

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ENDORSING THE) RESOLUTION NO. 04 -3434
FINAL CONCEPTUAL DESIGN REPORT FOR) Introduced by Councilor Brian Newman
THE PORTLAND MALL SEGMENT OF THE)
SOUTH CORRIDOR PROJECT

WHEREAS, the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA) and Metro published the South Corridor Supplemental Draft Environmental Impact Statement (SDEIS) on December 20, 2002 that evaluated a number of alternatives in the South Corridor and on April 17, 2003 the Metro Council adopted Resolution No. 03-3303, For the Purpose of Amending the Locally Preferred Strategy For the South/North Corridor Project to Define a Two-Phased Major Transit Investment Strategy For the South Corridor, With the I-205 Light Rail Transit Project as the Phase 1 Locally Preferred Alternative Followed By the Milwaukie Light Rail Transit Project in Phase 2; and

WHEREAS, The FTA required that the downtown Portland segment of the Locally Preferred Alternative (LPA) be defined as “preliminary” until the National Environmental Policy Act (NEPA) evaluation and analysis was updated for the Portland Mall Alignment; and

WHEREAS, FTA, FHWA and Metro published the Downtown Portland Amendment to the South Corridor Project SDEIS in October 2003 and the public was invited to comment on the Amendment until November 17, 2003; and

WHEREAS, on January 8, 2004, the Metro Council adopted Resolution No. 04-3403, For the Purpose of Finalizing the Decision to add the Portland Mall Alignment to the Locally Preferred Alternative for Phase I of the South Corridor Light Rail Project, that amends the South Corridor Locally Preferred Alternative by extending Light Rail Transit from the Steel Bridge to Union Station and then on 5th and 6th avenues along the Portland Transit Mall to the Portland State University Terminus at SW Jackson Street, and

WHEREAS, more detailed design and analysis regarding of individual station locations and platform configuration was called for in the South Corridor Locally Preferred Alternative Report (Metro: January, 2004), and

WHEREAS, the Mayor’s Committee and the Portland Mall Citizen Advisory Committee have worked with the public to refine urban design concepts, station locations, station platform configurations and develop Portland Mall revitalization strategies which are documented in the *Portland Mall Final Conceptual Design Report*, and

WHEREAS, a *Discussion Draft of the Portland Mall Conceptual Design Report* was published in June 2003 and information was provided at a series of four public open houses and at numerous briefings and a public hearing held during November 2003, and

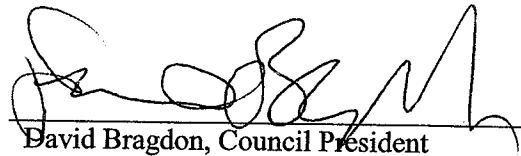
WHEREAS, based on public comments and direction from the Mayor’s Committee and Portland Mall Citizen Advisory Committee, a revised *Portland Mall Draft Final Conceptual Design Report* was published on March 1, 2004 and a series of open houses and briefings were provided and a public hearing was held on March 30, 2004, and

WHEREAS, after considering public input, the Portland Mall Citizen Advisory Committee and Mayor's Committee endorsed the Final Conceptual Design Report on April 19th and 23rd respectively; and

WHEREAS, the Portland City Council endorsed the *Portland Mall Final Conceptual Design Report* on May 19th and the TriMet Board will consider this report on May 26th respectively, now therefore

BE IT RESOLVED that the Metro Council hereby endorses the *Portland Mall Final Conceptual Design Report* for the Portland Mall Segment of the South Corridor Project that include shifts in station locations and changes in platform configurations consistent with the overall urban design concept and the inclusion of strategies intended to revitalize the Portland Mall.

ADOPTED by the Metro Council this 20th of May, 2004


David Bragdon, Council President

Approved as to Form:


Daniel B. Cooper, Metro Attorney



STAFF REPORT

IN CONSIDERATION OF METRO COUNCIL RESOLUTION 04-3434 FOR THE PURPOSE OF ENDORSING THE FINAL CONCEPTUAL DESIGN REPORT FOR THE PORTLAND MALL SEGMENT OF THE SOUTH CORRIDOR PROJECT

Date: [May 20, 2004](#)

Prepared by: Ross Roberts

BACKGROUND

This action is the latest in a series of actions that have defined light rail project segments for advancement in the South/North Corridor. The action requested would endorse the *Report of the Mayor's Steering Committee on the Conceptual Design for the Portland Mall Revitalization Project*, dated April 23, 2004 (Attachment 1) as well as the *Final Conceptual Definition of Alternatives Report* (Attachment 2) prepared by Metro, TriMet and the City of Portland. The Mayor's Steering Committee Recommendation (Attachment 1) includes shifts in station locations and changes in platform configurations consistent with the overall urban design concept and the inclusion of strategies intended to revitalize the Portland Mall as expressed in the *Final Conceptual Design Report*.

The actions leading up to this resolution are listed below:

- The South/North Corridor Project Draft Environmental Impact Statement (DEIS) was published in February 1998, and evaluated several alternatives in the South/North Corridor.
- On July 23, 1998, the Metro Council adopted the Locally Preferred Strategy (LPS) for the South/North Project that included light rail from downtown Portland to the Clackamas Regional Center via Milwaukie as the initial construction segment (*Note: LPS was a term defined in the federal ISTEA legislation of 1998 and is essentially the same as a locally preferred alternative*).
- A local ballot measure that would have secured local funding for the South/North light rail project was defeated in November 1998.
- Metro Council directed staff to proceed with the development of the North Corridor Interstate MAX light rail project and to develop transportation alternatives for the South Corridor concurrently.
- FTA and Metro published the South/North Corridor Supplemental DEIS (SDEIS) and amended the South/North LPS in June 1999 to define the Interstate MAX Project as the first construction segment in the South/North Corridor
- The North Corridor Interstate MAX Final Environmental Impact Statement (FEIS) was published in October 1999.
- In June 1999, the Metro Council directed that transportation alternatives be developed for the southern portion of the South/North Corridor and initiated the South Corridor Transportation Alternatives Study. The study evaluated bus rapid transit, busway, high occupancy vehicle lanes, high occupancy toll lanes, two commuter rail alternatives and river transit.
- Following the narrowing of alternatives to busway, bus rapid transit and the addition of two light rail segments, Milwaukie and I-205, FTA, the Federal Highway Administration (FHWA) and Metro published the South Corridor SDEIS on December 20, 2002.

- On April 17, 2003, the Metro Council adopted the LPA to include a two-phased approach to the South Corridor with the I-205 and downtown segments as the first phase and the Milwaukie segment as the second phase.
- Because additional environmental analysis was required for the downtown segment, the FTA required the LPA designation be defined as “preliminary” until the National Environmental Policy Act (NEPA) evaluation and analysis was updated for the Portland Mall Alignment. The environmental analysis was updated and was published in the Downtown Portland Amendment to the South Corridor Project SDEIS in October 2003. The public was invited to comment on the Amendment until November 17, 2003.
- Public comments on the downtown Amendment to the SDEIS were received by Metro staff and compiled in the South Corridor Downtown Segment Public Comment Report, published on November 19, 2003.
- On January 15, the Metro Council approved Resolution 04-3403 For the Purpose of Finalizing the Decision to add the Portland Mall Alignment to the Locally Preferred Alternative for Phase I of the South Corridor Light Rail Project, which identified mode, alignment, terminus and general station locations for the Portland Mall Light Rail Alignment.

Based on the information contained in the *Final Conceptual Design Report* and public comments, the Mayor’s Steering Committee for Portland Mall Revitalization, the Portland Mall Citizen’s Advisory Committee, the Portland City Council, TPAC and JPACT have endorsed the *Final Conceptual Design Report* and the station locations, platform configurations, urban design concept and Mall revitalization strategy contained therein. The TriMet Board is scheduled to take action on the Mayor’s Steering Committee Recommendation and the *Final Conceptual Design Report* on May 26, 2004.

ANALYSIS/INFORMATION

1. Known Opposition

Many constituencies were represented through the Portland Mall Citizen’s Advisory Committee including pedestrian and bicycling advocacy groups, businesses, the Portland Business Alliance and downtown residents. Although these groups initially had widely varying agendas, the process led to a strong consensus around the right-side station platforms, continuous traffic and bicycle lane and the revitalization strategies presented in the *Final Conceptual Design Report*. No opposition to this action is anticipated.

2. Legal Antecedents

The action being taken with this resolution sets the design parameters for the Final Environmental Impact Statement and Preliminary Engineering. It is a refinement of the previously adopted Locally Preferred Alternative for the Downtown Portland Mall. The selection of a Locally Preferred Alternative (LPA) is part of the project selection process mandated under the National Environmental Policy Act (NEPA). The LPA selected by the Metro Council on January 15, 2004, was based on the technical findings contained in an environmental impact statement and the public comments received during a 45-day period that follows the publication of the Draft Environmental Impact Statement in the Federal Register.

At the regional level, there are the following Metro antecedents:

- a. Resolution No. 98-2673, For the Purpose of Adopting the Land Use Final Order Establishing the Light Rail Route, Stations, Lots and Maintenance Facilities and the Related Highway Improvements For the South/North Light Rail Project;
- b. Resolution No. 98-2674, For the Purpose of Adopting the Locally Preferred Strategy (LPS) For South/North Light Rail Project;
- c. Resolution No. 99-2806A, For the Purpose of Amending the Locally Preferred Strategy For the South/North Light Rail Project to Define the Interstate Max Project as the First Construction Segment and to Amend the FY 2000 Unified Work Program;
- d. Resolution No. 99-2795A, For the Purpose of Amending FY 00 Unified Work Program to Add the South Corridor Transportation Alternatives Study and Amending the Transportation Improvement Program (TIP) to Authorize FY 99 Surface Transportation Program (STP)
- e. Resolution No. 03-3303, For the Purpose of Amending the Locally Preferred Strategy For the South/North Corridor Project to Define a Two-Phased Major Transit Investment Strategy For the South Corridor, With the I-205 Light Rail Transit Project as the Phase 1 Locally Preferred Alternative Followed By the Milwaukie Light Rail Transit Project in Phase 2
- f. Resolution No. 03-3351, For the Purpose of Amending the Metropolitan Transportation Improvement Program to Include the Revised South Corridor Light Rail Transit Project and Demonstrating Conformity of the Project, the Amended Regional Transportation Plan and Amended Metropolitan Transportation Improvement Program With the State Implementation Plan.
- g. Resolution 04-3403, For the Purpose of Finalizing the Decision to add the Portland Mall Alignment to the Locally Preferred Alternative for Phase I of the South Corridor Light Rail Project.

3. Anticipated Effects

Approval of this resolution would endorse the *Final Conceptual Design Report* (Attachment 2) and the *Report of the Mayor's Steering Committee on the Conceptual Design for the Portland Mall Revitalization Project*, dated April 23, 2004 (Attachment 1).

4. Budget Impacts

None at this time. The completion of the Final Environmental Impact Statement is funded through an existing Intergovernmental Agreement with TriMet. This project is included within the Financially Constrained System of the Metro Regional Transportation Plan and Metropolitan Transportation Improvement Plan. Preliminary Engineering and a Final Environmental Impact Statement would have to be completed and, after the Record of Decision about the project is determined, a full-funding agreement with the Federal Transit Administration would need to be approved. Only then would the allocation of Federal and state funds and local matches be expended.

RECOMMENDED ACTION

Approval of Resolution No. 04-3434.

FINAL

**REPORT OF THE MAYOR'S STEERING COMMITTEE ON THE
CONCEPTUAL DESIGN FOR THE PORTLAND MALL REVITALIZATION PROJECT**
April 23, 2004

Introduction

The Mayor's Steering Committee has completed an 18 month-long effort to review the background, key design and development issues and conceptual design options for the Portland Mall Revitalization Project. Based on the deliberations of the Committee, advice from the City's key Commissions and Bureaus, the Citizen's Advisory Committee and an extensive public review and input process, the Committee hereby forwards its recommendations for consideration by the City Council, Metro Council and TriMet Board.

Recommendations

The Steering Committee recommends the following:

- 1) Adoption of the draft Conceptual Design Report dated March 1, 2004, with emphasis on the following key elements:
 - a) **Revitalization Plan.** The Steering Committee recommends support for the overriding concept of a multi-faceted revitalization strategy, consisting of *infrastructure improvements, redevelopment strategies, a Mall management program* and *transit/traffic/pedestrian management*.
 - b) **Conceptual Design Elements:**
 - i) **Urban Design Considerations.** The Steering Committee has devoted considerable energy to insuring the project is grounded in excellent urban design. The Committee has carefully reviewed a detailed urban design analysis of the Mall prepared by the Bureau of Planning and a "Great Streets" report prepared by the project's lead urban designer, Zimmer Gunsul Frasca Partnership. The Steering Committee recommends continued efforts to promote design of the project consistent with the key principals of '*station as place*' and the '*urban rooms*', as outlined in the report. Moreover, every effort should be made to continue to preserve the original design intent of the Mall by emphasizing a strong environment for pedestrians and transit patrons.
 - ii) **Station Platform Configuration/Multi Modal Street Use Concept.** The Steering Committee has reviewed nearly a dozen alternative configurations for installation of light rail tracks and station platforms. Option B, or the "Right

Side Option”, as outlined in the report, represents the most workable option and creates a multi-modal street that will accommodate the needs of pedestrians, bicycles, bus and light rail transit, as well as improved business access for motor vehicles.

- iii) **Station Locations.** Option B has a clear urban design advantage over all the other alternatives. This option allows greater flexibility with regard to the location of light rail station platforms consistent with the *'station as place'* urban design concept and will best leverage development opportunities. Therefore, the two station sets in the Central Mall should be located at Pioneer Square and Oak Street as contemplated in Option B. This option also locates stations at intervals that will balance convenience to platforms with improved transit travel time in Downtown.
 - iv) **Multi-Modal Travel Lane.** The Steering Committee recommends that the project include a continuous, multi-modal travel lane along the entire project length. This lane will be exclusive of any continuous transit use south of Burnside and will be intended to improve business access and visibility while accommodating autos, delivery vehicles, bicycles and other modes of travel allowed by law.
 - v) **North Mall Configuration.** The North Mall should be configured to match the rest of the Mall with the light rail trains utilizing the same “Right Side” configuration inherent in Option B, provided that the issue of bus layovers is resolved to the satisfaction of the community and the Council. TriMet should work with the City to develop a plan acceptable to key stakeholders for bus service revisions in the North Downtown area, including changes to bus layover locations and the North Terminal. The plan for the North Mall should include vehicle access across Burnside and renewed efforts to link both sides of Burnside through special urban design treatments.
 - vi) **South Mall Configuration and Finishes.** The South Mall should be constructed to a standard similar to the existing Central and North Malls, including brick sidewalks, street trees (not Sycamores) and ornamental street lighting. At the same time, the design of the South Mall improvements should reflect the *'urban rooms,'* different vehicular access requirements and street configuration of this part of Downtown.
- 2) **Adoption of Key Planning Commission Recommendations.** The Steering Committee recommends strong consideration of the Planning Commission’s recommendations as outlined in their letter dated April 13, 2004, attached hereto as Exhibit “A”. Further, the Steering Committee concurs with the Planning Commission’s recommendations concerning future consideration of “green busses”; accommodation of short- and long-term bicycle parking and Mall Management. These issues and the other recommendations of the Planning Commission should

be incorporated into the planning process going forward. Staff should be directed to provide a progress report to the City Council at key milestones in the design and approval of the project as to the conformance of the project design to the key recommendations of the Planning Commission.

- 3) **Adoption of Key Citizens Advisory Committee Recommendations.** The Steering Committee recommends strong consideration of the recommendations of the Citizens Advisory Committee as outlined in their memorandum dated April 20, 2004, attached hereto as Exhibit “B”.
- 4) **Mall Management Strategy.** The Steering Committee recognizes the need for and benefits of a coordinated Mall management program that would be developed prior to project completion. Formation of a Mall Management Entity or District to oversee the day-to-day operations, management, security, maintenance, programming and marketing of the Mall is recommended.
- 5) **Development Strategy.** The Steering Committee recommends that PDC be directed to prepare a *Development Strategy*, consistent with the Conceptual Design Report, which will result in specific initiatives to encourage development of underutilized sites and buildings along the Mall concurrent with the Mall Revitalization project.
- 6) **Project Funding.** The Steering Committee recommends efforts to reconcile the budget to available resources, including an on-going value-engineering program. Local funding for the project should be developed from multiple public and private stakeholders as generally outlined below:

Portland Mall Revitalization Project

Proposed Project Funding

<u>SOURCE</u>	ENTIRE PROJECT <u>(\$\$M)</u>	PORTLAND MALL SEGMENT <u>(\$\$M)</u>
Federal Transit Administration	\$299.0	\$96.0
MTIP/Metro	39.8	see below
TriMet	20.0	see below
City of Portland/Other Local Funds:	60.0	see below
TriMet/Metro		10.0
Urban Renewal Funds		10.0
Bonding of New Parking Meter Revenues		15.0
Public Utility Facility Upgrades Contributions		5.0
Local Improvement District		15.0
Portland State University		5.0

Clackamas County	35.0	0.0
STIP/ODOT	20.0	0.0
Other	<u>24.8</u>	<u>4.0</u>
TOTAL	\$499.1	\$160.0

Project staff should work to develop necessary financial commitments which will allow the project to advance through the FTA rating process, and return to the City Council, Metro Council, and TriMet Board of Directors with necessary actions by August 1, 2004.

