oblatz Johnsen, Inc.*

VICKY DIEDE, *Portland Streetcar Project Manager, Portland Office of Transportation*

MARK DORN, *Track Engineer/Design Consultant Manager, URS*

MARK EDLEN, *Managing Principal, Gerding/Edlen, developer*

STEVE FOSLER, *Principal, Fosler Architecture, LLC, member CAC*

RICK GUSTAFSON, *Chief Operating Officer, PSI; Principal Shiels Oblatz Johnsen, Inc.*

ROD O'HISER, *formerly, City of Portland Planning Department*

J.W. MATT HENNESSEE, *Commission Chair, PDC*

D. CARTER MACNICHOL, *Principal, Shiels Oblatz Johnsen, Inc.*

DON MAZZIOTTI, *Executive Director, PDC*

DOUG OBLETZ, *Principal, Shiels Oblatz Johnsen, Inc. and Managing Member, Sockeye Development*

TOM POTTER, *Mayor, City of Portland*

MICHAEL POWELL, *Owner, Powell's Book Store; member and Vice-Chair of the Board of Directors, PSI*

VICTOR RHODES, *Principal, Rhodes Consulting and former Director, City of Portland Office of Transportation*

ROGER SHIELS, *Principal, Shiels Oblatz Johnsen, Inc.*

GORDON SMITH, *U.S. Senator for Oregon*

CHRIS SMITH, *Current Chair, CAC*

TIFFANY SWEITZER, *President, Hoyt Street Properties, member of the Board of Directors, PSI*

HOMER WILLIAMS, *Director, Williams and Dame Development, Inc.*

BRANT WILLIAMS, *Director, City of Portland Office of Transportation*

MARIIA ZIMMERMAN, *Administrative Assistant to Congressman Earl Blumenauer*



## Project Description

## Urban Context and History

Portland, Oregon sits at the intersection of the Willamette and Columbia Rivers with a good inland deepwater port that initially supported the shipment of goods from the Columbia River to the Willamette River. Portland was a key port until the railroads came in the 1890s, when it was eclipsed by the port of Seattle where ships did not have to navigate the difficult entry up the Columbia River from the Pacific.

The city has its origins in a legendary place known as “The Clearing” between two already established communities: the territorial capital, Oregon City, about twelve miles to the south, and Fort Vancouver to the north. The grade school textbooks and websites on Oregon history are fond of the William Overton story, reciting his interest in the 640 acres of land that is now Portland, and its potential for commercial use. In 1843, Overton, so the story goes, did not have the twenty-five cents needed to file a claim, so he partnered up with another legend in Oregon, Asa Lovejoy. Lovejoy, in turn, surrendered his interests in the land to a Francis W. Pettygrove but prior to giving up his interest, Lovejoy wanted to name it after his hometown, as did Pettygrove. A toss of the coin decided the argument with Pettygrove’s Portland (Maine) winning over Lovejoy’s Boston (Massachusetts).

The Central City we know today is actually the result of a 19th century merger of three cities, Portland, East Portland and Albina. Since the mergers, land uses also changed with East Portland and Albina assuming more of the industrial load and Portland on the west side becoming more of what we think of as downtown. It is this Central City that establishes a context for first the 1972 *Downtown Portland Plan* and then the *Central City Plan* to create an “inner city circulator” linking the commercial centers of the three merged cities.

The *Central City Plan* adopted by the City Council in 1988 is part of a longer process of rethinking the locational shifts that occurred in industry since the 1950s. Its charge was to support the emerging expansion of commercial, retail and residential uses into the former industrial areas of Albina to the north and east of downtown and to the former city of East Portland, this time connecting the three cities merged a century earlier through recognizing the land use changes needed to deal with the changes in the industrial landscape.

Streetcars played an important part in connecting different parts of the city, and in changing development practices in Portland from those associated with the first horse drawn streetcars on Front Street in 1872. The system was a catalyst for development in all three of the downtown communities and in the emergence of new suburbs. The ascendancy of streetcars in Portland concluded with closing the last

surviving streetcar line that ran from the public housing projects to Beaverton, south of the city, in the 1950s. This closing also marked the beginning of a thirty year decline economic decline in Portland. In announcing the expansion of the Portland Streetcar loop in March of 2005, the major newspaper in the state, *The Oregonian*, stressed this history with the following quote: “As the city grew [since 1872] and the streetcar went to rails, nothing indicated a commitment to development of an area quite like the laying of track for a streetcar” (Adair Law, special to *The Oregonian*). As will be seen, the same appears to hold true for the reincarnation of streetcar traffic to Portland in the new millennium.



The Portland streetcar facilitated over \$1.4 billion in private sector investment within the Local Improvement District.

In 1980, Portland continued work to reverse its decline with an amendment to its now famous 1972 *Downtown Plan* which focused on reversing the three trends related to population and job loss: retail migration to the suburbs; a concurrent dependence on the automobile; and an increase in air pollution, leading the area to experience sixty bad air days a year. The plan made access (not parking) a priority related to reversing all three problems and stressed public transportation as part of the key to its future success. By 1987 the city had begun to regain its prominence in retailing, moving from less than six percent of the market in the late 1970s to over thirty percent of the regional retail share in 1989. It had also reduced its number of bad air days to less than ten per year.

The Portland metropolitan statistical area of 2003 was reported as 2,009,305 and is expected to grow to over 2,300,000 by 2010. In the face of this pressure the City views its balance of rail, bus, auto, bike and pedestrian traffic as critical to the ability to sustain its quality of life. This same set of projections has led the city to add additional commercial and residential density to the Central City and, with the aid of improved public transit, to steadily reduce local dependence on autos.

This growth projection exists concurrently with a difficult state economy and an unemployment rate for the city of 6.2 percent. The vacancy rates in offices in the CBD are at eighteen percent when they were less

than ten percent just eight years ago. And high tech employment that fueled some of its growth in the 1980s and early 1990s has decreased. There is a significant reduction in the downtown payroll and parking revenues are down thirty percent. Portland also has what some consider a high crime rate compared to the rest of the state, but it is widely believed this statistic is due to a higher than usual level of reporting by a non-apatetic public.

According to the Portland Streetcar, Inc. (PSI) web site, specific transportation related decisions in the past have contributed to the ability of the City to manage increased population and to position itself for new job growth and improved quality of life. These decisions include:

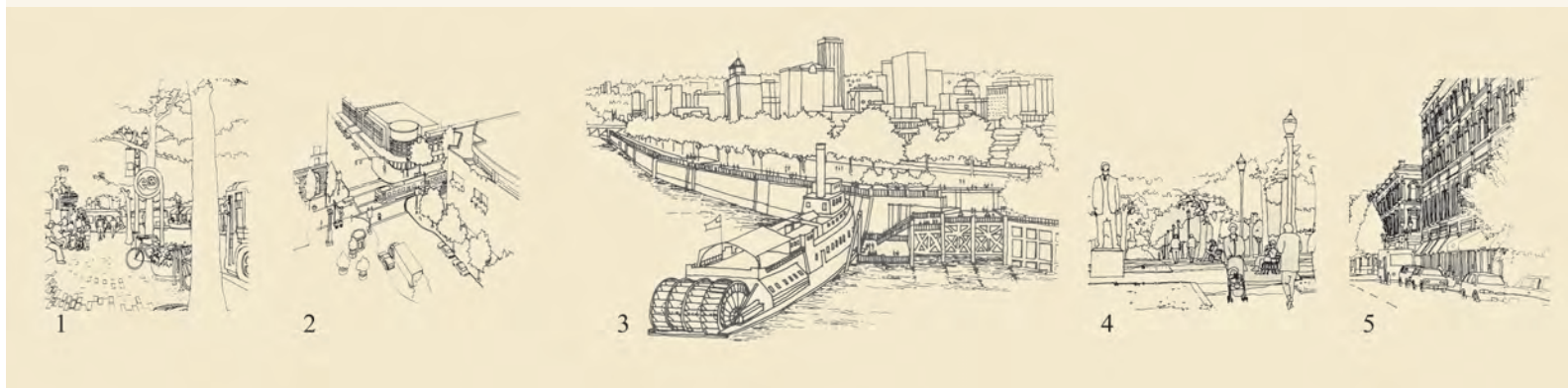
- Establishment of TriMet, a public regional transit agency with new buses and a twelve block downtown transit mall;
- Elimination of a freeway along the Willamette River where a popular public park now sits;
- A decision not to build a freeway that would have destroyed housing in established Portland neighborhoods, and;
- State and local support for MAX, the regional light rail service that now links suburban communities more than thirty-three miles apart from each other as well as to downtown Portland.

(A 5.5 mile spur to the Portland International Airport opened in the fall of 2002, and a 5.8 mile spur opened north to EXPO in May 2004.)

The Portland Streetcar system is one more important transportation decision that has enhanced Portland's vitality while helping the City accommodate new residential and business growth.