- 7) **Mall Improvement Standards.** The Steering Committee supports a design and construction approach that will result in a comprehensive refurbishment of the North and Central Mall, including the repair of existing brick sidewalks to a “like new” condition. At the same time, the Steering Committee recommends that TriMet employ the “best practices” of the Portland Streetcar project to assure the minimum construction duration and impacts to properties along the Mall.

- 8) **Vehicle Pullouts.** The Planning Commission and CAC have both devoted attention to the issue of vehicle pullouts, and to date, the preferred guidelines of the two have not been reconciled. It is recommended that staff be directed to continue the evaluation of the issue during the early stages of Preliminary Engineering in accordance with the CAC-approved guidelines attached hereto as Exhibit “C” and the proposed Planning Commission policies outlined in Exhibit “D”. The Steering Committee directs PDOT and TriMet to reconcile the vehicle pullout recommendations from the Citizens Advisory Committee and the Planning Commission prior to the City Council hearing currently scheduled for May 19, 2004.

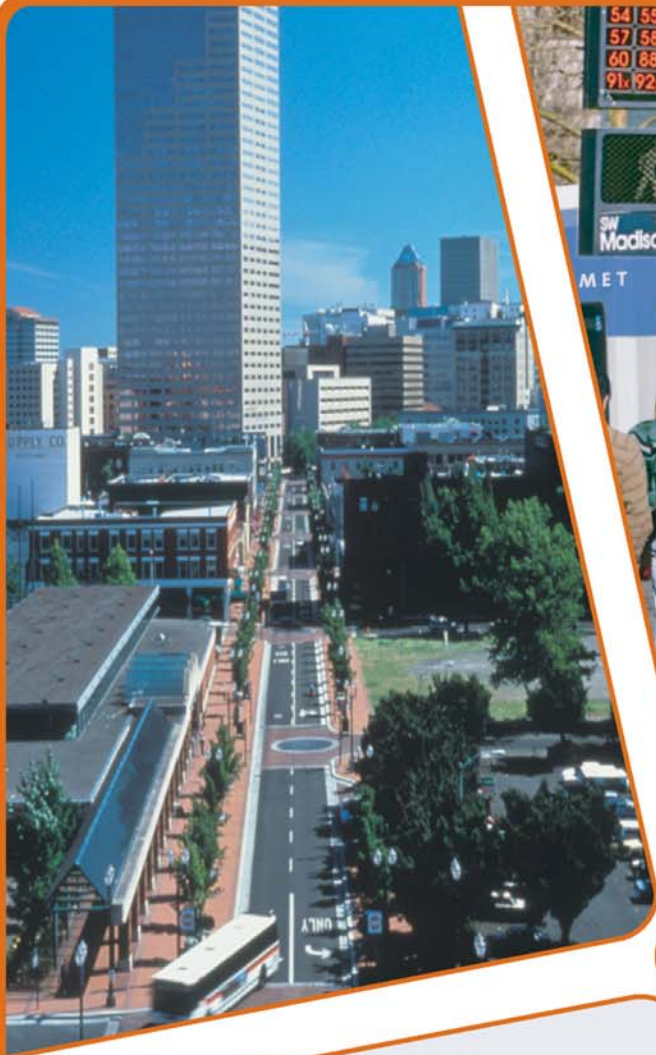
- 9) **Other Issues to be Resolved in Preliminary Engineering.** During Preliminary and Final Engineering, the Steering Committee recommends that PDOT and TriMet be responsible for addressing and resolving the following issues, including discussions with the public and stakeholders, advice from other City bureaus, the Design Commission and the Landmarks Commission:
 - a) Street Trees
 - b) Transit Shelters
 - c) Character of physical improvements vis a vis the “urban rooms” and “station as place” urban design concepts
 - d) Intersection design
 - e) Public art
 - f) Special lighting
 - g) Street furnishings
 - h) Relationship to future Burnside-Couch Couplet
 - i) Traffic impacts for off-Mall bus routes

- j) Public safety
- k) Jackson Street stations
- l) Auto turnouts

10) **Memorandum of Agreement.** Staff should work with key stakeholders to develop an overriding Memorandum of Agreement covering project design and funding and provide it for approval by all parties no later than August 1, 2004.

Collateral Documentation

Attached please find copies of the recommendations from the Citizen's Advisory Committee and the Planning Commission which represent extensive participation and review by these two key participants in the review process leading to the recommended conceptual design.



Project partners



City of Portland

TRI MET



METRO



PORTLAND MALL
REVITALIZATION

Conceptual Design Report

Public Discussion Draft

March 1, 2004

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- A. Organizational Outreach List
- B. Detailed Project Cost Estimate
- C. Transit Mall Tree Study (Pacific Resources Group)
- D. Mall Intersection Treatments Report (City of Portland)
- E. Review Comments on Draft CDR (PDOT Bureau of Maintenance)

OTHER RELATED REPORTS

Portland Mall Revitalization: Conceptual Design Report. Public Discussion Draft (Metro, TriMet & City of Portland: June 2003)*

Portland Transit Mall: Urban Design Analysis & Vision (City of Portland Bureau of Planning: March 2004)*

Great Transit & Pedestrian Streets (Zimmer Gunsul & Fransca: March 2004)*

Transit Mall Development White Paper (Portland Development Commission: March 2004)*

South Corridor Project: Public Comment Report (Metro: November 2003)*

South Corridor Amended Supplemental Draft Environmental Impact Statement (Metro: October 2003)

*Available on the TriMet Website: www.trimet.org

ACKNOWLEDGEMENTS

ADVISORY COMMITTEES

Mayor's Steering Committee

Vera Katz, Chair	Mayor, City of Portland
David Bragdon	Metro Council
Mark Dodson	Northwest Natural
Jim Francesconi	Portland City Council
Fred Hansen	TriMet
Jay Kenton	Portland State University
George Passadore	Wells Fargo
John Russell	Russell Development

Citizen Advisory Committee

Committee Member	Affiliation
Christopher Kopca, Chair	Downtown Development Group
Lew Bowers	Portland Development Commission
Trond Ingvaldsen	Standard Insurance
Phil Kalberer	Old Town/Chinatown
Dan Zalkow	Downtown Community Association
Janice Marquis	Russell Development
Deborah Murdock	Portland State University
Ann Niles	Pearl District Neighborhood Association
Greg Peden	Portland Business Alliance
Allyson Reed	Pioneer Place
Ellen Vanderslice	Willamette Pedestrian Coalition

PROJECT TEAM

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This report is available on the web at: www.trimet.org

EXECUTIVE SUMMARY

PROJECT SUMMARY

The City of Portland, TriMet and Metro are collaborating in a regional effort to extend light rail service between the Central City and Clackamas County. As a part of this effort, light rail service will be added to 5th and 6th Avenues from Union Station to Portland State University. The agencies have also taken this opportunity to revisit the future of the Portland Mall and implement a strategy to revitalize the signature downtown streets to better meet the needs of the community.

Adding capacity to the transit system is essential to the economic growth and vitality of Portland. With limited highway capacity and high rates of population and employment growth projected, enhanced transit is needed to provide access to and circulation within the downtown core area. The existing light rail system on First Avenue/Morrison/Yamhill will soon reach its capacity. Additional transit capacity is needed to ensure that downtown can continue to attract and compete for new jobs, shoppers and residents. Light rail service on the Portland Mall implements the Downtown Plan's vision for high capacity transit service through the high density office corridor. It also supports the region's 2040 Framework Plan to preserve natural resources, improve air quality and manage a compact urban form.

KEY DECISIONS NEEDED

It is essential that the Final CDR be adopted with three key issues resolved so that the project can move forward into the next phase of design. These issues are the focus of this report, and include:

- **Overall Revitalization Strategy**
- **Light Rail Station Locations**
- **Light Rail Station Configuration**

WHAT'S THE BIG IDEA?

The Portland Mall Revitalization Project provides a unique opportunity to not only re-engineer and rebuild the award-winning Portland Mall, but also to *re-think* the role it will play in the future of the Central City. Fundamentally, the project proposes to add light rail service on the Mall from Union Station to Portland State University. But this is just the start—the project will renew the Mall's existing physical infrastructure and extend streetscape improvements ten additional blocks to the south.

To be successful, however, the project must expand beyond bricks and mortar and light rail tracks to embrace transportation, urban design, social and economic objectives that will assure that the Mall is even more successful in the next 25 years than it has been over the previous 25.

This report lays out a series of goals, strategies and recommendations for the project based on the extensive public policy history behind the Mall and the analysis of the project undertaken over the last decade. With this information, the report also proposes a *Conceptual Design* for the Project that will serve as a basis for detailed design and engineering work. Beyond all this, a distillation of the “big idea” is needed to provide direction for the project. Accordingly, the following highlights the top priorities that the Portland Mall Revitalization Project should emphasize as it moves forward through the public review and approval process and implementation:

1. Re-establish the Mall as a multi-modal spine through downtown with a vibrant and interactive streetscape. The Mall should move beyond its 1970s roots and project itself as a unique place where businesses and people *want* to be. This means looking at a role for 5th and 6th Avenues that transcends that of simply a “transit mall” to create a user-friendly, interactive and engaging public space. The “New Mall” will continue to provide the highest quality transit service, offering enhanced options for regional trips and intra-downtown shuttle service. It will also be a safe and inviting environment for pedestrians and transit users, commuters and visitors. The Mall should also include the latest technologies, such as wireless infrastructure with a continuous “hot spot” along the Mall's entire length to facilitate communication through the latest in smartphones and emerging communication devices.

2. Establish a unique sense of place and arrival by celebrating the various “urban rooms” of the Mall and by treating each Mall station as a special civic space.

The design will create a unique sense of arrival and place at each of the Mall’s station platforms such that the place is instantly identifiable to anyone arriving via transit or for a visitor using the Mall as a starting point for exploration of the Central City. This will involve a careful station area planning process during Final Design and implementation of station area improvements as part of the construction of the project.

3. Make a direct link between public infrastructure improvements and new development. A definitive tie needs to be established between the \$160M public investment that is proposed for Mall infrastructure and economic development along the entire length of the Mall. This will require the implementation of a specific development plan for properties in the immediate vicinity of the Mall. The City, TriMet and the Portland Development Commission need to work together with property owners to prepare and implement a Development Plan that will incent new development of underutilized properties, renovation of existing buildings and improvements to storefronts and ground floor spaces along the Mall to create additional transit-supportive development and pedestrian activity.

4. Re-establish the Mall as a premier public space. The quality of the improvements to the Mall need to meet the high standards established when the original Mall was constructed in the late seventies. Renovation of existing improvements and new construction should improve the Mall’s maintenance requirements while retaining a high standard for public space improvements. Furthermore, a management ethic based on an enduring commitment to “real time” oversight, maintenance and security is needed to ensure the long-term success of the Mall. This can be accomplished by establishing a Mall Management entity that is pro-active and adequately funded to take on these responsibilities. The entity will work with property owners, businesses, transit patrons and other stakeholders to foster stewardship of the public spaces along the Mall.

5. Design the Portland Mall to be flexible enough to adapt to changing conditions. The new design should assure that as social, economic and transportation parameters change, the streets can be adapted with a minimum of upheaval to reestablish an appropriate balance between all uses.

REVITALIZATION STRATEGY

This project is about more than laying new bricks and trackways down the streets; it’s about strengthening the physical, social, and economic conditions of the Mall. A four-pronged approach is proposed by the Project Team:

I. Urban Design Vision & Concept

The revitalized Mall will respect the spirit of its original design by preserving the essential elements that stitch it together. However, selective modifications will be considered to enhance the functional quality, ease the maintenance burden and reflect the character variations of the urban rooms along the length of the Mall. A revitalized Mall needs to build upon the existing successes, but also respond better to its adjacent conditions. Addressing these and ongoing issues should also be seen as a unique opportunity to generate economic and social vitality. To accomplish this, the design of the Mall must:

- Create a context-sensitive development strategy that creates a catalyst for redevelopment of vacant or underutilized properties along the Mall.
- Make users not only aware of their presence on the Mall, but also where on the Mall they might be.
- Reenergize the Mall and create a place where pedestrians, transit patrons, employees and visitors want to be.

Two concepts are put forth in the urban design strategy which help guide design decisions. The idea of “urban rooms” along the Mall is key to both understanding the current Mall and providing a basis for perceiving how it should be seen in the future. When generalized, the Mall may be broadly considered to fall into a series of “urban rooms,” each with its own defining characteristics.

The analysis of existing conditions, opportunities and constraints of each room provides clarity on:

- Where ground-level activity (the presence of storefront windows, retail entrances, etc.) currently exists and which blocks are in greatest need of activation and vitality.
- Where each light rail station can best reflect the character of its room and be successfully integrated into the area (a concept referred to as “station as place”), rather than be simply a generic station on a block within the Transit Mall.

The second concept, which is related to the urban rooms idea, is referred to as “station as place.” This notion promotes the complete integration of the station design with the “place” itself. Each urban room on the Mall reflects its immediate context and potential. Each station within these rooms should thus also reflect the general character of the room. Finally, the “station as place” concept provides the opportunity to arrive and depart from unique and special places along the Mall that express Portland’s finest urban qualities.

II. Transit Operations & Transportation Strategy.

Adding light rail service will enhance the Mall’s ability to serve efficiently as the backbone for the region’s transit system and support future downtown growth. However, it also requires a careful rebalancing of the users and activities on the streets to ensure efficient operation and a quality civic environment. The Project Team makes several key recommendations regarding transit and transportation operations:

- **Study options for improving downtown bus service.** A transit concept plan is being developed that proposes to reroute some buses to other locations off the Mall to create a more balanced system downtown. The new light rail alignment will take on the Mall shuttle function that some buses currently provide and the bus system will be adjusted to provide better service to underserved areas of downtown.
- **Reduce bus noise and air quality impacts.** In the short term, TriMet will explore new methods of training bus operators to reduce vehicle acceleration and braking noise. TriMet has also agreed to pursue the strategy of phasing in hybrid buses which operate more quietly and emit less exhaust than the existing buses.



Portland State University's Urban Center

- **Preserve and enhance the high quality pedestrian environment of the Mall.** City policy classifies 5th and 6th avenues as Pedestrian-Transit Streets with local auto access and clearly indicates that transit and pedestrian use are a priority. It is essential to allocate an appropriate amount of space for pedestrians and transit users to create a safe and comfortable environment.
- **Preserve good downtown bicycle access.** Bicycles are currently only permitted where autos travel. Preserving or enhancing bicycle service will be considered while evaluating different station platform options.
- **Maximize flexibility and consider improving auto access along its length.** Currently, there are four blocks in the Central Mall (5th and 6th Avenues at Taylor/Yamhill and Washington/Stark) with sidewalk extensions that prevent autos from traveling through the block. Autos are also prevented from crossing Burnside on both 5th and 6th Avenues. There are conflicting opinions in the community regarding the benefits or disadvantages of this limited auto access. Some believe that improving auto access would enhance activity, strengthen retail and provide better clarity for drivers navigating through downtown. Others argue that limiting auto access (and allocating more space to sidewalks) is essential to enhancing the pedestrian environment and reinforcing the transit emphasis of the Mall. There are trade-offs to evaluate with either auto configuration. However, a design solution that provides the *flexibility* to adapt to either configuration would best serve the Mall today and into the future. As described later in this report, options exist that *could* provide off-peak and all-hours auto access along the length of the Mall.

III. Development Strategy

To be successful, this project needs to affect a significant change in development patterns along the Mall. This project aims to create a direct link between the planning and design of the Mall and the implementation of specific, complementary development strategies. The objectives of the Mall development strategy are to:

- Create shared commitment to the Mall among private owners and public agencies
- Incent in-fill development opportunities that leverage new public and private investments in the Mall
- Enhance the relationship between ground floor uses within buildings and public space along the Mall to create a better business environment.
- Utilize the “station as place” concept to focus and catalyze development along the Mall and its adjacent areas.
- Provide a safe and accessible retail environment along the Mall to enhance downtown’s competitiveness with regional shopping areas.

In order to achieve these objectives the Project Team recommends that PDC prepare a specific strategy that: (a) identifies both public and private sources to fund development efforts, including the possibility of forming a Business Improvement District (BID); (b) creates a program of incentives to encourage modifications to ground floor uses and storefronts along the Mall; and (c) establishes a plan for incenting the transit-oriented development of key parcels along the Mall that are currently undeveloped or underdeveloped.

IV. Mall Management Strategy

A coordinated management of the Mall is essential to this revitalization effort. Chief among the benefits of this approach would be the dedicated and visible stewardship to sustain the vitality of the space.

The following are the key objectives for the establishment of a formalized process of Mall Management:

- Create shared commitment to the Mall among private and public owners
- Consolidate and leverage existing and future public and private maintenance commitments
- Coordinate maintenance, crime prevention and public space programming
- Improve responsiveness to ongoing and capital maintenance issues
- Provide for common management and programming of Mall activities (e.g., vending, seasonal decorations, and street media)

The Project Team recommends that a Mall Management entity be created to take responsibility for the maintenance and operations of the streets and to assist with development efforts. The entity would establish and implement an activation strategy that could include programming activity, adding street media, managing maintenance and security, and other efforts.

REVITALIZED MALL DESIGN

One configuration for the South Mall and two configuration options for both the Central Mall and the North Mall are put forth by the Project Team for public review. Final decisions on these options are needed before the project moves into Preliminary Engineering in the spring/summer of 2004.

NORTH MALL CONFIGURATION (Burnside to Union Station)

Station Platform Options. Two station platform options are proposed for the North Mall.

Option A - Left Side Platform: The light rail alignment and the station platforms are on the left side of the street. Buses, autos and bicycles share the right lane, and buses can use the light rail lane for passing. Autos and bicycles are not permitted to cross Burnside.

Option B - Right Side Platform: The light rail trackway and stations are on the right side of the street. Buses travel on the trackway, but use a separate lane on the block between Davis and Everett for stops. Autos and bicycles travel in the left lane, and turning movements will remain consistent with existing patterns. Preliminary traffic analyses indicate that autos and bicycles would be able to cross Burnside on both 5th and 6th avenues without increasing traffic volumes on the Mall.

Station Locations: Stations in the North Mall would be the same for either Option A or B, and are proposed at Union Station (NW Glisan/NW Hoyt Streets) and NW Couch/Davis.

**CENTRAL MALL CONFIGURATION
(SW Madison to Burnside)**

Station Platform Options. Two station platform options for the Central Mall are proposed for further consideration:

Left Side Platform. Light rail operates in the center lane and utilizes the existing extended sidewalks at Yamhill/Taylor and Washington/Stark as station platforms. Buses travel on the right side and use the light rail lane for passing. Autos and bicycles operate in the left lane and are prevented from travelling through station blocks (although through auto access during off-peak hours may be an option). This is the lowest cost option that has the least construction impacts and introduces the least change to the existing configuration of the Mall.

Right Side Platform. Buses and light rail operate in the two right lanes and autos utilize the left lane. Light rail travels in the center lane until approaching station blocks when it transitions over to a right side platform. Buses travel in the center lane through non-station blocks and pull into the right lane at their designated bus stops, much like they do today. If combined with the Right Side Platform in the North Mall, autos may be able to travel the entire length of the Mall without being diverted off as they are today.

Station Locations. The station locations originally proposed for the Central Mall were largely driven by a desire to utilize the existing extended sidewalks for the light rail stations (i.e., the Left Side Platform) and by the necessity to place Left Side Platforms only at blocks that work with the pattern of one-way streets downtown. The Left Side Platform at these locations minimizes costs and introduces the least change to the existing configuration of the Mall.

However, the Right Side Platform provides the opportunity to reconsider station locations in the Central Mall to better support the concept of “station as place.” Stations at Pioneer Square/Courthouse (SW Yamhill/Morrison) and at the US Bank Plaza (SW Oak/Pine) are proposed for the Right Side Platform option.



Pioneer Courthouse Square

Station Packages. In light of the station platform and location choices, two station “package” options are put forth for the Central Mall.

Option A - Base Case Package.

Station Location/Platform Recommendation:

6th Ave @ Jefferson/Madison	Right Side Platform
5th Ave @ Jefferson/Madison	Right Side Platform
6th Ave @ Taylor/Yamhill	Left Side Platform
5th Ave @ Taylor/Yamhill	Left Side Platform
6th Ave @ Washington/Stark	Left Side Platform
5th Ave @ Washington/Stark	Left Side Platform

Option B - Right Side Package.

Station Location/Platform Recommendation:

6th Ave @ Jefferson/Madison	Right Side
5th Ave @ Jefferson/Madison	Right Side
6th Ave @ Yamhill/Morrison	Right Side
5th Ave @ Yamhill/Morrison	Right Side
6th Ave @ Oak/Pine	Right Side
5th Ave @ Oak/Pine	Right Side

SOUTH MALL CONFIGURATION (SW Jackson to Madison)

Station Configuration. Throughout the South Mall, the light rail alignment and station platforms will be on the right side.

On 6th Avenue buses and light rail will operate in the two right lanes. There are two auto lanes on the left side until Clay Street to accommodate traffic coming off of I-405. At SW Clay Street one lane forces a left turn and one continues north.

Also on 5th Avenue buses and light rail will operate in the two right lanes. One auto lane travels southbound until College Street, after which autos have the left lane and share two middle lanes with a low volume of buses. Streetcar shares the auto lane with autos for two blocks between SW Market and Montgomery.

Station Locations. Stations in the South Mall are proposed at SW Montgomery/Mill and Jackson/College. Consideration is being given to move the 6th Avenue station at SW Montgomery/Mill Streets to SW Harrison/Montgomery to reduce access impacts and Streetcar conflicts.

BUDGET & FINANCIAL STRATEGY

The total estimated cost of the Portland Mall segment from Union Station to PSU is currently estimated at approximately \$160 million in Year 2007 dollars. For purposes of determining potential sources of local funding for the downtown segment, a match ratio of 60% Federal/40% Local has been assumed. Therefore, the local funding requirement for the full Downtown segment is approximately \$64 million.

The following summarizes the proposed funding sources for the Portland Mall portion of the Project.

- TriMet and Metro Contributions
- Urban Renewal Funds
- Bonding of Downtown On-Street Parking Revenues
- Public Utility Contributions
- Property Owner Participation through a Local Improvement District (LID)
- Portland State University

Beyond the initial construction funding for the Project, there is also a desire to identify potential resources to fund ongoing management, operation, maintenance and security of the Mall. It is recommended that the capital funding strategy include consideration of a revenue stream that can carry forward beyond construction of the Project. Specifically, consideration should be given to tapping the parking meter system revenue enhancements to fund a combination of initial capital costs and a maintenance and operations program.

PROJECT SCHEDULE

It is expected that City Council will approve the conceptual design in late April 2004. Preliminary Engineering will commence shortly thereafter, and the Final Design will be completed in February 2006. Construction will begin spring 2006 and the light rail alignment will open in early 2009.



INTRODUCTION

PROJECT DESCRIPTION

The City of Portland, TriMet and Metro are participating in a regional effort to extend light rail service between the Central City and Clackamas County. In connection with this effort, all three agencies have undertaken the Portland Mall Revitalization Project. This project will add light rail service on 5th and 6th Avenues - from Union Station (west end of Steel Bridge) to Portland State University (S.W. Jackson Street) - and revitalize these signature downtown streets to better meet the needs of the community. (Fig. 1)

High rates of population and employment growth continue to increase demand for transit to and from downtown. Growth projections indicate that demand for transit service will exceed capacity provided by the existing downtown light rail alignment by 2020. The expanded light rail system is needed to support future growth, to achieve regional and local land use objectives and to continue to encourage the use of alternative modes of transportation.

CONTEXT

The Original Mall

The 1972 *Downtown Plan* provided goals and guidelines that would be used to rebuild and enrich the urban core through coordinated land use and transportation policies. It identified a series of key projects to begin reshaping the downtown; the Transit Mall was one of the projects to be immediately undertaken.

In 1978 the Transit Mall opened to serve as the central spine of a regional transit system that would make mass transit an attractive and compelling alternative to the automobile. The Mall was constructed on SW 5th and 6th Avenues between

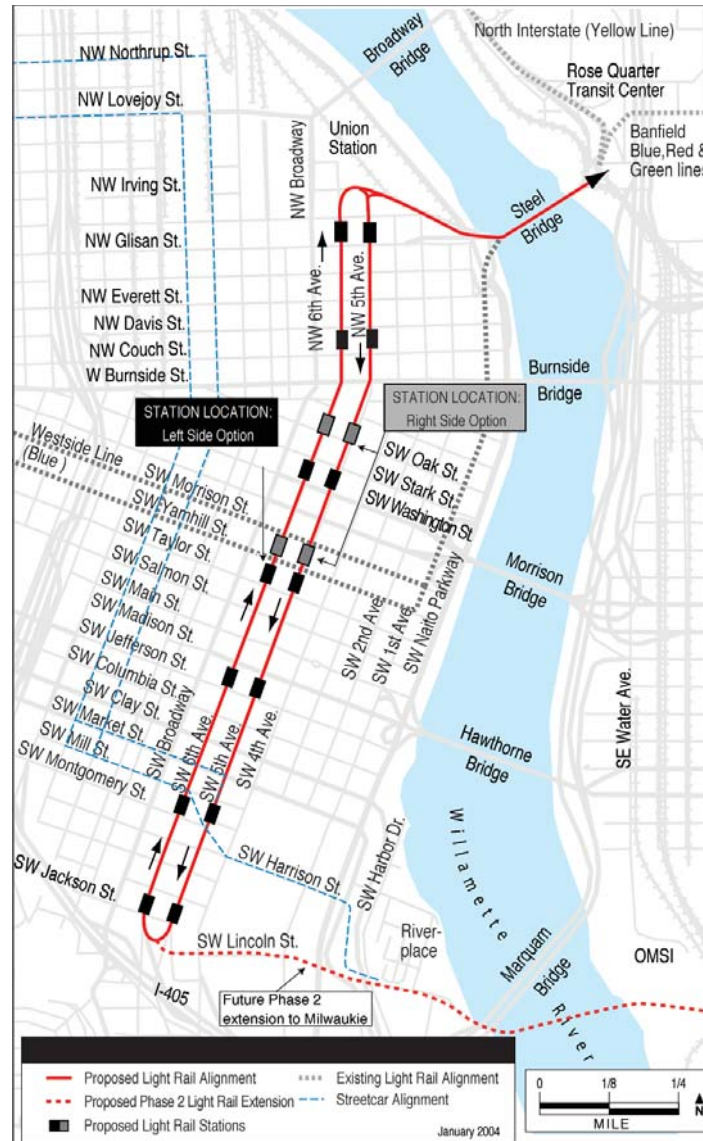


Figure 1: Recommended Light Rail alignment and station locations on the downtown Transit Mall.

SW Madison and W. Burnside to travel through the high density office corridor and retail-commercial core of the Central City. It was to be the symbol of optimal access to a regenerated urban core.

The Mall immediately received international attention as a model for transit and downtown redevelopment. It was recognized for both its exceptional design quality, and its strategic and operational innovation. Over the next decade, the significance of these attributes was confirmed. For years the Mall has been celebrated as a prototype for redeveloping an urban center using transit as a major catalyst.

North Mall Expansion

In 1994 the Mall was extended seven blocks north into the Old Town/Chinatown District, linking the original Mall with Portland's intermodal transportation center at Union Station. The design of the original Mall was replicated as closely as possible, although the narrower right-of-way north of Burnside precluded the same generous allocation of space to transit and pedestrian functions.

Expanding Light Rail

Light rail (MAX) was first introduced to Portland in 1986 on a 15-mile-long track between Gresham and downtown. As part of the region's overall transportation strategy, MAX was extended 18 miles west from downtown to Beaverston/Hillsboro in 1998. The MAX system was expanded to the Airport in September 2001 and the 5.8 mile Interstate MAX segment opens May 2004.

Future development growth with expanding population and employment will continue to increase demand for transit to and from downtown over time. Growth projections indicate that demand

for transit service will exceed capacity provided by the existing downtown light rail alignment by 2020. An additional alignment in downtown is needed to support future growth, and to provide an alternative to auto use.

On April 17, 2003 Metro Council adopted a two-phase South Corridor plan to extend light rail to Clackamas County. The first phase includes a light rail extension from Gateway Transit Center along I-205 to a new Clackamas Transit Center and from Union Station to Portland State University along the Transit Mall. The second phase will extend light rail from Portland State University to Milwaukie. (Fig. 2)

The alignment for expanding light rail in Downtown Portland has been the subject of much discussion and analysis since planning began for the Banfield Light Rail Project in 1979. Alignments were explored on SW Second, Third, Fourth, Broadway, Tenth and Eleventh Avenues. These options were deemed less favorable for numerous reasons, including the City's Street Classification designation of some routes as traffic streets, conflicts with garage entrances and bridgeheads, and inferior access to the high-density land uses along the Portland Mall.

The City of Portland convened the Downtown Rail Advisory Committee in 1993 to provide recommendations to the City on future light rail alignments within downtown Portland. Numerous surface and subway alignments within downtown were reexamined and a surface light rail alignment on 5th and 6th Avenues was reconfirmed as the preferred surface alignment. This Mall alignment is consistent with many years of planning and development policies endorsed by the City of Portland, Metro and TriMet, including the adopted Downtown Plan (1972) and the Central City Plan (1988). The alignment was approved in 1998 by the Portland City Council, TriMet Board and Metro Council as part of the South/North Light Rail Project Locally Preferred Alternative (LPA) decision and again in April 2003 as part of the South Corridor Light Rail Project LPA decision.

Other Transit Concepts Considered

Other transit mode options have been considered, including a subway system and bus-transit shuttle system, which would place bus terminals at both ends of the Mall and use light rail or streetcar to connect the transfer points.

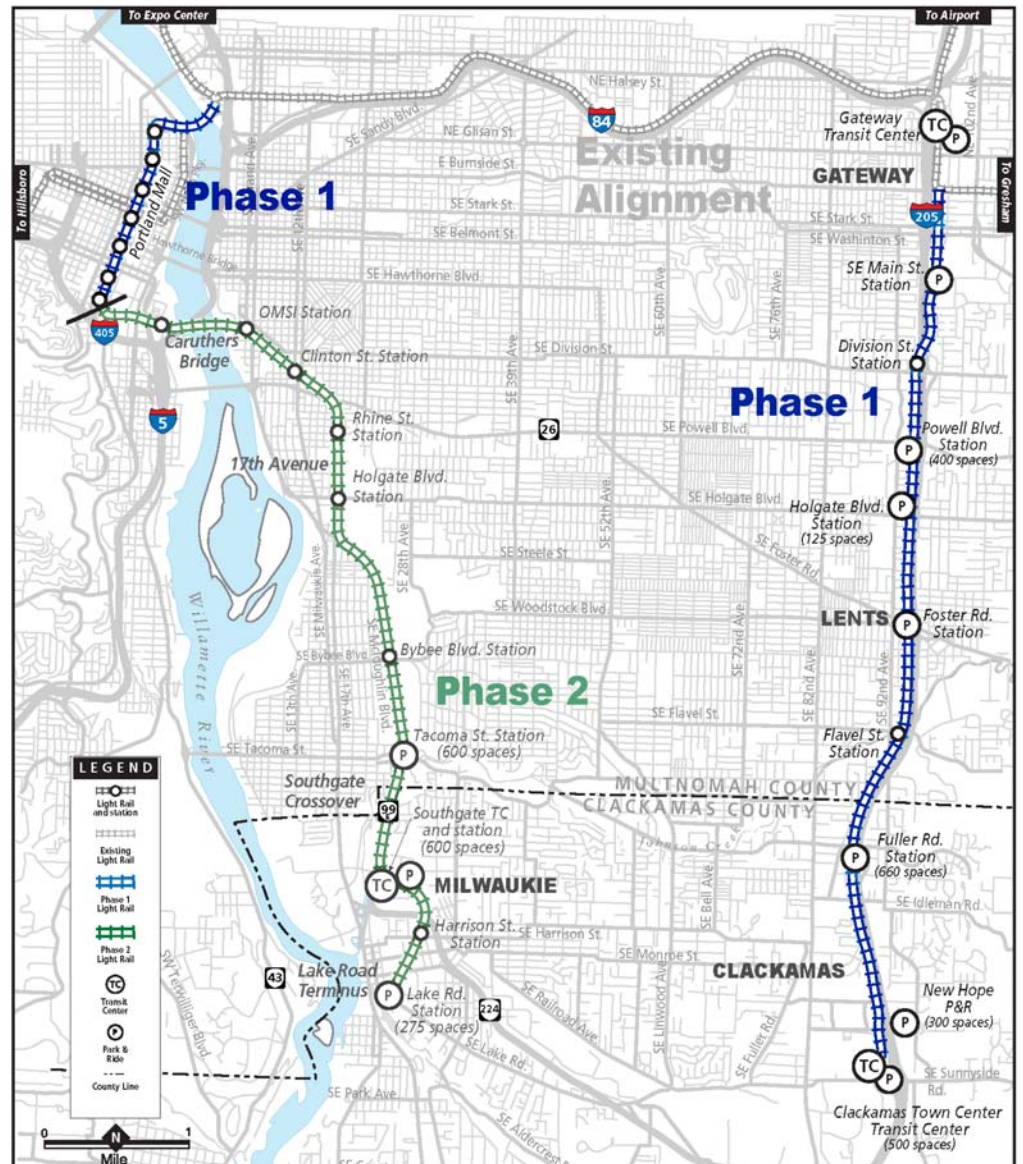


Figure 2: South Corridor Project. Two-phase Light Rail extension project to Clackamas County.

Subways have been studied several times in the last 15 years (*Portland Downtown Light Rail Tunnel Evaluation Study*: Prepared for PDOT by ZGF, May 1992). Each time, the results have pointed to on-street light rail as the most appropriate transit mode to serve downtown. The rationale for on-street light rail over other grade-separated options has included the additional cost (approximately \$1.3 - 1.5 billion) to provide equivalent transit coverage, desire to enhance pedestrian and street-level vitality, and the availability of sufficient above-ground rail capacity on surface streets. Furthermore, the subway and the shuttle options are highly unlikely to be awarded funding from the Federal Transit Authority (FTA) based on their user benefit calculations.