The technical description of the Portland Streetcar Project history would have us start with a feasibility study in 1990 leading to hiring a project manager, establishing a Citizen's Advisory Committee (CAC), and hosting a series of public meetings leading to a plan for the streetcar in 1991. This series of events sparked implementation actions

culminating in a 1995 solicitation for a contractor to design, operate and maintain a streetcar system. Portland Streetcar, Inc. (PSI), an organization of property owners, community and neighborhood leaders and public officials, was the successful (and only) respondent to the solicitation. Construction began in May of 1999 on the 2.4 mile first phase of the system, and by 2001, streetcar service linked the Legacy Good Samaritan Hospital in Northwest Portland to Portland State University. By March of 2005, the line was extended another 0.6 miles to RiverPlace, fully connecting the most densely populated area in the state of Oregon (Northwest Portland), to the district adjacent to the downtown.

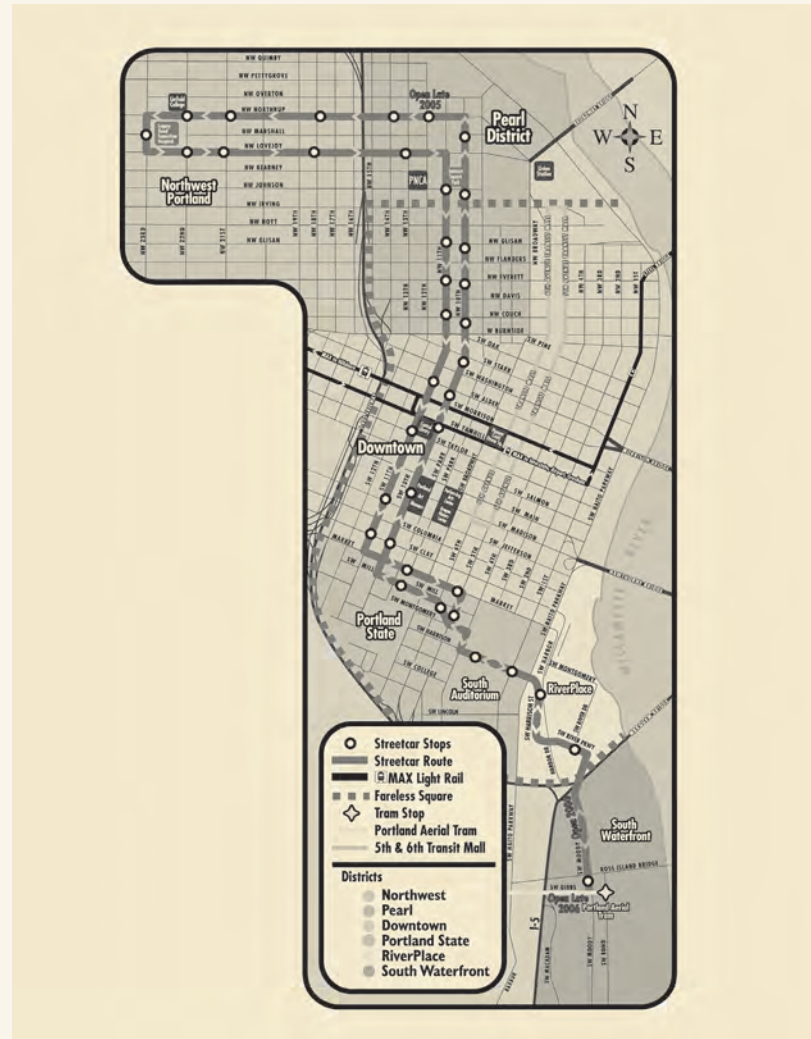


Portland's Downtown Plan and Program won the 1989 Rudy Bruner Gold Medal. The plan helped establish a new transit mall (1), light rail system (2), a new waterfront park (3), enhanced park space (4), and emphasized preservation throughout the Downtown (5).

(Source: Portland Office of Transportation and the Portland Development Commission)

The richer story connects John Carroll's (first chair of the Citizen's Advisory Committee) nostalgic memories of the "Red Car" in Los Angeles, to Congressman Earl Blumenauer's long standing belief in public transportation as both a vehicle to improve air quality and a primary strategy for growth management. It was Blumenauer who appointed John Carroll in 1990 to the CAC for the Portland Streetcar Project. The six-month appointment marked the beginning of Carroll's intimate involvement with the project, a relationship that continues to the present day. While he no longer serves as director of the CAC, he is currently the Chair of the Portland Streetcar, Inc. Board. Carroll refers to this involvement as proof that, "you and three other people can do anything or stop anything." In this case it was an affirmative assertion that helped make the Portland Streetcar Project happen.

The project story, however, goes well beyond John Carroll's nostalgia for streetcars. It is a story of planning and plan implementation over decades, regional coordination and community debate at every step of the process of project development, hard fought and innovative as well as flexible development agreements with the private land owners; it is a story of practical design, efficient engineering, common sense operations, and of the creative financing of the system. It is also a story of learning from what has become the centerpiece of a national movement for streetcar use involving over eighty cities throughout the United States and the world.



The Portland Streetcar Inc. system map illustrates the connections to areas of high employment in Northwest Portland and Portland State.



## THE PLANNING FRAMEWORK

Portland is celebrating the 25th anniversary of its 1972 *Downtown Plan*, updated in 1980. Eight additional planning efforts since then connect the Downtown to the larger Central City and region, including the *Central City Plan*. Virtually all of these call attention to the River District, which has undergone enormous transformation just prior to and following the installation of the Portland Streetcar.

In the 1980s some neighborhoods were protesting “dense” townhouse developments by literally burning down a new townhouse development in Northwest Portland. Even so, density was just beginning to be seen as a significant way to manage growth and sustain quality of life in Portland. From the 1980s through the 1990s planning policy protected intact neighborhoods and pushed dense development into the Central City according to plan. After the 1990s, many residents changed their attitudes about density and began to move into the denser environments for the convenience of access to work, shopping, and entertainment options without requiring car trips. Actions taken to implement the 1988 *Central City Plan* facilitated this process. The July resolution adopting the *Central City Plan* described the plan in this way:

*“A plan that is a vision for the future, which establishes the Central City as the center of commerce and cultural activities in the community, recognizes the unique environmental setting and historic precedence of the area, incorporates the residential and business characteristics of individual districts within the area, preserves the integrity of adjacent neighborhoods, and improves the livability of the area for all citizens.”*

*(Adopted CCP Planning Process, Resolution 33717, July 25, 1984.)*

The plan objectives included three specific mandates that were particularly relevant to the Portland Streetcar Project:

- Clarify the functional role of the Central City and its relationship to the larger community;
- Identify feasible public actions to assist and attract private investment in the Central City; and
- Assure a human scale.



- |                        |                        |
|------------------------|------------------------|
| 1. Downtown            | 5. Loyd District       |
| 2. Pearl District      | 6. Hawthorne Boulevard |
| 3. Nob Hill            | 7. Sellwood            |
| 4. Old Town/China Town | 8. Alberta Street      |

To these mandates were added several objectives including the desire to “establish the relationship of each of the districts in the Central City to each other and to the Central City as a whole.” The current and projected alignment of Portland Streetcar, while not specifically referenced except as a Central City Circulator (building on the *Downtown Plan* reference), does exactly this by implementing four key components. First, there will be a spine of four parks, two of which are complete. Second, the parks will be linked and bordered by the double track of the transit service. Third, they will be surrounded by a ring of mixed-use and mixed-income neighborhoods. And four, each neighborhood is to have a distinct identity (Northwest Portland, the Pearl, Downtown, Portland State, RiverPlace, and eventually, South Waterfront). At this stage in development, 24,000 Portland State University students and another 12,000 Oregon Health Services University students are linked to cultural attractions downtown and to a ring of mixed-use housing projects on a streetcar line that also frames what will be the spine of parks.

Plans for the Portland Streetcar include extensions that would link communities on both sides of the river.

### ***Regional Coordination***

When it was proposed, the project was not considered a regional priority for TriMet, the region's metropolitan transit organization. TriMet was then focused on the \$3 billion South/North Light Rail Project and had concerns that the streetcar would distract attention from assuring completion of this project. As a result, the Streetcar Project was required to seek funds other than regional transportation funds. There were predictions that the streetcar would be a failure due to operating in mixed traffic. One of TriMet's employees dubbed the streetcar as a "donkey trolley."

In order to get TriMet's cooperation on the project, both political and practical moves were made, including an agreement to not seek federal funds from the same sources employed by TriMet. For example, an early allocation of funds for study came from HUD, and later resources came from a special allocation from the Federal Transit Agency outside the allocations offered by formula to TriMet. Since that time TriMet representatives have changed their attitude a great deal. They now support the operations of the first 2.4 miles of double track with an allocation of \$1.6 million dollars per year, which is the amount they would have spent on bus service in the area now served by the new rail system. In addition, in 2000 they sponsored the "Willamette Shore Streetcar Study." TriMet is providing two-thirds of the operating expenses for the Portland State University to RiverPlace

extension that opened in March of this year, and is also committed to providing another two-thirds of the operating support for the RiverPlace to Southwest Gibbs Avenue service in the South Waterfront District.