On December 4, 2003 the Portland City Council formally designated a surface alignment on the Mall as the "Locally Preferred Alternative" for expanded light rail service through Downtown Portland.



View looking south down 6th Avenue from the North Mall.

PUBLIC PROCESS

Summary

The Portland Mall Revitalization Project will be a highly visible public works project and the fifth major transportation project in the city's Central Business District in the last 25 years. To ensure consistent information and to facilitate dependable lines of communication with the general public and specific downtown communities, the Project Team has developed an extensive community relations program.

The goal of the program is to ensure that the project serves community needs and mitigates, as much as possible, negative effects of construction on the businesses and neighborhoods along the Downtown route. The purpose of this process is to provide information and an opportunity for the public to comment on the proposed project's scope, design, schedule and impacts.

Community relations activities have been designed to:

- Establish regular communications with Downtown businesses, organizations and communities to solicit good advice and encourage engagement and ownership in the project.
- Build public awareness and support for the project as essential to enriching the region's economy and livability.
- Work directly with residents, businesses, and property owners along the proposed route to inform them about project impacts and timelines.
- Provide downtown property owners a convenient forum to participate in design alternatives specific to their properties.
- Influence project design and planning so that impacts to properties, communities and transportation system users are minimized during construction, to the extent possible.

TriMet, Metro and the City of Portland Public Information departments worked together in developing the project media communications plan and in fielding media inquiries.

Project Oversight

Two oversight committees were established to provide guidance on the project:

Mayor's Steering Committee

In January 2003 Portland Mayor Very Katz established a Steering Committee of business, transit and government leaders to provide policy guidance and to oversee the Project on behalf of the entire community. The Steering Committee also acted as the official hearings body for public testimony on the Draft Conceptual Design Report. (The Portland Planning Commission is going to serve as a hearings body for this final report.)

Community Advisory Committee (CAC)

The Community Advisory Committee is comprised of multiple stakeholders who affect design decisions and serve as a sounding board for the interests of the downtown community. The committee, organized in spring 2003, met regularly with project managers to assist in developing alternatives outlined in the Conceptual Design Report and in reviewing and facilitating the public involvement process.

Draft Conceptual Design Report

The Draft Conceptual Design Report (Draft CDR) issued by TriMet in June 2003 put forth initial options for adding light rail service and revitalizing the Mall. It provided the information needed to allow the public, the Citizen Advisory Committee and the Steering Committee to make informed recommendations on key issues involving urban design, light rail station alignment options, streetscape improvements, transit/traffic operations, construction impacts, mall management and project financing.

The Draft CDR was used as the basis for public review of the proposed downtown light rail alignment and the design choices for essential project elements. It also provides the background and foundation for this Final CDR. The community feedback and analytical work that followed the Draft CDR helped define the vision and recommendations that are outlined in this report.

Amended Supplemental Draft Environmental Impact Statement (ASDEIS)

To satisfy Federal requirements, an Amended Supplemental Draft Environmental Impact Statement (ASDEIS) was issued by Metro and the Federal Transit Administration in October 2003, which discusses the environmental, transportation, social, economic and other impacts of the Portland Mall alignment. The key decision points addressed in the ASDEIS are the transit mode, alignment and terminus options.

Public Outreach

During spring 2003, members of the Community Affairs team created an outreach plan for the Project. They identified a list of key property owners and stakeholders for one-on-one discussions about alignment alternatives and impacts. Staff completed a first round of contacts and presentations to downtown business, resident and user associations from April to September 2003 (see Appendix A).

During late summer and fall 2003, a range of venues were employed to introduce the project and solicit input on the Draft Conceptual Design Report's alternatives from key business and neighborhood associations, property owners and stakeholders:

- Four public open houses were held in July and again in October in the Mall's north, central and south districts to focus on questions specific to each area of the alignment. Meetings were publicized in *The Oregonian*, through mailings to

over 3,500 businesses and residents on 5th & 6th, on TriMet and Metro's websites and on the Rider Alerts on TriMet buses, and notification was sent to all neighborhood and business associations in Portland.

- Newspaper articles in *The Oregonian* and local television news coverage highlighted the project plans and included information on the public input process.
- Presentations were made to over 50 downtown organizations. Project staff met with many of these organizations multiple times. (See Appendix A for complete list.)
- Outreach staff canvassed every retail and business property on the Mall to discuss the project, covering all properties within the area bound by 4th Avenue, Broadway, Union Station and I-405.
- The complete content of the draft Conceptual Design Report and animated "fly-through" visual simulations of the three main design concepts were posted and publicized on TriMet's website at www.trimet.org.

Project staff solicited comments from the public at all community meetings and briefings held to date on the project. During the official public review process a total of 143 comments from 122 people were received and documented in the Portland Mall alignment's ASDEIS (*South Corridor Project Public Comment Report*. Metro, November 2003). The majority of comments received pertained to the Locally Preferred Alternative (LPA) decision focusing on mode, alignment and terminus. Over 70% of the people who commented favored light rail on the Mall from Union Station to Portland State University. Those who did not support the LPA testified in favor of a subway.

Many people expressed an interest in the urban design aspects of the project. In general people want to maintain the tree canopy on 5th and 6th and feel that it adds to the overall character of the street. People enjoy the pedestrian emphasis on the Mall and do not want to see auto access negatively impact the pedestrian environment. People care deeply about the Mall and its image and want to participate in the next phase of the project to determine the design of elements such as the shelters, trees and street design.

Final Recommendations

In November 2003, the official public review period for the ASDEIS concluded. In December, the Community Advisory Committee (CAC) made its recommendations to the Mayor's Steering Committee based on public comment. The Mayor's Steering Committee hosted hearings to take public testimony on the draft design report and the ASDEIS, and made its final recommendation to the Portland City Council. Both



Commonwealth Building - SW 6th Avenue at Washington/Stark

committees reaffirmed the Locally Preferred Alternative (LPA) of light rail as the mode, 5th and 6th Avenues as the alignment and Union Station and PSU as the terminus based on public review. The Portland City Council and the TriMet Board of Directors approved the LPA in December 2003, and the Metro Council adopted the Portland Mall Light Rail Locally Preferred Alternative in January 2004. (Fig. 1).

This Final Conceptual Design Report will receive further public review in late winter. Final approval of the Conceptual Design Report by the City of Portland, TriMet and Metro is expected in spring 2004.

PURPOSE OF THIS REPORT

The Draft Conceptual Design Report (Draft CDR) issued in June 2003 provides the background and foundation for this Final Report (Final CDR). The community feedback and analytical work that followed the Draft CDR helped define the vision and recommendations that are outlined herein.

Since the Draft CDR was published there has been a significant amount of work accomplished on many fronts, including:

- Community outreach
- Land use analysis, including further research and analysis of existing conditions and opportunities
- Urban design analysis
- Case studies of significant streets in other cities
- Transit and transportation operations analysis
- Analysis of development opportunities along the Mall
- Mall management strategy development

This report incorporates the key findings from these analyses and takes a comprehensive approach to establishing a project vision and revitalization strategy. It provides a set of recommendations on the conceptual design elements, as well as an overall development and mall management strategy. The strategies and recommendations put forth in this report will guide the project into the next phase of design referred to as Preliminary Engineering.

Key Decisions Needed

It is essential that the Final CDR be adopted with three key issues resolved so that the project can move forward into the next phase of design. These issues are the focus of this report, and include:

- **Overall Revitalization Strategy**
- **Light Rail Station Locations**
- **Light Rail Station Configuration**

There are a number of issues that are not covered in detail in this report and will be resolved during the next phase of the project, such as:

- Bus operations plan, including specific bus stop locations, signalization and routing
- Auto turning movements and mitigation of impacts
- Street furnishings
- Shelters
- Lighting
- Art
- Utility relocations
- Street trees
- Security efforts

Approved Decisions

This report does not elaborate on transit mode, alignment and terminus options, which are issues that are thoroughly addressed in the Amended Supplemental Draft Environmental Impact Statement and resolved as part of the LPA process.

Additional Related Reports

A series of white papers produced by the Project Team under separate cover provide greater detail on the research and analytical work completed to date. This work informed the recommendations outlined in this report.

- *Great Pedestrian & Transit Streets* (Zimmer Gunsul Frasca: March 2004)
- *Portland Transit Mall: Urban Design Analysis & Vision* (Bureau of Planning: March 2004)
- *Transit Mall Development White Paper* (Portland Development Commission: March 2004)

Other past reports that studied the Transit Mall, and also helped inform the Project include:

- *Portland's Transit Mall* (Association for Portland Progress: July 2000)
- *Downtown Portland Retail Strategy* (Portland Business Alliance & Portland Development Commission: 2002)

MALL REVITALIZATION PLAN & RECOMMENDATIONS

OVERVIEW

The introduction of additional light rail service into the existing downtown circulation system and particularly to the Transit Mall offers the opportunity to re-evaluate existing Mall functions and assess the contribution of the Mall to downtown's vibrancy.

EXISTING CONDITIONS

The Portland Transit Mall has long been considered nationally as a highly successful urban transit street. A large part of that success can be attributed to the quality of design and materials, as well as the functional innovation. Concentrating transit services on a single pair of avenues (5th and 6th Avenue) has:

- Made transit a more attractive option by improving service efficiency and providing clarity to users about how the system operates
- Reflected an ongoing city and regional commitment to use transit to reinforce Downtown Portland's central role in the region
- Successfully maintained high transit accessibility to the highest concentration of employment, cultural, residential and recreational uses, thereby meeting mandated livability goals for both Portland and the region
- Provided traffic relief and improved development opportunities to other non-transit downtown streets.

Today, the Mall is generally active during weekdays with office employees, transit riders and shoppers walking through the streets, buying lunches, running errands and waiting for buses. There are pockets where storefronts are attractive and businesses add vitality to the streetscape.

However, after 25 years of service, time has taken its toll and these signature streets have lost some of their grace and appeal. Despite wide acknowledgment of the Mall's successes, there are areas that continue to impact the civic quality of the Mall. These include the:

- Deterioration and aging of various Mall components (e.g., bricks, granite pavers, shelters). Major maintenance of the Mall has been deferred for the past decade while its future has been debated. As a result, Portland's two most durable and carefully designed streets have been allowed to deteriorate.
- Minimal night and weekend activity, at times creating an uncomfortable and intimidating pedestrian environment.
- Pockets of social problems which are believed to impede the success of the Mall and diminish the pedestrians' sense of safety, especially at night.
- Limited use of the public realm along the Mall due to bus noise and pollution impacts.
- Intermittent patterns of retail development over the length of the Mall, with some vacancies.
- Lackluster public and private commitments toward adequate Mall stewardship and management. This results in numerous unattractive storefronts and a less dynamic pedestrian environment. Some property owners perceive the Mall as a poor front door for their businesses, and several have even closed entrances that front 5th and 6th Avenues.



The fountain, cafe and florist on SW 6th Avenue at Washington/Stark activate the streetscape.



Meier & Frank is a prime opportunity for storefront improvements.

CREATING A GREAT STREET

In the effort to begin shaping the future of the Mall, a study of “great” pedestrian and transit streets was undertaken. Six streets were analyzed: via del Corso in Rome, Fifth Avenue in New York City, Market Street in San Francisco, Nicollet Mall in Minneapolis, and 16th Street Mall in Denver (*Great Pedestrian & Transit Streets*. Zimmer Gunsul Frasca: March 2004). Sometimes great, sometimes good, but always noteworthy, these streets were examined to understand their secrets for success and the deficiencies that undermined their promise. It was determined that during their periods of greatest success, they possess four qualities without equivocation. Conversely, failure was always associated with a diminishment of one or more of those characteristics. The four qualities are as follows:

1. Accommodate all activities present with balance (vehicle modes, pedestrians and adjacent functions all operate without greatly compromising each other).
2. Encourage or require all activities to behave properly (e.g., buses are quiet and unobtrusive).
3. Inspire stewardship to collectively sustain the success of the street.
4. Establish and maintain a physical quality of the street at a standard that complements and inspires all who use it.

Each of these streets demonstrate a level of flexibility that has allowed it to adapt to changing conditions over time. With this flexibility the streets can be adjusted to better accommodate all users when the dynamics of the street change, and thereby to ameliorate any adverse conditions.

The lessons learned from this analysis provide a framework for the revitalization of the Mall.



“Gold Man” entertains in front of Pioneer Place

PROJECT GOALS & OBJECTIVES

To date, the Portland Transit Mall has functioned as a bus-intensive movement corridor. The introduction of light rail to the Mall changes the nature of this civic experience in a fundamental way, and provides an opportunity to reevaluate the desired character and functional quality for the Mall’s future.

The Portland Mall Revitalization Project aims to revitalize the Mall with active, multi-purpose streets that provide excellent transit service (including new light rail service), healthy commercial, cultural and institutional uses, and a safe and active pedestrian environment. It will create a place that instills a sense of pride and ownership in all its users and restores the character of 5th and 6th Avenues as *signature streets*.

The project will successfully integrate the different users – transit, pedestrians, autos and cyclists – and ensure that the Mall continues to serve effectively as the backbone for the region’s transit system and support future downtown growth.

The vision is to design streets that accommodate each user in a manner that creates a healthy and dynamic streetscape. Achieving this vision requires a careful evaluation of trade-offs associated with different design solutions and a strong understanding of the needs of each user. It is important to keep in mind that *functionally* and *symbolically*, 5th and 6th Avenues are to give priority to transit and pedestrians, as designated in the City’s existing planning policy.

KEY PROJECT OBJECTIVES

If designed and managed effectively, the reinvented Mall will build on the successes and ameliorate the adverse conditions that exist today.

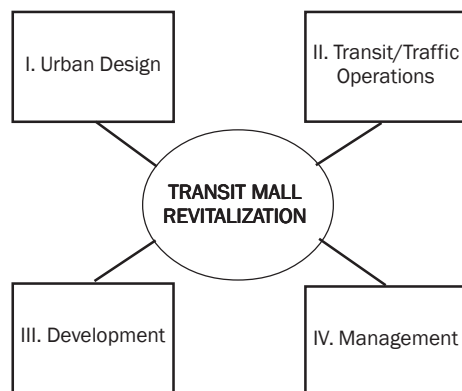
To achieve this end, four key project objectives have been defined as follows:

- Improve transit service to support future downtown growth
- Enliven and renovate the Mall to create great public spaces and a safe pedestrian environment
- Support and promote further investments in downtown business, residential, cultural and institutional uses
- Design and construct the Mall on schedule, within budget and with minimal impacts

PROJECT APPROACH

This project promotes the philosophy that transit is not just about mobility and access; it is also a tool for accomplishing urban design and development objectives. A comprehensive approach to revitalize the Mall is needed to achieve multiple objectives and realize the full potential of these signature streets.

There are four components to the revitalization strategy:



This multi-pronged approach is essential to strengthen the physical, social, and economic conditions of the Mall.

The following outlines the key considerations in developing the revitalization plan and conceptual design recommendations:

- **Pedestrian comfort and safety.** What design solutions will promote pedestrian comfort and safety? How can pedestrian safety be enhanced at night? How can bus noise and air quality impacts be mitigated?
- **Transit safety and operations.** How can the Mall be designed to maximize transit efficiency and safety while ensuring that pedestrians, autos and cyclists are well accommodated?
- **Urban Vitality.** How can the light rail extension best integrate with and enhance the existing urban fabric? What public and private improvements can create more opportunities for spontaneous activity and interaction? Where are the best opportunities for redevelopment along the Mall?
- **Visual interest.** What improvements to the streetscape and building frontages will better attract and engage pedestrians?
- **Stewardship.** How can property and business owners become invested in the Mall and work collectively to ensure the long-term viability of 5th and 6th Avenues?
- **Long-Term Maintenance.** What can be done to consistently ensure the maintenance of both public and private areas of the Mall is addressed efficiently and effectively over the long term? What design decision will help ensure that maintenance costs are kept to a minimum without sacrificing design quality?

I. URBAN DESIGN VISION & CONCEPT

The Portland Transit Mall is one of the central city's fundamental organizing and functional elements. It is also an intrinsic component of the regional transit system. Changes to it must enhance and energize its role so as to respect its past, improve the present and enhance all aspects of future civic quality.

The idea of "urban rooms" along the Mall is key to both understanding the current Mall and providing a basis for perceiving how it should be seen in the future. The experience on the Mall should in part be defined by the architectural character, density and types of activity that vary along the length of it.

The idea of "station as place" within each urban room should not only exemplify each urban room's character, but also be seen as an opportunity to arrive and depart from unique and special places along the Mall. Integrating place with station exemplifies Portland's desire to integrate use and function in ways that enhance its quality of life.

The Mall is visually defined by a distinctive design that sets it apart from other downtown streets. The resulting clarity and continuity contribute greatly to the Mall's functional and aesthetic qualities.



The monolithic nature of the Transit Mall has served the city well as a unifying downtown element. The introduction of light rail on the Mall and the Mall's expansion offer a unique opportunity to make design modifications that respond to the changing dynamic of the streets and lessons learned from 25 years of operation.