TriMet has come a long way past the "donkey trolley" label to embrace the Portland Streetcar as an important part of the regional transit system. Steps along the way in TriMet's conversion included the incorporation of a vintage trolley system run on TriMet rails. This vintage system was then recast in the form of a modern transportation element and became the Portland Streetcar. Most of those interviewed on the subject believe the initial resistance dissipated when competition for funding was addressed. TriMet did not become convinced, however, until it saw the increasingly dense development that was emerging in anticipation of the Streetcar Project.

Both the City Department of Transportation and TriMet see themselves in the community development business, not strictly as transportation providers. In the City, Vic Rhodes, then Director of Transportation, changed the name of one of his departments from Transportation Engineering to Transportation, Engineering, and Development. TriMet and the City view transit as a key growth management strategy in the region.

## COMMUNITY AND BUSINESS PARTICIPATION

### ***The River District***

One of the many stories of public and private cooperation that demonstrates the streetcar leverage comes from the first development agreement with Hoyt Street Properties L.L.C. The story starts in 1987, in what is now the River District, an area between the densely populated Northwest Portland, home of Legacy Good Samaritan Hospital, and Portland State University. The area included thirty acres around the old Union Station property and forty acres of Burlington Northern Railroad yards. The Portland Development Commission acquired the thirty acres as a possible site for a future convention center, which was eventually located across the river. Six years later, in 1993, Hoyt Street Properties acquired the Burlington Northern property, thus aggregating seventy acres of property with the potential to link two major employment centers and Northwest Portland residential neighborhoods to the downtown.

The entire seventy acres was zoned industrial and was surrounded by warehouses. The Portland Development Commission reports that there were no streets in the seventy acres, no parks, no housing and no amenities. It was also the “largest contaminated site in the city.” In addition, the Lovejoy Viaduct, an expressway ramp, served to further

isolate Northwest Portland from the area. A consortium of business and government leaders, which included owners of the seventy acres, oversaw a *Vision Plan* for the area calling for high density housing (5,500 units with approximately one hundred acres a unit), a mix of incomes, and parks and open space. The PDC led the negotiation of an agreement between the City and Hoyt Street Properties to develop their property, committing to approximately \$150 million in public and private funds that led to the final realization of the *Vision Plan*.



*The historic Union Station still exists in what is now the River District.*





*The aerial photo shows the extent of brownfield remediation required in what would become the River District.*

The development agreement between the City of Portland and Hoyt Street Properties L.L.C. was completed in 1997 and was one of the reasons for developer confidence in the potential transformation of the abandoned and contaminated rail yards. The agreement cited as “contingent obligations” the “Lovejoy Project” (the demolition of the expressway ramp), the construction of the “Streetcar Project,” the delivery of the “Park Squares Project,” and a “Neighborhood Park Project.” In exchange for these contingent conditions, the developer agreed to housing affordability and density goals. Those density goals were renegotiated two years later and significantly increased.

The agreement defines the “Lovejoy Project” as the “...removal of the N.W. Lovejoy and N.W. 10th Avenue ramps and reconstruction of those streets at grade along with construction of a new ramp to the Broadway Bridge at N.W. 9th Avenue and N.W. Lovejoy, including all street improvements...” The “Streetcar Project” was defined in the same agreement as “...the construction of a new streetcar system, connecting downtown Portland and, ultimately, Portland State University, with the Legacy Good Samaritan Hospital area along an alignment including N.W. 10th and N.W. 11th Avenues, N.W. Lovejoy and N.W. Northrup within the property.” The “Park Squares Project” included land acquisition by the city as well as the design, construction and maintenance by the City of both South Park Square and North Park Square as amenities in the overall



development, incorporating two full blocks at approximately 40,000 square feet each. In like fashion, the “Neighborhood Park Project” involved the acquisition by the City of approximately 90,000 square feet and the design, construction and maintenance of the property acquired as a public park.

Another contingency was the controversial agreement dictated by Portland’s City Council to provide for an income distribution consistent with the income demographics of the City of Portland as a whole. This required another level of public finance (an estimated \$50 million) beyond the costs of demolishing the Lovejoy ramp, the construction of connector streets (an estimated \$15 million), the building of a streetcar system (an estimated \$45 million), and the building of three large parks (an estimated \$10 million). At the time of the agreement none of these contingencies except for the Lovejoy Project were in place. The agreement and a 1994 *Vision Plan* for the area were used to acquire the needed funding in accordance with deadlines identified in the agreement.

### ***A History of Cooperation***

The State of Oregon has a long history of citizen activism, an organized and vocal business community, and solid land use planning. From the early days of One Thousand Friends of Oregon and the Citizen’s Advisory Committee (CAC) that debated the key elements of the

*Downtown Plan* for a decade prior to its acceptance, Portland citizens have stayed involved. When it came time to appoint the CAC of community and business representatives for the Portland Streetcar Project, the process was understood and respected. Senior stakeholders and advocacy groups stepped up to serve and worked through a wide range of issues inviting the public into the alignment, design and operation decisions. Michael Powell, past chair of the Citizen’s Advisory Committee, summarizes this history by suggesting that there is a “culture of inclusion” in Portland that makes projects like the streetcar possible.

The City Commissioner of Public Utilities, Sam Adams, attributes the success of their planning efforts and their ethic of participation to involved citizens who read newspapers and books. They also consume large quantities of micro-brew beer and go out a lot, demanding a quality public realm in which to do so. Adams speaks of the business community as “not at war with progressives,” and describes them as a group of people who do not subvert community goals to their financial interests. For the most part, Portlanders have little respect for arguments based on authority. Adams describes all of this as contributing to a climate that assumes consensus is possible. Participants also expect, and are not deterred by the fact, that the process to get to this consensus will “drive you nuts.”

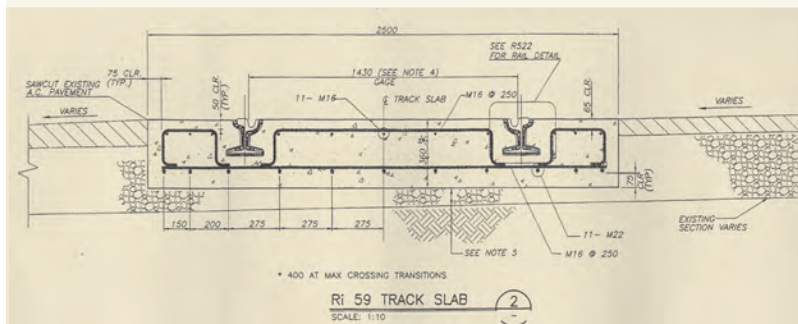
## DESIGN AND OPERATIONS

To place the story of the design and construction story of the Portland Streetcar in some context requires us to recall two Neil Goldschmidt elections. The first was in 1976 as then Mayor Goldschmidt ran for office during the construction of Tri Met's Downtown Transit Mall. There was an article and a picture of him in front of the project under construction. He responded by making a TV ad with him in front of a jackhammer on the mall calling for even more improvements downtown. A second election occurred a decade later in 1986, when Neil Goldschmidt, former Portland mayor, was then running for governor. The opening of the light rail occurred in September, just two months before election. The downtown disruption was extensive during the period, and there was considerable skepticism toward the light rail project. The headline in *The Oregonian* read, "Would you

do this in an election year?" There was a photo of Goldschmidt with his arms outstretched surrounded by the chaos of construction in the central business district. Goldschmidt was successful in both elections.

The Portland Streetcar, Inc. Board, which included leading property owners along the line, established design and performance criteria intended to make construction considerably less expensive and less disruptive to adjacent businesses. Streetcar construction was designed to avoid interference with utilities, to allow for ease of access to the utilities, and to be constructed rapidly.

Professional staff from URS, the lead engineering and design firm in the project, and from Portland Streetcar, Inc. worked with rail manufacturing innovators in Austria on the technology of rail-slab relationships and devised a twelve inch deep section that could go on top of phone and other utility vaults, handle 5,000 pounds per square inch loads, span trenches of up to ten feet, and that could be laid in increments of three blocks in three weeks. This track section and construction efficiency was facilitated by the use of a slip form track and slab-laying machine. Streetcar costs for the first 2.4 miles of double track were between \$20 million and \$25 million a mile, compared to light rail at between \$60 million and \$80 million a mile.



*The innovative thin track slab allows for both rapid and inexpensive construction.*

The care taken to minimize disruption of business during construction was extraordinary, with most stores experiencing the chaos of construction in front of their door for less than a week. One anecdote brings the construction management care for ongoing business into sharp focus. During construction at one storefront serviced from the street a delivery truck showed up. The entire construction crew nearby stopped its work immediately and helped off-load the delivery in a matter of minutes. The speed of construction has many benefits, but perhaps the most significant one is political. The installation of streetcars can happen within a four year election cycle, which appeals to politicians at every level of government.

PSI kept its cost per mile down and improved the scale of the rail cars compared to the MAX light rail by purchasing modern “off the shelf” streetcars from Inekon in the Czech Republic. They initially purchased five cars, and then added two more. Three new cars are currently on order. The economy becomes clear when one understands that this is ten cars in a three hundred car manufacturing run from one of the largest streetcar providers in the European Union. The cars are small with large windows and are built low to the ground, allowing the rider to view business frontage and pedestrians on the street at almost eye level.

PSI customized the off-the-shelf cars, choosing its own color palate, seat fabrics, adding air conditioning, refitting the cars to be bi-directional, adding in stainless steel hand rails, providing a modified bridge plate for improved access for the disabled, and providing a new fare box design. In addition, they needed to do some structural adjustments to the cab. Sponsorships for the cars and stations do not sell ads but offer marketing tag lines in a discreet and uncluttered way that adds to the simple and uncomplicated image of the entire streetcar system.



*One source of economy in the PSI project was the purchase of five “off the shelf” cars from Inekon in the Czech Republic.*

The station designs are practical and minimalist. For one designer they are seen to be somewhat disappointing. "...on sloping sidewalks, the required modifications to the platforms, barriers and ramps have become obtrusive." This is acknowledged by PSI and modifications are already in process further simplifying station designs.

The stations have electronic signboards announcing the wait time until the next car. Some, when reading the almost fourteen minute wait time, as a worst case, decide to walk. The system designers and operators say, great, that's part of the point. Meanwhile they are working to bring the headways down to twelve minutes with the opening of the new section, and aspire to get ten minute headways as their ideal.

Preparing for system operation has paid off for PSI. Six months prior to opening the line, the striping on the roadway was done with signage announcing the coming of the line and stressing the importance of keeping rearview mirrors inside the stripes to avoid losing them. At this point they have lost only one mirror and had a total of four "tow-aways." When a car is parked on the rail right-of-way, the car is not towed but simply moved to the next available parking spot out of the train right-of-way with a note of explanation. By not issuing tickets, problems can be identified and cars can be moved in a matter of minutes with minimal disruption on the line.

When asked, "Why not provide bus service in lieu of a streetcar?" almost all respondents offered comparable answers related to developer confidence in a fixed line. While the Hoyt Street Agreement left room for the provision of rubber tire transit, the key parties to the agreement were clear that the combination of predictability for developers as well as for transit passengers was higher for fixed rail. They knew where to put development, and passengers knew exactly where they were going and how long it would take.

Several government officials, developers and citizens interviewed also identified that there are some intangibles related to train riding. There are people who will ride a train that will not get on a bus. Ride quality is a factor. As board members of PSI state, "the train is an event while the bus is just a bus." Also the occasional user has confidence in exactly where they are going. The scale of the streetcar is more rider friendly, as it is smaller than light rail and more consistent with Portland's 200 by 200 foot block grid system. Finally, virtually all saw the streetcar as a catalyst for development, while few saw bus service as convincing in this role. Businesses will occasionally protest if a bus stop is placed outside their establishment. They are big, smelly, and noisy. No one, however, is complaining about the location of a streetcar stop near their property.



The design of the Portland Streetcar added a new element to a balanced transportation system in Portland. The MAX light rail travels at fifty-five miles per hour and brings the suburbs downtown, while the streetcar usually moves at ten to fifteen miles per hour and moves people around the Central City. Light rail has much higher capacity per car than the streetcar, which has thirty-two seats and can hold up to 120 passengers per car when fully packed.

### PORTLAND STREETCAR, INC. (PSI)

PSI has no employees. It is a non-profit corporation under contract to the City to oversee design, construction and operations of the Streetcar Project. It is governed by a board of twenty-two business owners, community members and governmental leaders. PSI sub-contracts for staff services. All sub-contractors, as well as City and

*The scale of the streetcars fit in well with the pedestrian scale of the streets.*

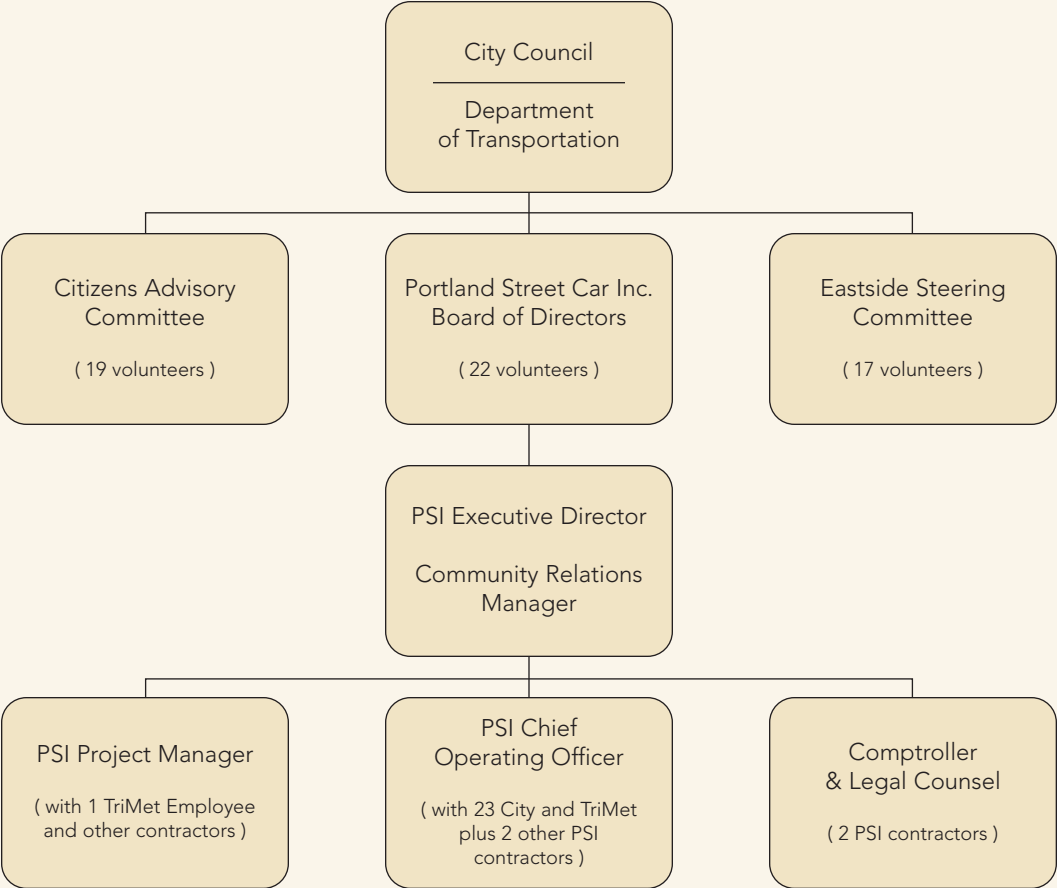
TriMet employees assigned to the project, work under the direction of the PSI Executive Director, the PSI Chief Operating Officer and the PSI Construction Manager, all employees of Shields Oblatz Johnsen, Inc. (SOJ). As a not-for-profit, PSI believes they have more flexibility in the promotion of the Streetcar Project, in the operation of a safe environment, and in sustaining a high level of support in the business community and among other stakeholders.

In addition to managing PSI, SOJ also has development interests along the line, as do several others, including PSI CEO John Carroll who, with Roger Shiels, is intimately involved in the development and implementation the Portland Streetcar. Developers who see the potential of the streetcar to leverage development opportunity are a central part of the design, development and operation of the system. The profit motives are clear and the returns are good.

SOJ was initially involved in the early 1980s working for the Burlington Northern, advising them about land use options for what has become the River District. One of their partners, Douglas Oblatz, is also a managing member of Sockeye Development, which has completed the Museum Place Project and two others in a three block development abutting the streetcar. The projects involve a rich mix of uses including a grocery store, a soup kitchen, a YWCA facility, a range of retail outlets, and low to moderate as well as market rate housing.



### PSI ORGANIZATION CHART



The PSI organization chart shows a broad spectrum of units reporting ultimately to Executive Director Roger Shiels (SO)), and through him to the board of directors of PSI. They report to the CAC and Eastside Steering Committees. The PSI Board also has a direct reporting line to the Portland Department of Transportation (PDOT) and their project manager, Vicky Diede, as well as Brant Williams, the PDOT Director. They, in turn, report to the Portland City Council. Within this organization the day-to-day work is done by a series of PSI “contractors” performing the duties of Project Management, Chief Operating Officer, Comptroller, and Legal Counsel. Except for two office managers contracted by PSI, others reporting to the Chief Operating Officer are almost all City and TriMet employees. Project Management has the consultant teams of design and engineering staffs, a general contractor, the vehicle manufacturer, as well as a TriMet senior inspector reporting to it.