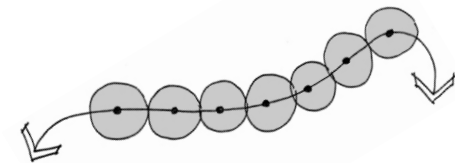
A revitalized Mall will respect the spirit of its original design by preserving the essential elements that stitch it together. However, selective modifications will be considered to enhance the functional quality, ease the maintenance burden and reflect the character variations of the urban rooms along the length of the Mall. A revitalized Mall needs to build upon the existing successes, but also respond better to its adjacent conditions. Addressing these and ongoing issues should also be seen as a unique opportunity to generate economic and social vitality.

To accomplish this, the design of the Mall must:

- Create a context-sensitive development strategy that creates a catalyst for redevelopment of vacant or underutilized properties along the Mall.
- Make users not only aware of their presence on the Mall, but also where on the Mall they might be.
- Reenergize the Mall and create a place that pedestrians, transit patrons, employees and visitors *want* to be.

Urban Rooms

In light of the above issues, the concept of "urban rooms" is used both as a means to better understand existing conditions and also to make any subsequent vision more context sensitive. The Transit Mall may be broadly considered to fall into seven large urban rooms, each with its own predominant characteristics, opportunities and constraints. These rooms are distributed within three larger sections known as the North, Central and South Mall areas (fig. 3).



A trip down the Mall takes you through a series of "urban rooms" that have their own distinct personalities.

These urban rooms, or segments, are defined by their adjacent land uses, architectural character and levels of activity. Identifying these defining features is a first step towards creating a more distinct personality for the various urban rooms and creating interest and variety for the people that use the public spaces. It will also help identify ways to soften the monolithic character of the Mall's design.

The City's Bureau of Planning performed an extensive analysis of existing conditions of each urban room within the larger context of the Central City. Findings provided clarity on:

- Where ground-level activity (the presence of storefront windows, retail entrances, etc.) currently exists and which blocks are in greatest need of activation and vitality.
- Where each light rail station can best reflect the character of its room and be successfully integrated into the area (a concept referred to as “station as place”), rather than be simply a generic station on a block within the Transit Mall.

Station Area Concept & Design Strategy

The concept of “station as place” requires a complete integration of the station design at each location with the place (station location) itself. To be successful, the station must respond effectively to existing conditions as well as future needs/opportunities of the immediate surroundings. There are essentially two conditions and approaches to implement this concept:

- The light rail station location is in a prominent and recognizable destination that is already a “place” or destination with character. In this situation the design of the station needs to be integrated to become part of that context, and, where appropriate, enhance or celebrate the “place.”
- The station location is on a block that does not have a well-defined sense of destination or “place”. In this instance there is a unique opportunity for the station to either help define a destination or reinforce one. This could be accomplished through coordinated development strategies with private development or integrated design within the public realm.

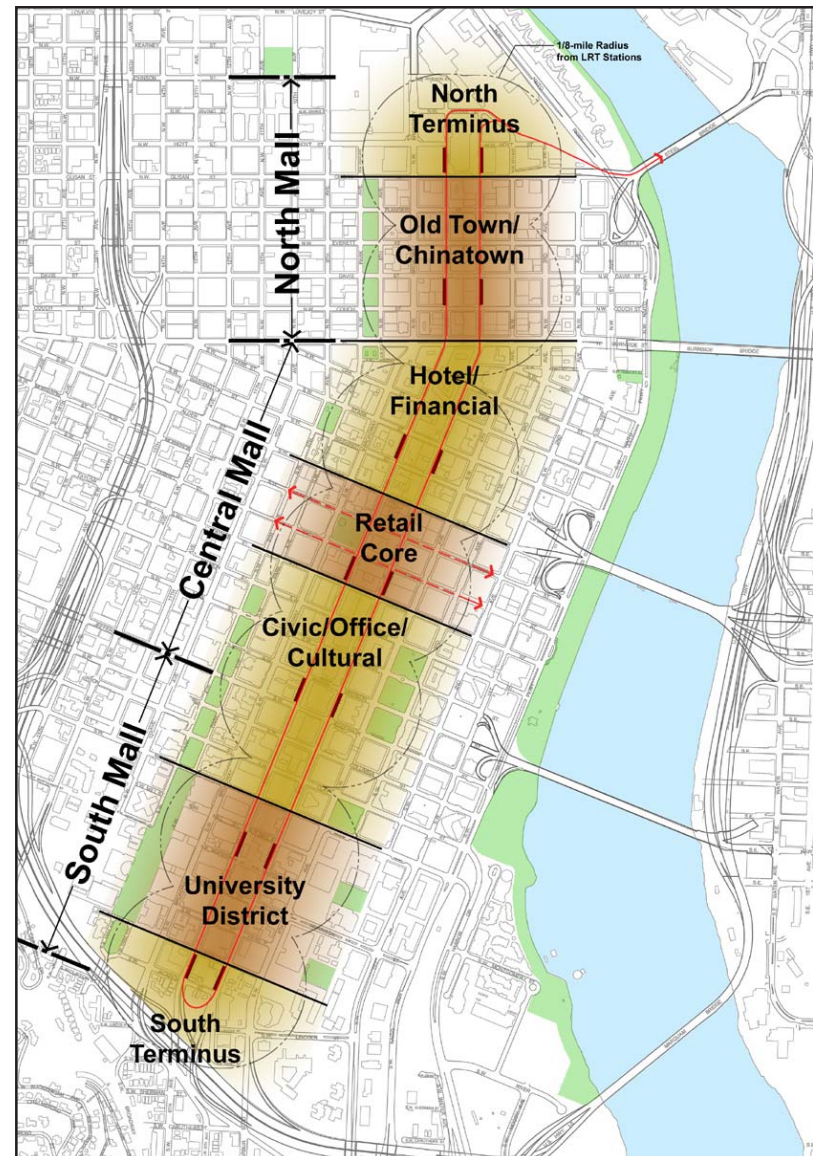


Figure 3: Mall Segments and Urban Rooms Graphic

For example, a station at City Hall could be designed to give transit riders the impression of truly arriving at City Hall rather than at a station that happens to be in front of it (fig. 4). Successful execution of this concept could involve extending the use of surrounding building materials and the blending of pavement and vehicle movement areas. Such an integrated design approach might also include unique landscaping, lighting, and enhancements to the street's edge conditions.

Each urban room on the Mall is defined by its immediate surrounding context and potential. Each station within these rooms should be reflective of the general character of the room and integrated into the existing surroundings.

Realizing the vision of each station being an integrated part of "the place" in which it resides works best when each station is strategically placed in a location that either already is a destination or readily lends itself to becoming a desired place of arrival and departure.

To be properly pursued, this concept suggests moving two station pairs from their "base case" locations in the Central Mall to locations that better support this concept. The stations originally proposed at SW Taylor/Yamhill could be moved one block north to SW Yamhill/Morrison, and the stations at SW Washington/Stark could be moved two blocks north to SW Oak/Pine. This idea is discussed further on pages 41-42.

This concept of "station as place" is presented in greater detail in a separate document, *Portland Transit Mall: Urban Design Analysis & Vision* (City of Portland, Bureau of Planning: March 2004).

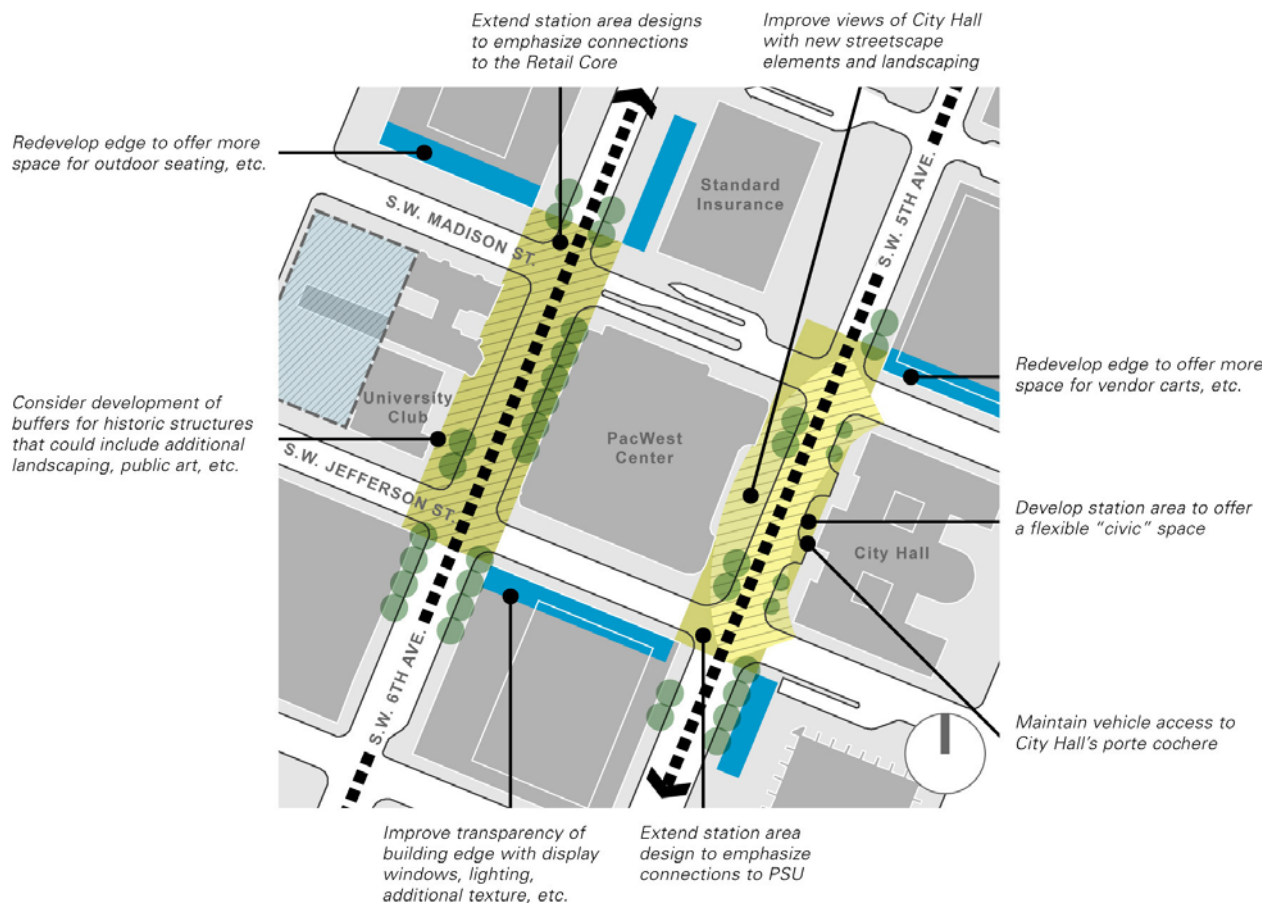


Figure 4: City Hall Station - Illustrative Diagram

II. TRANSIT OPERATIONS & TRANSPORTATION STRATEGY

KEY CONSIDERATIONS

The existing light rail alignment is limited in its ability to accommodate future downtown growth. Therefore, a second LRT alignment is needed, with the Mall as the preferred location. This new demand on the Transit Mall requires a careful rebalancing of the users and activities on the streets to ensure efficient operations and a quality civic environment.

The key objectives behind the transit and transportation strategy are to:

- Add light rail service and enhance the Mall's ability to serve efficiently as the backbone for the region's transit system and support future downtown growth.
- Maximize transit efficiency and safety while ensuring that pedestrians, autos and cyclists are well accommodated.
- Create a safe and comfortable environment for transit users and pedestrians.
- Minimize access impacts on properties along the Mall.



Light Rail at Pioneer Courthouse Square.

RECOMMENDATIONS

Study options to improve downtown bus service. A transit concept plan is being developed that proposes to reroute some buses to other locations off the Mall to create a more balanced system downtown. The new light rail alignment will take on the Mall shuttle service that some buses currently provide and the bus system will be adjusted to focus on broader distribution. Although rerouting buses may take some people out of direction or force a transfer, it will also provide better service to underserved areas of downtown. See pages 46-49 for additional information on the Transit Concept Plan.

Preserve and enhance the high quality pedestrian environment of the Mall. City policy classifies 5th and 6th avenues as Pedestrian-Transit Streets and clearly indicates that transit and pedestrian use are a priority. The recreated Mall will continue to serve its important function as a north-south pedestrian spine through downtown. Therefore, it is essential to allocate an appropriate amount of space for pedestrians and transit users to create a safe and comfortable environment.

Preserve good downtown bicycle access. City policy classifies all downtown streets where autos circulate as Bicycle Access Routes, including 5th and 6th Avenues. Bicycles are currently not allowed on the Mall in the bus-only lanes in the North and Central Mall; they are only permitted where autos travel. The Project Team recommends evaluating opportunities to enhance bicycle access along the length of the Mall.

Reduce bus air-quality and noise impacts. The noise and exhaust from bus acceleration and braking is a detriment to pedestrian activity and outdoor public gathering spaces. It also adversely impacts retail and office activity. Reducing the number of buses on the Mall will help mitigate this issue. Furthermore, in the short term the Project Team recommends exploring new methods of training and bus operations to identify ways for bus operators to reduce vehicle acceleration and braking noise. TriMet has also agreed to pursue the strategy of phasing in hybrid buses which operate more quietly and emit less exhaust than the existing buses.

Design the Mall to maximize flexibility and consider improving auto access along its length. Currently, there are four blocks in the Central Mall (5th and 6th Avenues at Taylor/Yamhill and Washington/Stark) with sidewalk extensions that prevent autos from traveling through the block. Autos are also prevented from crossing Burnside on both 5th and 6th avenues. There are conflicting opinions in the community regarding the benefit or disadvantage of this limited auto access. Some believe that improving access will enhance activity, strengthen retail and provide better clarity for drivers navigating through downtown. Others argue that limiting auto access (and allocating more space to sidewalks) is essential to enhancing the pedestrian environment and reinforcing the transit emphasis of the Mall. There are trade-offs to evaluate with either auto configuration. However, the Project Team recommends pursuing a design solution that provides the flexibility to adapt to either configuration to best serve the Mall today and into the future. As described later in this report, options exist that could provide off-peak and all-hours auto access along the length of the Mall.

III. DEVELOPMENT STRATEGY

KEY CONSIDERATIONS

A significant shortcoming in the downtown development process has been the disconnect between the planning/design of the Portland Mall and development efforts. Rather than taking a comprehensive approach and making a direct link between the two, public policy decisions have often taken separate tracks. This has resulted in a delay between the decision to invest in a major public improvement project and the preparation and implementation of specific, complementary development strategies.

To be successful, the Portland Mall Revitalization Project needs to result in a significant change in development patterns along the Mall. This project aims to create a direct link between the planning and design of the Mall and the implementation of specific, complementary development strategies.

The objectives of the Mall development strategy are to:

- Create shared commitment to the Mall among private owners and public agencies (the “stewards”);
- Incent in-fill development opportunities that leverage new public and private investments in the Mall.
- Enhance the relationship between ground floor uses and public space along the Mall to create a better business environment and enliven the pedestrian experience.
- Provide a safe and accessible retail environment along the Mall to enhance downtown’s competitiveness with regional shopping areas.

RECOMMENDATIONS

Prepare and implement a specific development strategy. The Portland Development Commission (PDC) has created the framework for a development strategy in a document entitled “Transit Mall Development White Paper” (March 2004). As a next step, the Project Team recommends that the PDC prepare a more specific strategy that: (a) identifies both public and private sources to fund these development efforts, including the possibility of forming a Business Improvement District (BID); (b) creates a program of incentives to encourage modifications to ground floor uses and storefronts along the Mall; and (c) establishes a plan for incenting the transit-oriented development of key parcels along the Mall that are currently undeveloped or underdeveloped.

Enhance Existing Ground Floor Spaces. Cosmetic improvements to certain building frontages will add visual interest and help reinvigorate the streetscape. Businesses will attract more customers and help build a positive image for the Mall both day and night.



Food vendors on 5th Avenue at Stark/Oak

Ground floor uses along the Mall need to be modified in a manner that will create a stronger relationship between the building and the streetscape. This will involve changes to both the adjacent public and private spaces.

Storefront improvements could include any of the following:

- **New signage.** Projecting signage is a highly cost-effective measure to add visual interest to the streetscape. Consider including signage as part of the art effort to create a signature feature for the Mall.
- **Lighting.** Enhancing exterior building and display area lighting will help create an active nighttime environment where people feel comfortable to stroll and wait for transit.
- **New awnings.** Some of the canvas awnings on buildings along the Mall have an unappealing and ominous effect. Replacing them with new materials will brighten the streetscape and create a more inviting environment.
- **Enhanced window displays.** A number of storefronts are not used to their fullest potential. Increasing transparency and improving window displays will help promote businesses and strengthen the quality of the street.
- **New entrances.** Several businesses have turned their backs on 5th and 6th Avenues, choosing to use entrances on side streets. Businesses should be encouraged to invite customers from the Mall to help create more points of interaction and break down the scale of inactive facades.
- **Retail activity extending to the sidewalk.** Businesses should take ownership of the streets and be encouraged to extend their retail activity onto the sidewalks to help activate the Mall.