The PSI organization chart is essentially a map of the public and private cooperation required to design, construct, operate and maintain the system at the level that has been established. This predictability assures the continuation of the leverage effects related to the introduction of the system. The extensive volunteer citizen councils and board components provide a check and balance, weighing developer interests and citizen concerns against the broad missions and capacities of the Office of Transportation and City government.

PSI is an organizational model that is especially effective for design and construction. Its by-laws, for example, were used to start Atlanta Streetcar Inc. The small number of formal employees adds to sustainability and offers flexibility to respond to organizational challenges. For example, PSI faces some new challenges as it considers the extension to Lake Oswego. Does it remain Portland Streetcar, Inc., or change its name? How will the mayor and council in Lake Oswego participate in the governance and finance of the system? PSI board members believe the virtual structure of the organization makes it well suited to address such challenges.

Key elements of the organizational model seen as replicable in other cities include:

- Creating a forum for dialogue across stakeholder interests;
- Defining it as not just a transit system but as a vehicle for economic and community development;
- Maintaining a “pay to play” role for property owners in the Local Improvement District (LID) with a respect for the value for service offered those who contribute to the LID; and
- Using the organization and the streetcar as part of a larger growth management system where the organization starts in the discussion with a “clean slate.”

## FINANCES

For the construction of the first 2.4 miles of double track from Northwest Portland to Portland State University, the City picked up seventy-three percent of the capital costs of the system. Over half of the total \$56.9 million cost came from City parking bonds. The private sector LID accounted for seventeen percent of the capital and the federal government picked up the remaining ten percent. Operating costs for the same system show no federal contribution, a thirty percent city parking revenue contribution, an eleven percent source from private sponsorships, and the largest source is TriMet's fifty-nine percent, an offset for what bus service to the area would have cost.

### ***Public Money***

Timing is everything. The early federal commitment from HUD for an initial feasibility study and the boost provided early in the process with the \$5 million of Federal Transit Authority (FTA) funds secured by Senator Hatfield gave energy to system finance and added to the public confidence in the project. The innovative transfer of federal funds from FTA through TriMet to the project helped streamline the design of the system and reduced construction costs. Essentially, the FTA funds in the project were "passed through" TriMet where they were used for bus acquisition and local funds earmarked for the buses were then released to help fund the streetcar. This made the

streetcar free of federal requirements to "design it up." There were no NEPA requirements for alternatives analysis and no federal Davis Bacon Act constraints because of the use of local funds in lieu of federal.

This is a streetcar built by the automobile. Parking in the Central City was used to finance almost half the capital costs of the original system and also continues to help finance its operation. Bonds tied to an increase in short term parking fees from seventy-five cents to ninety-five cents in five garages allowed a total bond of \$28 million against the capital costs for the system. In addition, an allocation of \$2 million for capital comes from the City Parking Fund. Parking meter revenues are now being used for the operation of the system, with new meters in the River District being dedicated to the Streetcar Project. In addition, increased fines for parking violations (given for "rampant lawlessness") were also dedicated to the streetcar. An aggregate of the public and private sector sources related to parking revenues of all kinds indicates that \$950,000 (twenty-nine percent) of the \$3.3 million operations budget for the first three miles of the system will come from parking. Parking's contributions to capital costs from public sources totals forty percent.

Other public support for the initial 2.4 miles of double track included a \$1.8 million allocation from the City's General Fund and another \$1.7 million from the City Transportation Fund. Federal support was limited to the FTA funds at \$5 million and the \$0.5 million from HUD. The remainder was made up from the tax increment financing of the South Park blocks Urban renewal area.

There were some shifts in how the first extension was financed compared to the initial 2.4 miles. Tax increment financing for the first section of the system represents about thirteen percent of the capital costs, while in the .06 mile extension just opened it totals over fifty-three percent of the total capital costs. A transportation land sale yielded an additional nineteen percent to the capital resources in the extension, while no such funds were available in the first phase. Federal participation dropped from ten percent of the total capital to five percent in the extension, with city and private sources picking up the difference. TriMet did not make financial contributions to capital costs in either round of financing, but is carrying fifty-nine percent of the operational cost of the first 2.4 miles, and sixty-seven percent of the costs of the second .06 miles.

#### ***Private or Not-for-Profit Money***

Portland has made good use of Local Improvement District funding for several projects in service of its Downtown Plan and Central City Plan goals. Thus, by now a \$9.6 million LID for the first 2.4 miles of double track was almost routine. Portland State University is a big player in the LID. It has over 24,000 students and parking capacity for 3,000 cars. They provided \$2 million to the LID. Legacy Good Samaritan provided an additional \$1.6 million, and Hoyt Street Properties provided an additional \$0.7 million. The remaining funds came directly from other owners adjacent to the line, assessed at \$6 per \$1,000 of assessed value on their property and from owners a block away from the line who were assessed at \$3 per \$1,000 of assessed value. Michael Powell, a local bookstore owner, chaired the LID process and "was never turned down." He believes the adjacent property owners were convinced by low construction impacts and the promise of higher property values. The private sector has also stepped up to support the operations of the Portland Streetcar with car sponsorships amounting to \$250,000 a year. Overall, the LID is now on the full three miles of double track, representing eighteen percent of the total capital cost.

## PORTLAND STREETCAR CAPITAL AND OPERATIONS FUNDING

### NORTHWEST PORTLAND TO PORTLAND STATE UNIVERSITY (2.4 MILES OF DOUBLE TRACK). SERVICE BEGAN ON JULY 20, 2001.

#### **Capital Budget - \$56.9 Million**

Sources:	City Parking Bonds	\$28.6 million
	Local Improvement District	9.6
	Tax Increment (South Park Blocks URA)	7.5
	Federal Transportation Funds	5.0
	City Parking Fund	2.0
	City General Fund	1.8
	City Transportation Fund	1.7
	U.S. HUD Grant	0.5
	Misc.	0.2

#### **Operations Budget - \$2.7 Million (July 1, 2003 – June 30, 2004)**

Sources:	TriMet	\$1.6 million
	Parking Meter Revenues	0.8
	Sponsorships/Fares/Promotions	0.3
Service Hours:	21,500 hours	

### PORTLAND STATE UNIVERSITY TO RIVERPLACE (0.6 MILES OF DOUBLE TRACK). SERVICE BEGAN ON MARCH 11, 2005.

#### **Capital Budget - \$16.0 Million**

Sources:	Tax Increment (North Macadam URA)	\$8.4 million
	Transportation Land Sale	3.1
	Local Improvement District	3.0
	U.S. HUD Grant	0.8
	Transportation Fund	0.6
	Misc.	0.1

#### **Operations will cost an additional \$600,000 for RiverPlace service**

Sources:	TriMet	\$400,000
	Parking Meter Revenues	150,000
	Sponsorships/Fares/Promotions	50,000
Service Hours:	27,000 hours	



RIVERPLACE TO SW GIBBS AVENUE  
(0.6 MILES SINGLE TRACK). SERVICE BEGINS JULY 2006.

**Estimated Capital Budget - \$15.8 million**

Sources:	Regional Transportation Funds	\$10.0 million
	Tax Increment (North Macadam URA)	3.8
	Local Improvement District	2.0

**Operations will add an additional \$600,000 for Gibbs service**

Source:	TriMet	\$400,000
	Parking meters	\$200,000
Service Hours:	30,000 hours	

## IMPACTS

### *Development Impacts*

The consensus on streetcar alignment generated much of the private investment that followed. Portland Streetcar, Inc. has settled on a leverage calculation for the first phase of system construction investment of \$72.9 million against \$2,287,854,000 in private and institutional investments – a ratio of one to thirty. This calculation was done for investments in the Local Improvement District boundary and was limited to projects completed between 1997, when the alignment was selected. They claim 7,248 residential units have been constructed and 4,624,150 square feet of non residential construction. The compilation of projects for this calculation occurred in January of 2007.

The leverage effects are credited by virtually all those interviewed as occurring in anticipation of the line. The developers did not wait for its actual construction. Using River District Urban Renewal boundaries, the Urban Renewal Agency calculated 5,200 new housing units and 3.6 million square feet of commercial and institutional space since 1997, with construction on the line beginning a full year after the absorption of housing units in the district peaked. These numbers overlap with the calculation of development between 1997 and 2004 and involve a different boundary than the LID.

Another snapshot of development taken from 1996 through 1999 shows 1,311 units of housing and approximately 400,000 square feet of mixed-use commercial space constructed in the Pearl District (in the Northwest corner of the River District). Again, this was the volume of construction in the area that occurred in anticipation of the line's opening and well prior to the start of construction.

The first starts in housing and commercial production were cautious ones. The first twenty-seven units by Hoyt Street Properties (the Pearl Lofts) in 1994 were self-financed. This project provided the "comparable" to kick off the next project of forty-eight units in Hoyt Commons in 1995. From there Hoyt went block by block with fourteen townhouses and sixty-eight condominiums in 1996.

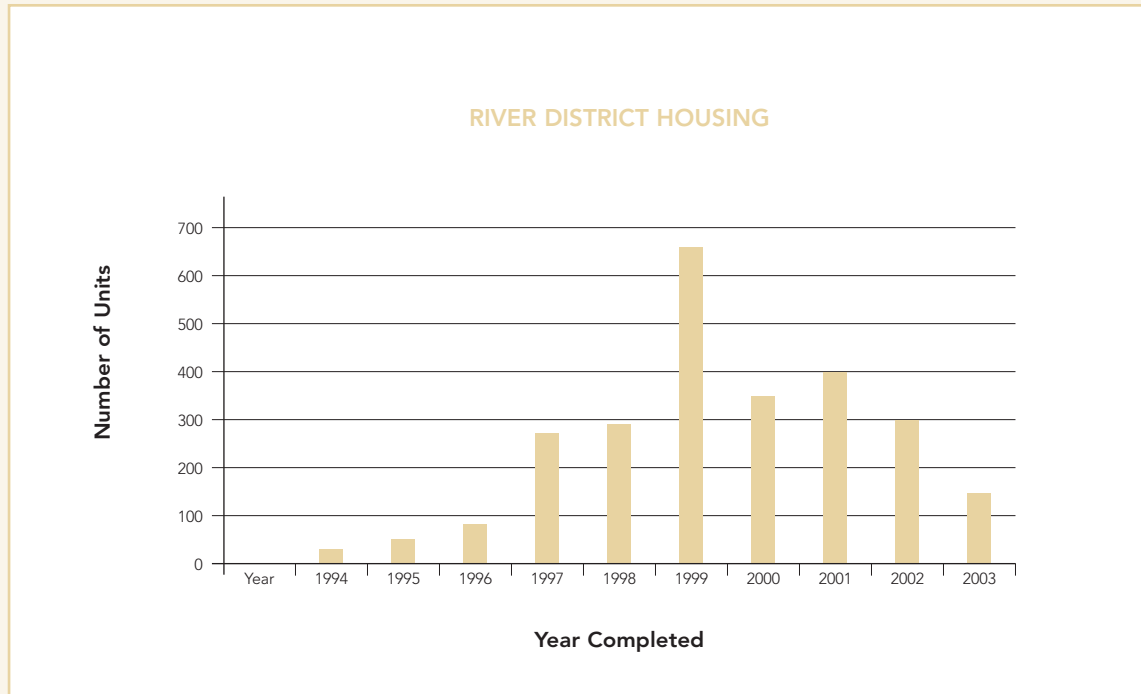


*The Pearl District (left) and one of the early Hoyt Street Properties projects (right) illustrate some of the progress made in areas adjacent to the Streetcar.*

The assessed land value of land in the River District in 1990/1991 was \$3.65 per square foot, and by 1994 was up to \$42.00 per square foot. By 2000, after the amended agreement with Hoyt Street Properties was signed, the assessment was \$125.00 per square foot and by 2005 it was assessed at \$200.00 per square foot. The Portland Development Commission reports that in the last six years alone, land value in the city as gone up an average of four percent while the river district values are up 250 percent for the same time period.

Another snapshot of land values provided by the Portland Development Commission illustrates that all land use categories within one hundred feet of streetcar alignment from 1999, when construction actually began, and 2001, when it opened, increased an average of seventeen percent over the two years. PDC reports that this is twice the average annual rate of increase experienced by the rest of the city.

In the mid-1990s, Hoyt Street Properties believed that they would get the best return from townhouse construction. However, they agreed that if the Lovejoy viaduct came down, the spine of parks starting with Jameson Park were built, the street grid were built out, and if the Streetcar Project went forward, they would be able to assume higher densities. The 1997 Development Agreement between Hoyt Street Properties and the City of Portland actually provided for a graduated



HOYT STREET PROPERTIES ACTIVITY  
(SINCE THE 1997 INITIAL DEVELOPMENT AGREEMENT)

PROJECT	AMOUNT \$ (millions)	CONDO	APTS	TWN HSE	RETAIL (square feet)	OFFICE (square feet)
Streetcar Lofts	\$ 28	139			9,000	
River Tec	\$ 10					75,000
Riverstone Condos	\$ 25	121			10,000	
The Pinnacle	\$ 51	176			51,000	
Park Place Condos	\$ 47	131			15,000	
Lexis Condos	\$ 23		139		8,500	
Kearney Plaza Apts.	\$ 18		138		7,500	
Johnson St. Town House	\$ 7			13		
Bridgeport Condos	\$ 35	123			8,000	
<b>TOTALS</b>	<b>\$ 244</b>	<b>690</b>	<b>277</b>	<b>13</b>	<b>109,000</b>	<b>75,000</b>

Calculated 1997-2005

scale: If the Lovejoy Viaduct came down, then they would build eighty-seven units to the acre. If the streetcar was provided, then they would build 109 units to the acre. If the spine of parks was provided, then they would build 133 units to the acre. In 1999, the renegotiated Development Agreement provided for an additional twenty-two units per acre, and as of 2001 when the line opened, Hoyt Street Properties alone had built 946 units at an average density of 143 units per acre in the River District.

An analysis of how the housing densities in the River District sorted out according to production by income category shows solid progress on the twenty year targets set by development agreements and Portland Development Commission policy on the area.

Douglas Oblatz of Sockeye Development (also a principal in Shiels Oblatz and Johnsen) reports on three blocks of development at Museum Place adjacent to the West End of the streetcar alignment. Their three block development includes 140 apartments over a new 47,000 square foot grocery store; 1,100 square feet of retail; 220 underground parking spaces; a YWCA Downtown Center; the St. Francis apartments with 132 mixed income rental units above ground floor retail; and an additional



30,000 square feet of ground floor retail with offices above for a project known as Madison Place. In addition, in the same three block area, John Carroll is building the Eliot with 250 market rate condominiums.

The streetcar passes through a five block area that links the CBD and the River District on the site of the former Blitz-Weinhard Brewery that closed its doors in 1999. The Brewery Blocks are now being rapidly redeveloped for over \$294 million, with the PDC providing a \$6 million loan at eight percent to be repaid over ten years, and an additional \$2 million in streetscape improvements. At completion the project is expected to yield a total of 530,000 square feet of office space 185,000 square feet of retail, and already has its full complement of residential at 370 units. The on-site employment projections are estimated to be 2,300 jobs, fully twenty-three times the employment of the complex in the last days of the brewery operation. The project is seen to already be boosting streetcar ridership, and the Streetcar Project was a big factor in the largely private sector decision to advance the project.

*Recent reports by PSI show total development activity from 1997 through 2006 totaling \$2,287,854,000 with 7,248 residential units and 4,624,150 square feet of non-residential construction.*

DEVELOPMENT ACTIVITY WITHIN THE  
 PORTLAND STREETCAR LOCAL IMPROVEMENT DISTRICTS  
 JANUARY 2006



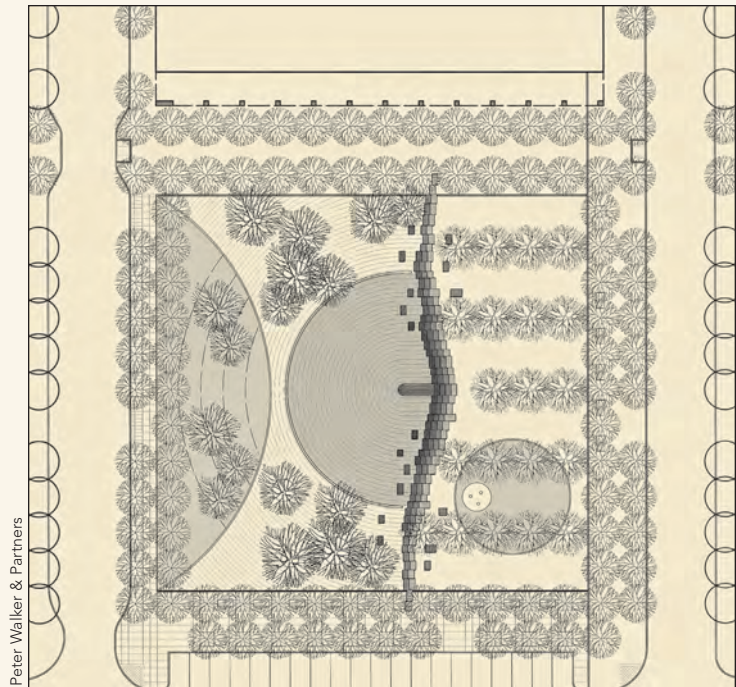
Peter Walker & Partners



Portland Streetcar Inc.