Sixth Avenue (east side) at Alder/Washington. Example of a streetscape that could benefit from cosmetic improvements.



Sixth Avenue (west side) at Alder/Washington. Example of a visually interesting streetscape.

Promote a strategic retail improvement effort.

Storefront improvement efforts should be concentrated in or adjacent to the Retail Core to attract people from the Morrison/Yamhill retail loop onto 5th and 6th Avenues. Currently there are pockets along the Mall where edge conditions are healthy, active and well-designed. Building on the strength of these pockets will help extend the energy and activity up and down the Mall. Quality retail will expand incrementally out from the existing core.

Incent redevelopment and new development. There are a number of undeveloped or underdeveloped properties that could be improved to enhance the vitality of the Mall. Figures 5 and 6 identify key redevelopment opportunity sites for new mixed-use development, renovation, and adaptation to retail. Prime opportunities for renovation include the vacant 58,000 SF building at SW 5th & Washington (formerly Caplans’s Sports) and the vacant 12-story office building at 300 SW Oak.

Public-private partnerships can accelerate the redevelopment of underutilized sites and buildings to create higher density mix-use projects that intensify activity on the Mall.

Development strategies will need to be targeted to the following types of opportunity sites:

- **Undeveloped properties.** Develop existing surface parking lots for higher and better uses such as office buildings, retail or housing.
- **Underdeveloped buildings.** Improve or redevelop properties that are currently vacant or that are not developed to their highest economic potential.

New developments should be designed with the following:

- Significant amount of transparency to display internal activity
- Flexible ground floor designs that can accommodate different users and adapt to future market conditions.
- Opportunity to attract users that provide weekend and evening activity. Creating a critical mass of similar commercial uses is essential to implementing a merchandising mix plan. Co-locating similar retail that creates a synergy of activity is critical to retail’s success (e.g. clustering restaurants, art galleries, teen apparel).

Use the “station as place” concept to catalyze development. Redevelopment efforts should focus on station areas to promote the concept of “station as place.” In particular, there are important development opportunities around the light rail stations at US Bank plaza (if Option B is chosen), Old Town and Union Station (see Figs 5 and 6). The redevelopment of these sites is essential to achieve the level of activity and character desired for these areas. There are also plans for numerous development projects around the PSU stations. Stations must be designed with consideration of these opportunity sites to help catalyze development efforts.

Develop a merchandising mix plan. PDC is to develop a merchandising mix plan that captures the character of each urban room. The Plan should identify underutilized street level space along the length of the Mall and develop strategies to target appropriate businesses for reactivation.

IV. MALL MANAGEMENT STRATEGY

THE CASE FOR MALL MANAGEMENT

One of the key lessons learned from the case studies of model transit and pedestrian streets is that management is fundamental to the long-term success and viability of a great street (see *Great Pedestrian & Transit Streets*, November 2003). Portland itself has a mix of successful and failed urban spaces. In most cases success can be traced to management. The model we hold most dearly is Portland's "living room," Pioneer Courthouse Square.

Refurbishing the Mall and adding light rail service, in and of itself, is unlikely to be enough to improve business conditions on the Mall. Undertaking a coordinated approach to efficiently manage the Mall is an essential component of this revitalization strategy. Chief among the benefits of this approach would be the dedicated and visible stewardship to sustain the vitality of the space. The Mall would be newly viewed as a space that has "eyes and ears" and has vested interests actively involved to guarantee its successful future.

Objectives:

The following are the key objectives for the establishment of a formalized process of Mall Management:

- Create shared commitment to the Mall among private owners and public agencies
- Consolidate and leverage existing and future public and private maintenance commitments
- Coordinate maintenance, crime prevention and public space programming
- Improve responsiveness to on-going and capital maintenance issues
- Provide for common management and programming of Mall activities (e.g., vending, seasonal decorations, and street media)



RECOMMENDATIONS

Establish a Mall Management entity. The Project Team recommends that the City, TriMet and the business community create a single umbrella organization to oversee management and operation of the Mall. The organization could consist of a new nonprofit corporation with a board of directors made up of representatives of property owners, tenants, users and agencies that operate on the mall. Pioneer Courthouse Square, Inc. is a local example of a nonprofit that could serve as a model for the Mall. The management entity would be responsible for the following:

- Maintenance. The new entity would serve as a central management entity for all mall maintenance. This could be accomplished through contracts with the City, TriMet and the Downtown Clean & Safe program to perform current maintenance duties. In addition, certain maintenance tasks could be contracted to private firms. The key change from the current situation is that a Mall Maintenance Plan would be reviewed and approved by the Board of Directors each year. This will put those with a clear stake in the Mall in charge of determining maintenance priorities and should result in a more responsive maintenance program.
- Operations. The management entity would be responsible for programming activity on the Mall and enhancing security on the Mall (see below).
- Development. The entity would assist PDC with the implementation of a storefront improvement program and the *Portland Mall Development Plan*, as needed.



Art Quake Festival takes over downtown and the Transit Mall (1977-1996).

Establish and implement an activation strategy. The activation strategy should be designed to respond to the diverse characteristics of each urban room. For instance, a concept that is appropriate for the University District may not be well suited for the Retail Core. A strong understanding of the users, owners and physical characteristics throughout the Mall is essential to a successful activation effort.

Some general concepts for activation are as follows:

- Program activity on the Mall. Consider installing permanent or temporary art displays, hosting public events and celebrations, and installing semi-permanent facilities for food vendors in appropriate locations.
- Add street media. Thousands of people will be arriving at stations and bus stops along the Mall each day - we need to capture their attention and market downtown events. Banners and other advertising efforts need to be of high quality, tasteful, fun and artistic. There is also the opportunity to incorporate electronic way-finding devices that will provide instantaneous information on shops, restaurants and other businesses along the Mall either in a stand-alone electronic kiosk or via wi-fi or Bluetooth signals to phones or PDAs.
- Incorporate the latest in wireless technologies with a continuous “hot spot” along the Mall’s entire length to facilitate communication through smartphones and emerging communication devices.
- Implement consistent and comprehensive caretaking of the street for cleanliness, maintenance and security enforcement to maximize the attractiveness of the street and minimize illicit activities.
- Implement a tree lighting program to enhance the street at night.
- Manage tree trimming efforts.
- Develop plan for increased security, especially in the evenings.

COMPREHENSIVE VISION FOR THE MALL

When the four components of the revitalization strategy – urban design, transit/traffic operations, development and Mall management – are layered on top of one another, the complete vision of the Mall’s future begins to take shape. Physical improvements to the public and private realms along the length of the Mall, combined with a long-term management effort that ensures ongoing activation and maintenance of the streetscape, will ensure the viability of these *signature streets*.


Figures 5 and 6 illustrate the revitalization strategy with different station locations. Figure 5 keeps the stations as proposed in the Draft CDR - the two Central Mall station pairs are located at SW Taylor/Yamhill and SW Washington/Stark. Figure 6 moves those station pairs to SW Yamhill/Morrison and SW Oak/Pine.

Both maps illustrate the development opportunities along the length of the Mall (same in both graphics), including projects that are under construction or already planned (purple), development projects that are in planning stages by either the public or private sectors (blue), prime opportunity sites that are not currently planned (light blue), and storefronts that could be improved to help activate the streetscape.

The maps also put the Mall in context with other public improvement projects in the downtown, including the Burnside/Couch couplet, Ankeny “Street of Fountains” development, and the Old Town/Chinatown Streetscape project.

Figure 5: Transit Mall Revitalization Map - Option A. Central Mall stations at SW Taylor/Yamhill and SW Washington/Stark.

LEGEND

	LRT ALIGNMENT		MALL CORRIDORS		KEY REDEVELOPMENT PROJECTS CURRENTLY UNDERWAY/PLANNED
	STREETCAR ALIGNMENT		MALL LRT STATIONS		KEY REDEVELOPMENT PROJECTS IN PLANNING
	PEDESTRIAN CORRIDORS				KEY OPPORTUNITY SITES- NOT CURRENTLY PLANNED
	OPEN SPACE				STOREFRONT IMPROVEMENTS

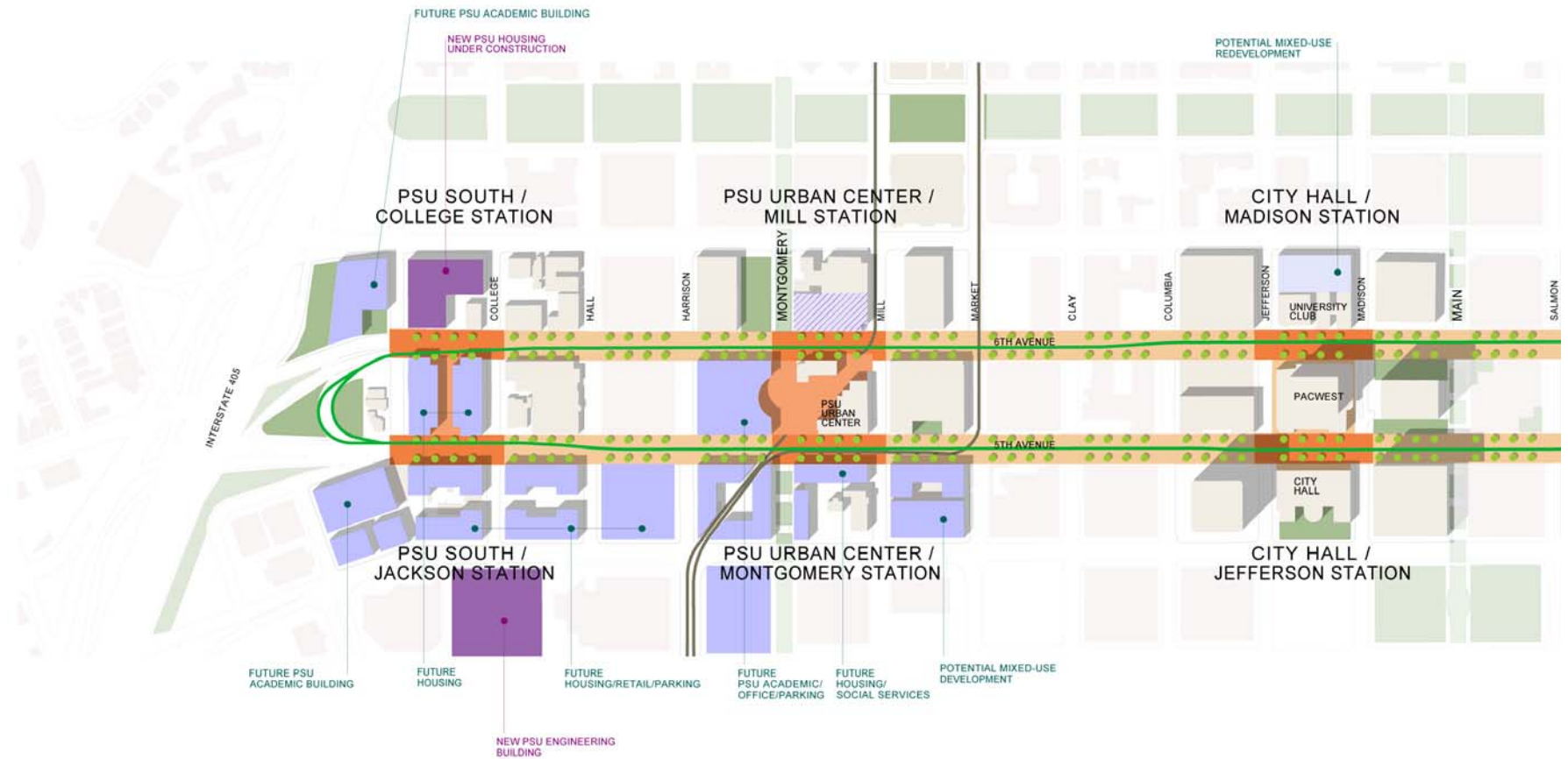
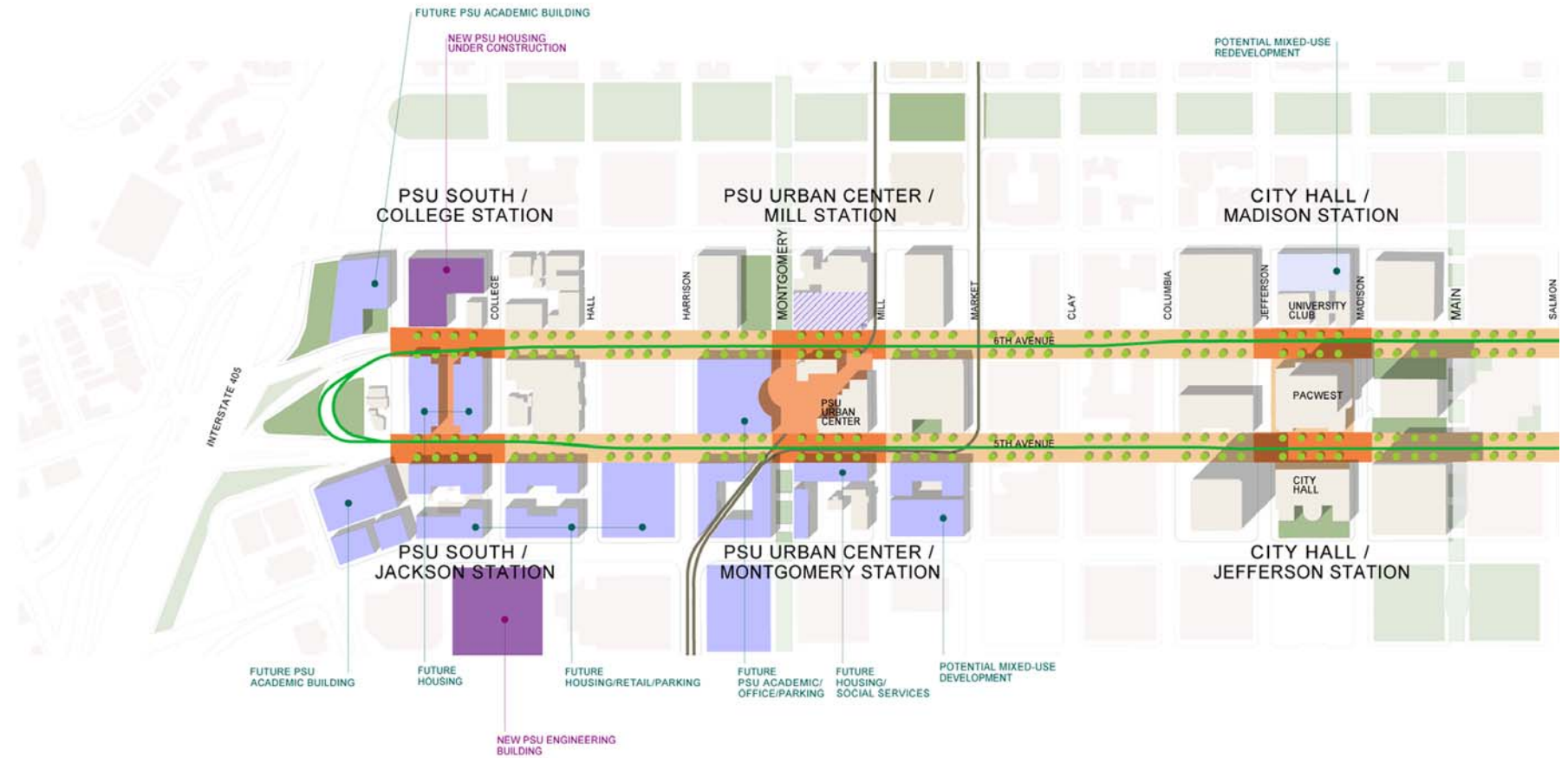


Figure 6: Transit Mall Revitalization Map - Option B. Central Mall stations at SW Yamhill/Morrison and SW Oak/Pine. Revitalization opportunities are the same as Map I.

LEGEND

	LRT ALIGNMENT		MALL CORRIDORS		KEY REDEVELOPMENT PROJECTS CURRENTLY UNDERWAY/PLANNED
	STREETCAR ALIGNMENT		MALL LRT STATIONS		KEY REDEVELOPMENT PROJECTS IN PLANNING
	PEDESTRIAN CORRIDORS				KEY OPPORTUNITY SITES - NOT CURRENTLY PLANNED
	OPEN SPACE				STOREFRONT IMPROVEMENTS



REVITALIZED MALL DESIGN

PHYSICAL DESIGN OF EXISTING MALL

Today, 5th and 6th Avenues are configured differently in the North, Central and South Mall segments.