The photos above show development around Jamison Square and the map to the right illustrates development sites facilitated by Portland Streetcar Inc.





Above: Site Plan for Jamison Park by Peter Walker and Partners  
Below and Right: Children enjoying Jamison Park fountain

### RIVER DISTRICT HOUSING PRODUCTION BY INCOME CATEGORY (COMPLETED OR UNDER CONSTRUCTION)

	2002	2004	20 YEAR TARGET
Low/Extremely Low (0-50% MFI)	740 (21%)	740 (16%)	20%
Moderate Income (51%-80% MFI)	748 (21%)	835 (18%)	25%
Middle/Upper (Over 80% MFI)	2,036 (58%)	3,155 (67%)	55%
<b>TOTAL</b>	<b>3,524 UNITS</b>	<b>4,730 UNITS</b>	<b>100%</b>

Calculated 1997-2005

#### ***Transportation Impacts***

The Portland Streetcar system has seven cars and operates with twenty-seven employees. It is a seven-day-per-week service that runs from 5:30 am to 11:30 pm. Monday thru Friday. Weekend service is 7:15 am to 11:45 pm; on Sunday service stops at 10:30 pm. Current headways are thirteen minutes and the fare is mostly free (outside the fareless zone, the system is \$1.40). The streetcar's weekday ridership is about 7,800 riders per day, with Saturdays performing at 6,400 riders and Sundays at 3,000 riders. Ridership over the first years operation tends to peak in the summer, and is consistently highest on Saturdays.

Parking is also positively impacted. The number of parking spaces per unit of new residences in the area adjoining the streetcar alignment has moved from an average of 1.5 per unit to less than one per unit, with the range running from 0.6 to two cars per unit. Essentially, residents along the line who work or go to school in reach of the line or the MAX find they have little need for a car.

### BREWERY BLOCKS SINCE 1999

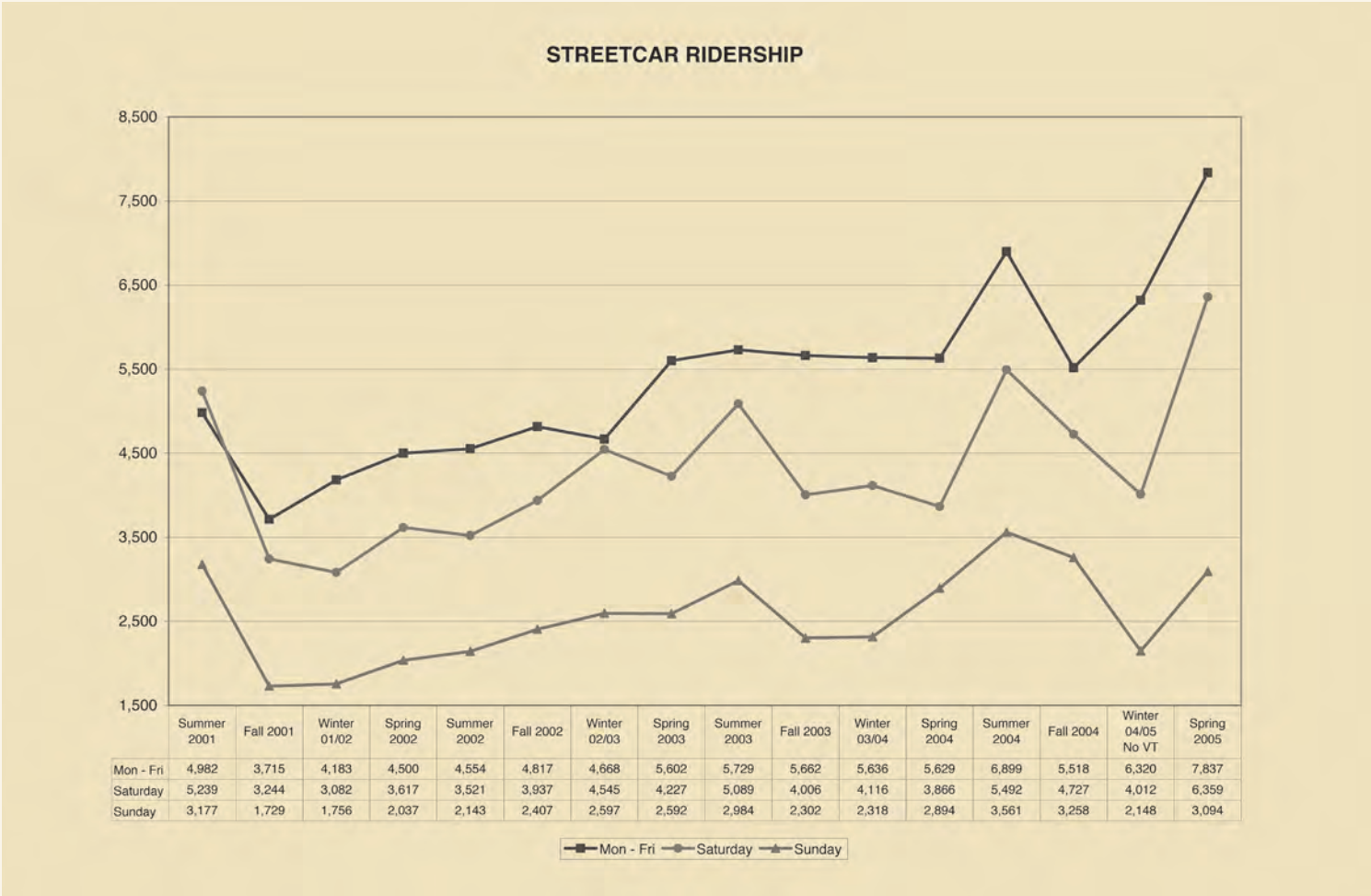
PROJECT	CONDO	APTS	RETAIL (sq. ft.)	OFFICE (sq. ft.)	OTHER
Block 1 (2002)			9000	78,000	10,000
Block II (2002)			50,000	75000	
Block III (2004)	125		10000		
Block IV (2005)			51000		
Block V (TBD)		245	15000	280,000	
<b>TOTALS</b>	<b>125</b>	<b>245</b>	<b>135,000</b>	<b>433,000</b>	<b>10,000</b>

Calculated 1999 through 2005

### FUTURE PLANS

The extension of the line to the South Waterfront District is scheduled to provide service beginning in September of 2006. It is expected to cost approximately \$15.8 million and will link the downtown with that former brownfield site, where approximately \$1 billion will be invested in new mixed-use development. The Portland Streetcar is part of the North Macadam Investors LLC agreement for that work, just as it was part of the Hoyt Street Properties Agreement in the River District. Homer Williams, Chair of Williams and Dame Development, signed

the Hoyt Street Properties Development Agreement as the then Manager of Hoyt Street Properties, and he signed for the North Macadam Investors as their manager. The thirty-four acres of South Waterfront District development is expected over the next ten years to produce another 250,000 square feet of retail, a 1.5 million square foot medical facility, 5,000 new jobs, and 2,800 new housing units, all within an easy walk of the streetcar.



There are also plans under consideration to extend the line across the Willamette River, north and south of the existing alignment to East Portland, linking the Lloyd District (convention center) site and east side strip commercial and neighborhood, to the west side, in a full streetcar loop. The Eastside Steering Committee is already in place and discussions of route alignment and land use dominate their meetings. Some participants want the streetcar but do not want to be “Pearlized.” They are concerned that the extreme makeover of the west side will become a template for a similar transformation of their neighborhoods. Unlike the River District or the South Waterfront brownfields, some see the east side as composed of intact working class neighborhoods where former industrial lands are already transformed with heavy and light commercial development and residential services. There was no gentrification in the redevelopment of the old rail yards in the Pearl or River District, but there could be on the Eastside.

In addition, work is underway to extend the streetcar line to Lake Oswego. It is not an accident that the September 2000 study, The “Willamette Shore Streetcar Study,” is well received in Lake Oswego. Their mayor, Judie Hammerstad, is the Chair of the National Community Streetcar Coalition and is currently a member of the Board of Directors of PSI. TriMet capital projects developed the study to test if they could use the existing rail right of ways to service John’s Landing, Dunthorpe and Lake Oswego in an effort to reduce the pressure on car commutes

on the congested Highway 43 corridor. The study suggests a \$62.7 million system with twelve minute headways in peak times would bring commuters to downtown in about fifteen minutes. The group is currently seeking funds for the next phase of project development.