The **North Mall** has a 60-foot right of way with 16- to 20-foot wide sidewalks and two vehicle travel lanes. Autos and buses operate in a shared left lane and buses have exclusive use of the right lane. Vehicles are only permitted to take left turns off of the Mall. (Fig. 7)

The **Central Mall** has an 80-foot right of way and typically has 18-foot and 26-foot wide sidewalks with three vehicle lanes. Buses have exclusive use of two lanes and autos have a dedicated left lane. Between SW Washington/Stark and Taylor/Yamhill the left-side (18-foot) sidewalks extend to 30-foot and autos are diverted off of the Mall for one block. (Figs. 8 & 9)

The **South Mall** (currently not actually part of the Mall) has an 80-foot right of way. It typically has three vehicle travel lanes, parking on both sides of the street and 15-foot sidewalks. Vehicles are typically permitted to make left and right turns off of 5th and 6th Avenues. (Fig. 10)

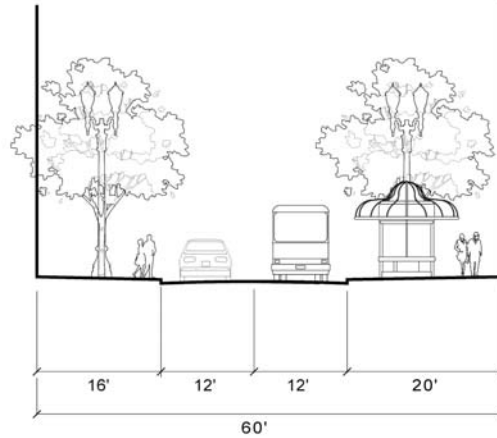


Figure 7: Existing street section in the North Mall. View of 5th Avenue looking south.

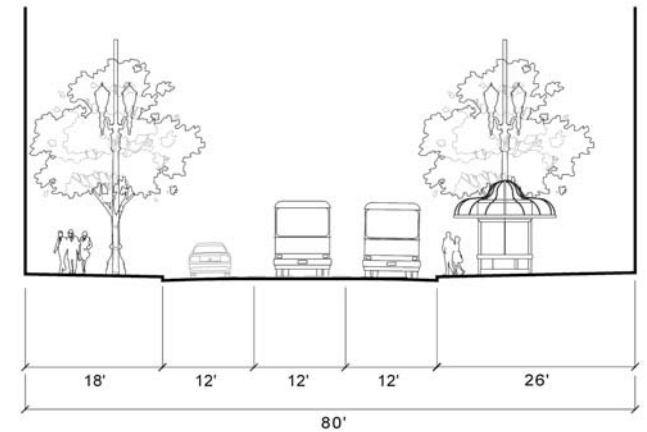


Figure 8: Existing street section of typical block in the Central Mall. View of 5th Avenue looking south.

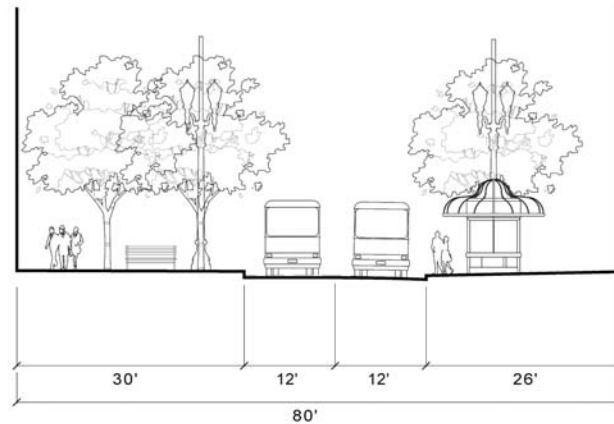


Figure 9: Existing street section of extended sidewalk in the Central Mall. View of 5th Avenue looking south.

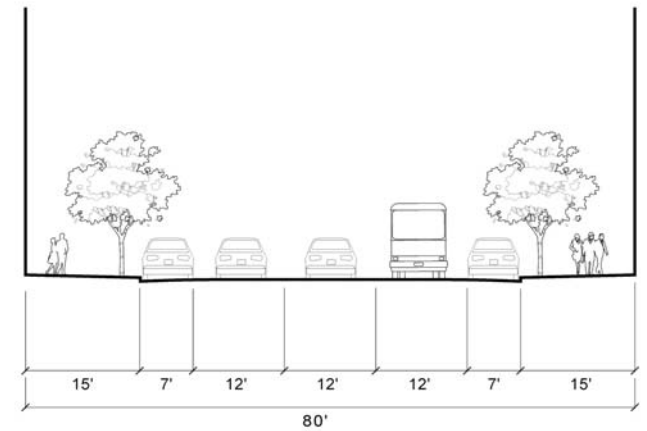


Figure 10: Existing street section in the South Mall. View of 5th Avenue looking south.

NEW NORTH MALL CONFIGURATION

As bus and light rail planning has progressed, a new alternative for the configuration of the North Mall recently emerged. As a result, this report puts forth two alignment options for consideration.

STATION PLATFORM OPTIONS

Option A - Left Side Alignment:

The design that was presented in the Draft CDR is illustrated in Figures 11, 13 and 15. Since the North Mall has a 60-foot right-of-way and bus boardings can only occur on the right side of the street, this initially appeared to be the only viable alignment option. The light rail alignment and the station platforms are on the left side of the street. Buses, autos and bikes share the right lane, and buses can use the light rail lane for passing. Autos are permitted to take right turns off of the Mall, which is currently prohibited, but can no longer take left turns (although an analysis is underway to determine whether left turns might be possible at Davis or Flanders). Sidewalks remain the same as exist today at 16 to 20 feet in width in non-station blocks and increase slightly at station platforms.

Light rail stations are located at NW Glisan/Hoyt (Union Station) and NW Couch/Davis.

Option B - Right Side Alignment

Option B is illustrated in Figures 12, 14 and 16. In this option the light rail stations remain at the same locations as Option A, but the trackway and stations are on the right side of the street. Buses travel on the trackway, but may need a separate lane on the block between Davis and Everett for stops.

The block between Davis and Everett would be the only block on 5th and 6th Avenues in the North Mall with bus stops. Other stops would be located between 5th and 6th Avenues on NW Everett.

Autos travel in the left lane, and turning movements remain consistent with existing patterns. No right turns would be allowed across the transit track way. Preliminary traffic studies indicate that autos would be able to cross Burnside on both 5th and 6th Avenues and continue traveling down the Mall.

Sidewalks are maintained at existing widths at non-station blocks (16'/20'), with the possible exception of the bus stop block between Davis and Everett. A preliminary proposal reduces the sidewalk on both sides of this block to approximately 13' to provide the 11' bus, 12' LRT, and 11' auto lanes. Further design analysis is needed to identify other solutions and preserve the pedestrian quality of the streetscape.

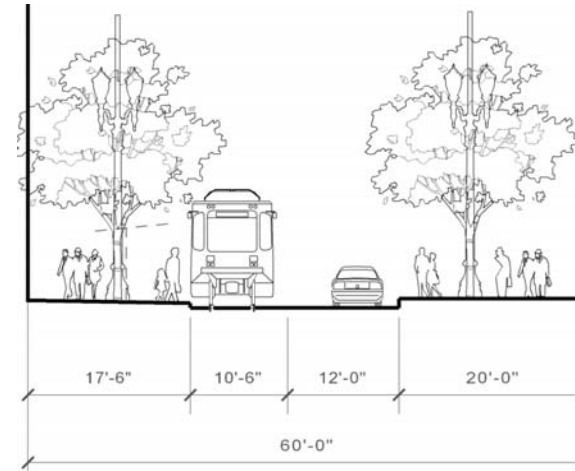


Figure 11: Option A - Left Side Platforms. Section of North Mall Station Block. View of 5th Avenue looking south.

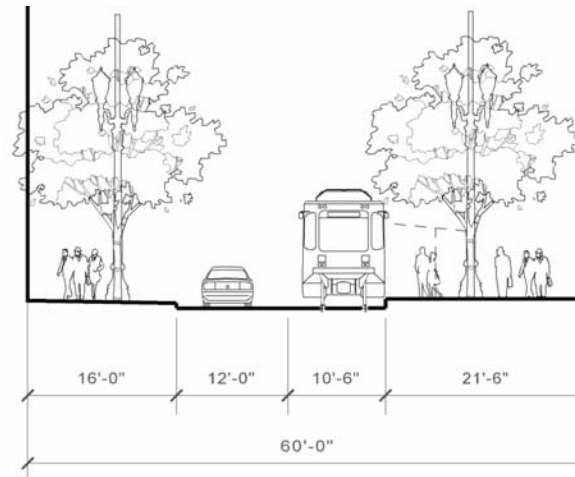


Figure 12: Option B - Right Side Platforms. Section of North Mall Station Block. View of 5th Avenue looking south.

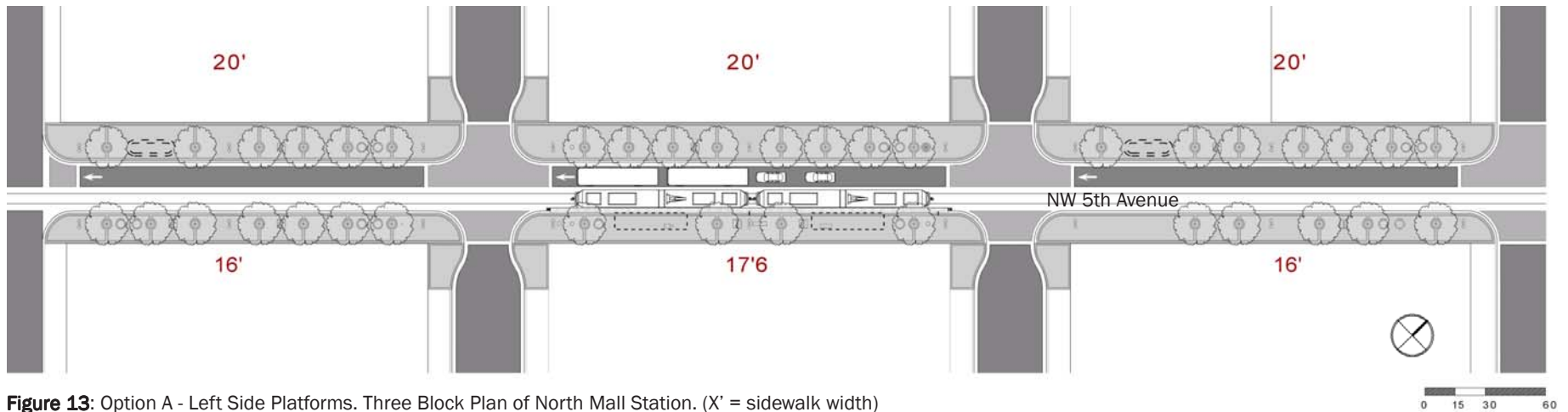


Figure 13: Option A - Left Side Platforms. Three Block Plan of North Mall Station. (X' = sidewalk width)

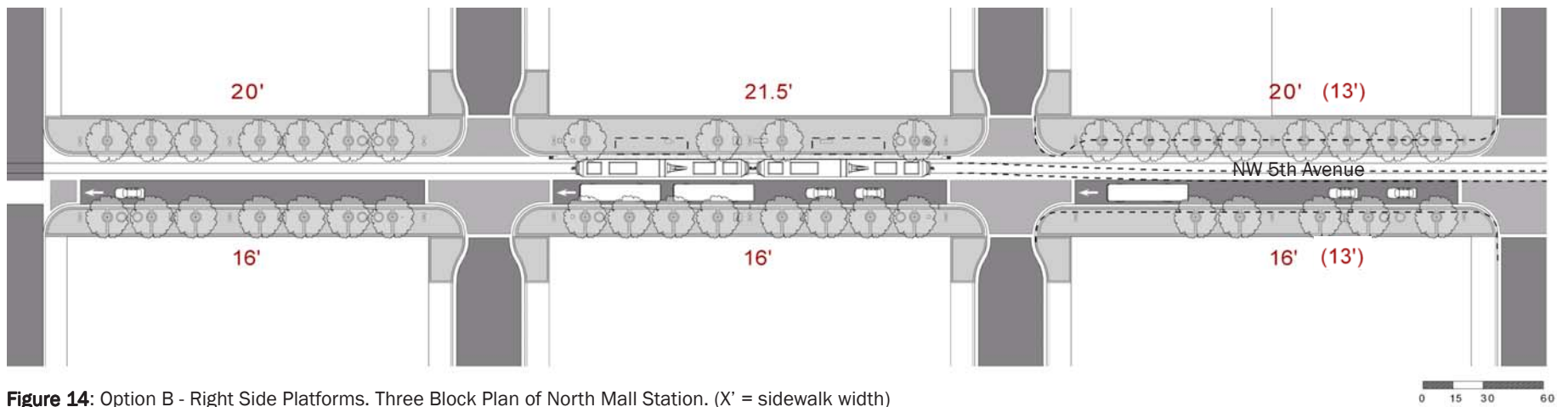


Figure 14: Option B - Right Side Platforms. Three Block Plan of North Mall Station. (X' = sidewalk width)

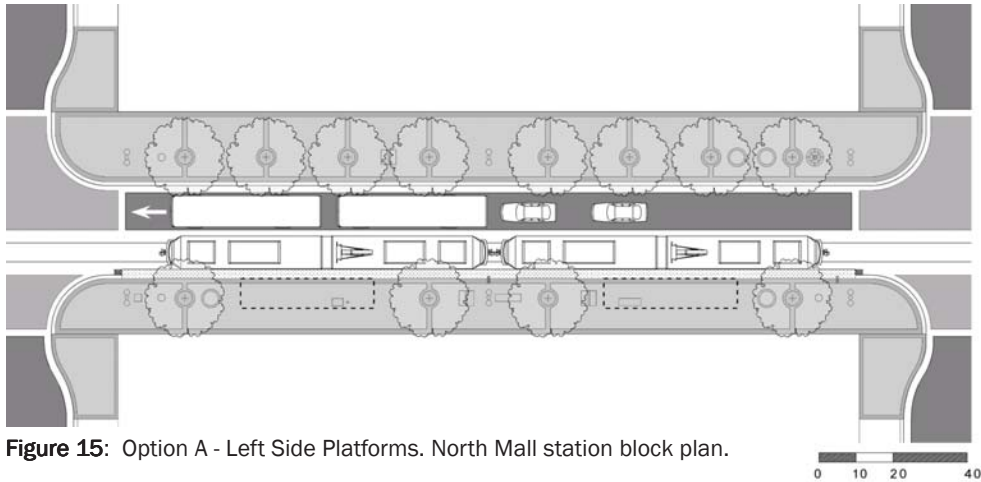


Figure 15: Option A - Left Side Platforms. North Mall station block plan.

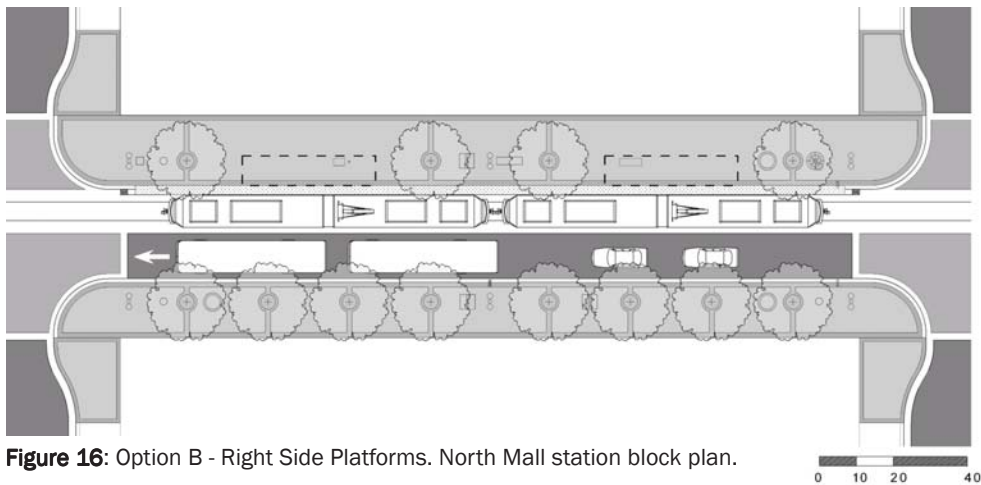


Figure 16: Option B - Right Side Platforms. North Mall station block plan.

Design Evolution

A new bus service plan that works with either Option A or B is taking shape (see pages 46-49). As a part of this strategy more efficient transit service is proposed for the North Mall. Weekday bus ridership on the North Mall is just one-fifth that of the Central Mall, and only an eighth as much during rush hour. With the new light rail taking on the shuttle service currently provided by buses, and with the proposed enhancements to cross-Mall service, bus demand will be further reduced in the North Mall. Moreover, many buses currently run through the North Mall – without making any stops– to reach the North Terminal layover facility. Significant efficiencies can be gained by having some of these buses turn around at Burnside instead of traveling through the North Mall.

This proposed reduction in bus travel provides the opportunity to reconsider the light rail alignment in the North Mall. With bus stops located only on one block on both 5th and 6th Avenues (between NW Davis and Everett), light rail can be accommodated on the right side.

North Mall	Existing Conditions	Left Side Platform	Right Side Platform
Sidewalk Widths:			
Non-Station Blocks (left/right side sidewalks)	16 ft/20 ft	16 ft/20 ft	16 ft/20 ft
Station Blocks (left/right side sidewalks)	N/A	17.5 ft/20 ft	16 ft/21.5 ft
Bus Stop Blocks (NW Davis/Everett)		16 ft/20 ft	13 ft/13 ft ¹
Light Rail Travel Headways (minutes)	N/A	5	5
Light Rail Travel Time Between Union Station and PSU (minutes)	N/A	10.2	10.3
Bus Travel Time			
5 th Ave – Glisan to Madison (minutes)	9.9	8.2	8.9
6 th Ave – Madison to Glisan (minutes)	8.6	8.1	8.2
Auto Capacity (per hour) ²	300	300	450 ³

¹ Further analysis is needed to identify other design/operations solutions that preserve the pedestrian quality of the streetscape.