*The model of a portion of the South Waterfront illustrates the high density of proposed development.*

### ***Streetcar Advocacy***

Another impact of the streetcar is the way it has generated interest in new streetcar systems nationally and internationally. Part of the mission of PSI as amended in 2003 is to encourage others to develop streetcar systems. Thus far they have entertained over eighty communities from around the world to tour their work, and also have consulted with several municipalities, including Atlanta, GA and Charlottesville, NC, in different stages of developing their own streetcar systems. PSI is active in the Community Streetcar Coalition and is their “poster child.”

In correspondence with the Administrator of the Federal Transit Administration, the general manager of Portland’s TriMet, Fred Hansen, recently wrote to support consideration of what is referred to as Small Start Legislation. This is an effort led by Congressman Earl Blumenauer to enable less capital-intensive transit investments and to rethink the federal transportation system user benefit calculations to allow for a different understanding of what constitutes benefit. Both Hansen and Blumenauer use the Portland Streetcar, Inc. experience to make their point. Hansen’s letter talks about the necessity to consider in benefit calculations not just the trips taken but also the car trips not taken. His example follows:

*“A young couple (this could be an empty nester couple, a single mom or a host of others) is looking to buy a residence in one of our outlying neighborhoods, Hillsboro. They work at Nike but in their off hours they like to either get out of town for recreation or take advantage of urban pleasures such as the theater, Saturday Market, and our fine restaurants. Instead of living at the edge of our region they decide to move into a townhouse in the Pearl District. They do this in part because of the proximity of MAX and Streetcar. They take MAX to Nike (as they would have had they moved to Hillsboro) but are now able to take Portland Streetcar to the theatre, restaurants, and many other activities in the city. They still use their car to get out of town, but now it sits idle much of the week.”*

Hansen’s letter goes on to describe the statistics of the streetcar-related development in his city as an illustration of car trips not taken.



Assessing Project Success

## Success in Meeting Project Goals

### **From the application**

→ *Create a high quality transit service as an incentive for high density mixed-use development within the Central City.*

→ *Connect major attractions in the Central City including Legacy Good Samaritan Hospital, the Pearl District, the Cultural District, Portland State University, RiverPlace, and South Waterfront with high quality transit.*

The density and mixed use of the developments along the streetcar alignment and to the park blocks all were described as significantly influenced by the streetcar system. Similarly, the neighborhoods in five districts are connected with the system, and the ridership peaking at over 7,800 daily trips is higher than the initially predicted 4,000 and is still climbing.

→ *Develop rail transit that operates in mixed traffic and on existing rights-of-way at lower cost than light rail transit.*

→ *Develop rail transit that fits the scale and traffic patterns of existing neighborhoods.*

The physical description of the system matches the goal statements.

→ *Reduce short inner-city auto trips, parking demand, traffic congestion and air pollution.*

Parking revenues in the city are down thirty percent as a measure of parking demand. We have logical arguments for the reduction of short inner-city auto trips related to the fact that over 8,000 new residents now live adjacent to the streetcar and related MAX in the Central City of Portland. No data were offered on traffic congestion or pollution effects, but 7,800 streetcar riders per day are not in their automobile or on a bus.

***Progress has also been made on goals developed by the Board of Directors, Portland Streetcar, Inc. June 26, 2001 and November 4, 2003.***

→ *Complete phase 1: Continue development efforts for extension of the Streetcar Project to RiverPlace and North Macadam in accordance with the established plan adopted by the City of Portland.*

The line to RiverPlace (0.6 miles of double track) continuing the initial 2.4 miles addressed in the application was opened in March of 2005. The North Macadam line is programmed to open in 2006 and by all accounts is on schedule, with significant residential and other development already under construction that anticipates its successful conclusion.

→ *Consider Additions: Work with property owners and neighborhoods that have expressed interest in consideration of streetcar service additions.*

There is an Eastside Steering Committee in place, and Lake Oswego has announced a 2009-2010 completion schedule.

→ *Encourage others to develop streetcar-oriented communities*

To date, representatives from over eighty cities have toured the Portland Streetcar system and PSI consultants have been called in to consult with several cities on the finance, design, construction, and operation of similar systems considered in those cities. PSI consultants, the City, and TriMet are active participants in the National Community Streetcar Coalition and are working with the U.S. Congress to advance Small Start Legislation that will encourage greater federal support for such systems in the future.

In March of 2004, Shiels Oblatz Johnsen issued the “Streetcar Initiative Report” that identifies twenty-two cities that are currently planning a streetcar line. Four of these cities are currently building lines and three of them currently operate streetcars. The survey concludes that all the cities involved in streetcar planning, design and operation believe that “there should be a coalition to improve accessibility and availability of federal dollars for construction of streetcar systems in our cities.” From this, PSI has been building just such a coalition.

→ *Work with TriMet and others to obtain additional operating funds to enable existing peak-hour service frequencies to be reduced from fourteen minute to ten minute headways or less.*

This was described as a priority and involves the acquisition of three more streetcars from the Inekon Group, which have been ordered.

## Selection Committee Discussion: What We Learned

### ***Strategic Transportation Connections***

Linking key employment centers with transit, housing, park infrastructure and retail contributes immeasurably to the walkable mixed-use communities that are increasingly in demand in urban areas.

### ***Non-Profit and Business Community Leadership***

Public policy can be implemented through well-constructed non-profit and business collaborations. The role of both the enlightened self-interest of business and the public interest in non-profit organizations can be critical ingredients in the implementation of urban revitalization programs and in the balancing of public and private interests in development.

### ***Trust in Streetcar Appeal***

People who will not ride busses will ride streetcars; they like them. Current streetcar technology is low impact with minimal disruption to normal business during construction. It offers a permanent route to add to business confidence in patron routes, provides a scale of vehicle that works in concert with the pedestrian character of the streetscape and regular downtown streets, and is a non-polluting form of transportation that also reduces congestion on the street by reducing car trips.

### ***Sometimes Retail Leads***

While the common logic of planning is that retail will follow office and housing markets, the PSI project demonstrates that key retailing can also lead development. It can make it more attractive for office and housing development and supports the life on the street needed for good working and living neighborhoods.

### ***Leverage is Good for Everyone***

PSI has made it part of its mission to advance the cause of streetcar usage throughout the United States. In doing so, the Portland renewal story is further advanced even as the lessons of its renewal are better understood. Their successes, and their efforts to share their experiences with other cities, have potential for spreading transit-related benefits across the country.

***Brownfield Reclamation Requires Imagination***

Over one hundred acres of brownfield rail yards and an expressway separated Portland neighborhoods and employment centers from downtown and Portland State University. In many cities these impediments would be seen as insurmountable, especially in a declining economy with increasing unemployment and higher levels of office vacancy. The PSI story, however demonstrates that once imagined through careful vision planning, the public, private and non-profit worlds can implement very ambitious projects.

**FOR FURTHER INFORMATION:**

See Portland Streetcar website: <http://www.portlandstreetcar.org>

ABBOTT, CARL (1983) *Portland: Planning, Politics and Growth in a Twentieth Century City*, Lincoln, NE: University of Nebraska Press.

OZAWA, CONNIE P. (2004). *The Portland Edge: Challenges and Successes in Growing Communities*. Washington, D.C.: Island Press.

## RELATED RUDY BRUNER AWARD WINNERS:

Text taken from <http://libweb.lib.buffalo.edu/bruner/>. see also [www.brunerfoundation.org](http://www.brunerfoundation.org)

### **Portland's Downtown Plan and Program, Portland, OR; 1989 Gold Medal Winner**

*Portland's Downtown Plan and Program is a detailed city planning mechanism to revitalize and enhance Portland, Oregon's downtown area. This multifaceted plan featured expanded and centrally located local transit; appropriately located and designed uses to fashion the downtown into a twenty-four hour locale; the positing of transit, building, and development into an urban form that steps down to the river-front; preservation and restoration of historic buildings and the proper scaling of new development within historic areas; and provision and design of public places. The Portland Downtown Plan is a successful comprehensive downtown planning process that could serve as a model for other mid-size American cities. The Plan is exemplary in terms of its grassroots participation, its populist goals and objectives, and the successful collaboration between citizens, business and political interests.*

### **Southwest Corridor Project, Boston, MA: 1989 Silver Medal Winner**

*The Southwest Corridor Project implemented a new multi-modal transportation complex, involving the replacement of the Metropolitan Boston Transportation Authority Orange Line, the establishment of four lines of commuter rail, Intercity Amtrak service, and eight transit stations. The project was implemented through the cooperation of public agencies and community organizations in Boston.*

### **Cleveland Historic Warehouse District, Cleveland, OH; 1997 Silver Medal Winner**

*The Warehouse District has preserved a series of historically significant Victorian warehouse buildings in downtown Cleveland, adjacent to the financial district. The District has preserved important buildings which would otherwise have been lost, and has created a new mixed-use residential neighborhood that also includes retail shops, restaurants, jazz clubs, and commercial tenants in the heart of Cleveland.*