² Automobile capacities provided are for an average condition over the entire Mall and could be higher or lower in different parts of the transit Mall depending upon localized factors such as pedestrian volumes and turn volumes. Note that peak hour auto volumes on SW Morrison and Yamhill average approximately 270 autos/hour.

³ Assumes Right Side Platforms in the North and Central Mall and through auto access is permitted between PSU and Union Station. Traffic analyses indicate that auto capacity is not impacted by access across Burnside.

Figure 17: North Mall Station Platform Options - Comparison Chart

Platform Comparison

Figure X provides a comparison of the Existing Conditions, Left Side and Right Side platform options in the North Mall. Sidewalk widths are similar in both the Left and Right Side options, with the possible exception of the bus stop block (NW Davis/Everett) with the Right Side option. A preliminary proposal reduces the sidewalk on both sides of this block to approximately 13' to provide the 11' bus, 12' LRT, and 11' auto lanes; this is below the 15-foot standard for downtown. Further design analysis is needed to identify other solutions and preserve the pedestrian quality of the streetscape.

Both options perform comparably on light rail and bus travel efficiency, and both offer some time savings on bus travel over what is provided today. This efficiency is largely produced by increasing bus stop spacing with the Mall renovation.

In addition to the regional MAX lines that will run on the Mall, a shuttle system will be added so that light rail will travel with 5 minute headways; a train will always be visibly approaching when people look down the street.

Auto capacity (averaged for the full length of the Mall) is higher with the Right Side option at 450 autos per hour versus the 300 per hour under existing conditions and with the Left Side option.

A final distinction is that the Right Side Platforms puts all transit loading on one side of the street, thereby facilitating transfers and enhancing system clarity.

NEW CENTRAL MALL CONFIGURATION

The new configuration of the Central Mall will be determined by which station platform design and location is selected. The high levels of bus volumes and transit ridership in this section of the Mall add operational constraints that are not an issue in the North and South Malls where transit volumes are significantly lower.

STATION PLATFORM OPTIONS

The Draft Conceptual Design Report put forth three station platform options for the Central Mall (fig. 18):

Left Side Platform. Light rail operates in the center lane and utilizes the existing sidewalk extensions as station platforms. Buses travel on the right side and use the light rail lane for passing. Autos operate in the left lane and are prevented from travelling through station blocks (although through auto access during off-peak hours may be an option). This is the lowest cost option that has the least construction impacts and introduces the least change to the existing configuration of the Mall.

Island Platform. Buses travel in the right lane, light rail in the center lane and autos in the left lane. At station blocks an island platform is located between the light rail and auto lanes. Autos are able to pass through station blocks. This option adds approximately \$10 million in construction costs over the Left Side Platform option.

Right Side Platform. Buses and light rail operate in the two right lanes and autos utilize the left lane. Light rail travels in the center lane until approaching station blocks when it transitions over to a right side platform. Buses travel in the center lane through non-station

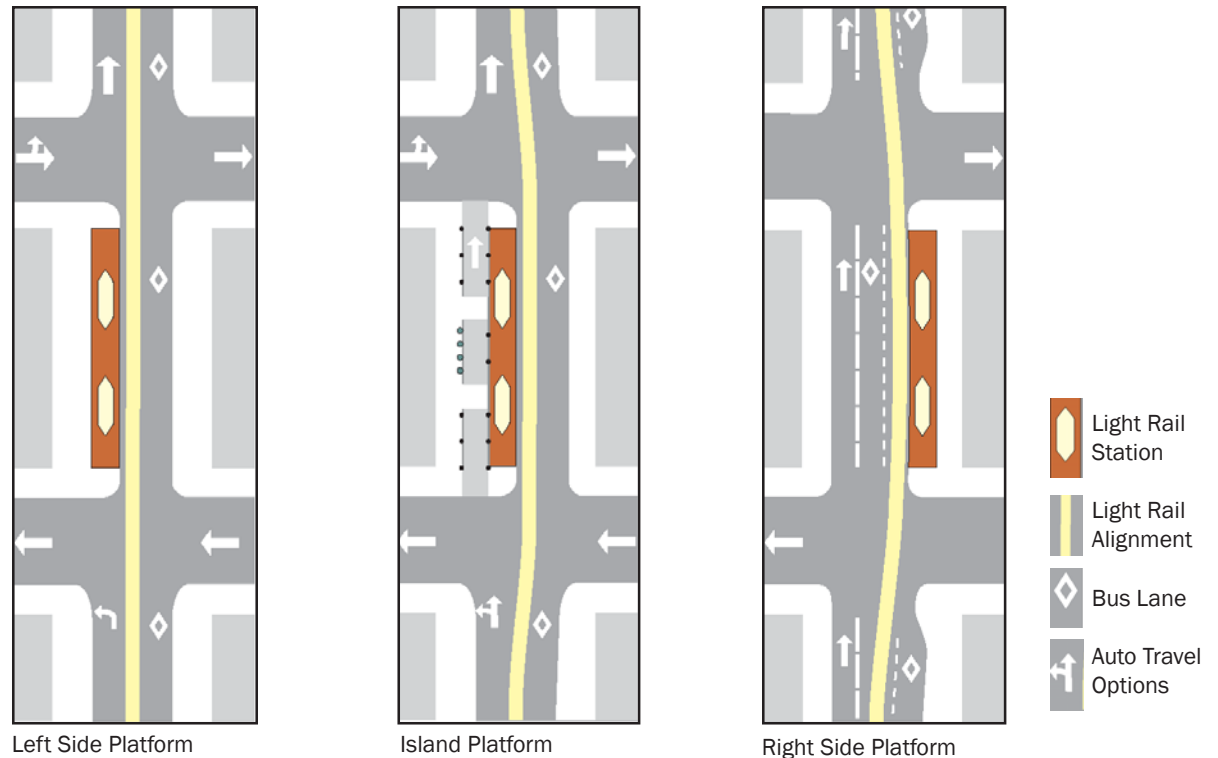


Figure 18: Central Mall Platform Options.

blocks and pull into the right lane at their designated bus stops, much like they do today.

The auto lane continues through the station blocks. This option adds approximately \$4-5 million in construction costs over the Left Side Platform option.

Since the report was issued, extensive analyses have been performed from both operations and urban design perspectives, and spirited public discussions have taken place to evaluate these station options.

Key considerations used in evaluating the options include:

- Pedestrian and passenger comfort and safety
- Bus and light rail operations
- Transit capacity
- Auto accessibility
- Urban design quality
- Cost
- Design Flexibility

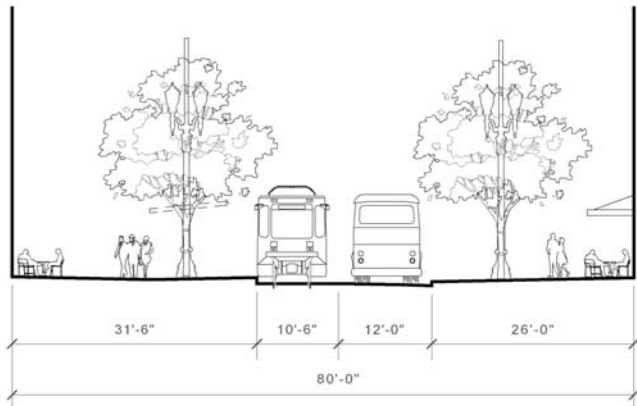


Figure 19: Left Side Platform - Section

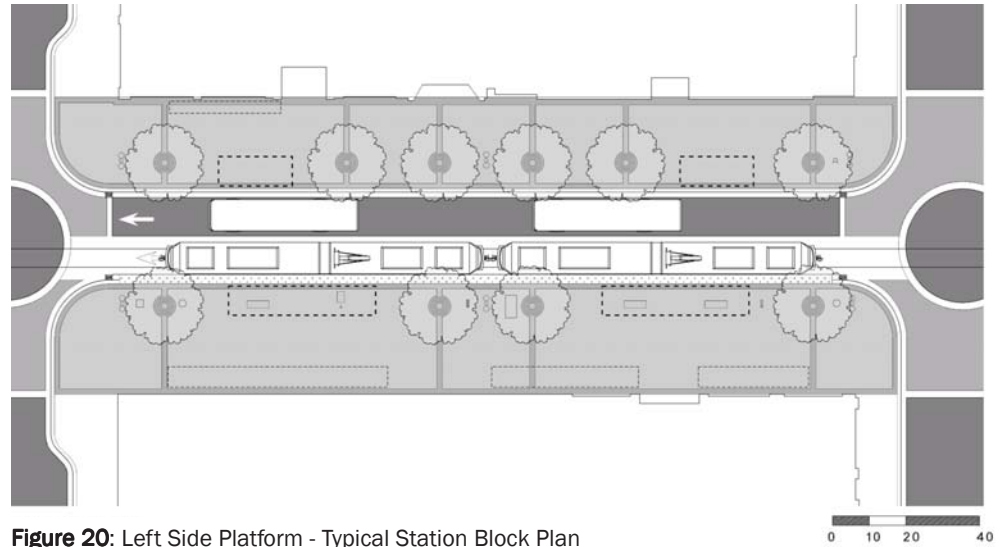


Figure 20: Left Side Platform - Typical Station Block Plan in the Central Mall

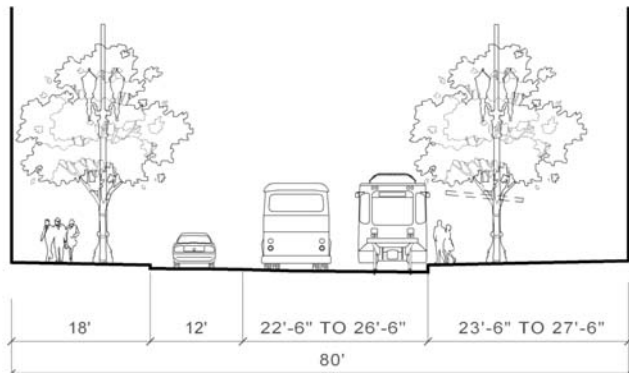


Figure 21: Right Side Platform - Section

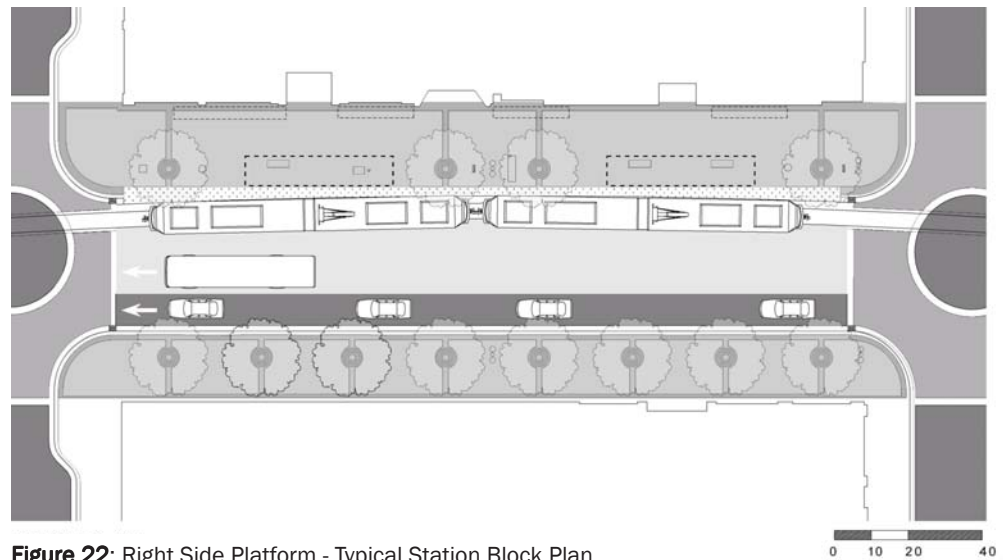


Figure 22: Right Side Platform - Typical Station Block Plan in the Central Mall

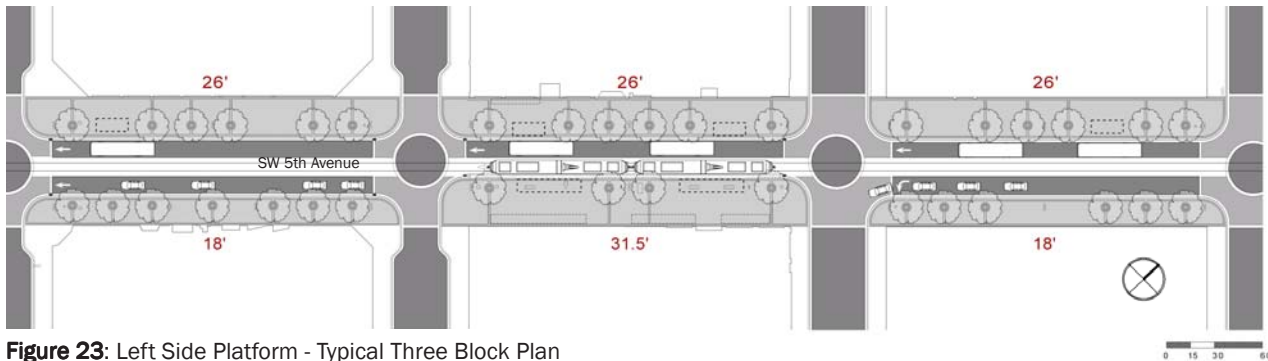


Figure 23: Left Side Platform - Typical Three Block Plan
(X' = sidewalk width)

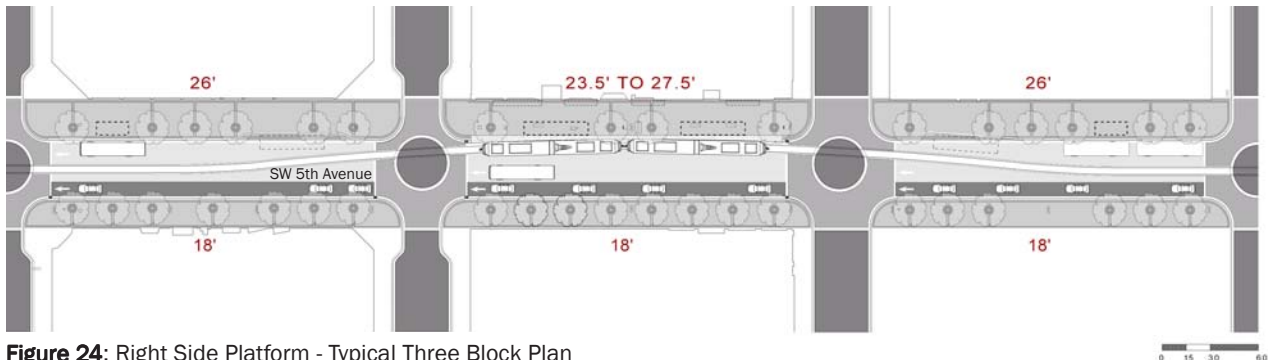


Figure 24: Right Side Platform - Typical Three Block Plan
(X' = sidewalk width)

Through this process numerous variations on these platform options evolved. At one point the Right Side Platform option appeared to have insurmountable operational issues, until further design and operations analyses revealed a solution.

Based on the results of the analyses, which were reinforced by much of the public response, and the advantages of the Right Side Platform option, the Project Team recommends that the Island Platform not be carried forward for consideration. Although the Island Platform functions well from a transit and auto operations standpoint, the Project Team views it unfavorably on a number of important issues.

- Significantly impacts sidewalk width; at station blocks sidewalks are reduced to 15'-0" on both sides of the street. This offers less "discretionary space" for public art, retail uses or programmed space and reduces the pedestrian emphasis of the existing Mall.
- Creates a less safe and comfortable environment for transit riders. Illegal/unsafe street crossings are likely and transit riders are isolated on a platform in the middle of a busy street. This concern is magnified at the the Yamhill stations where bus, auto and pedestrian activity is very high.
- Significantly alters the "seamless" design character of the Mall by disconnecting the east and west sides of the street. Chains and bollards required to prevent mid-block crossings would emphasize this division.
- Has significant capital cost impacts; this is the most expensive of the options considered.

Note that since the Draft CDR was issued several design variations were introduced to the Island Platform that mitigated some of these issues. However, the Project Team continued to view it less favorably than the Left and Right Side options.

Therefore, the two platform configurations currently being considered are:

- ⌘ **Left Side Platform**
- ⌘ **Right Side Platform**

Platform Comparison

Figure 25 provides a comparison between Existing Conditions and the Left Side and Right Side Platform options. Sidewalk widths with the Left Side Platform remain the same as exist today. Sidewalk widths would be reduced with the Right Side option, but at 23-26 feet remain generously wider than the 15-foot standard for downtown.

Both options perform comparably on light rail and bus travel efficiency, and both offer some time savings on bus travel over what is provided today. This efficiency is largely produced by increasing bus stop spacing from 2 blocks today to 4 or 5 blocks with the Mall renovation.

In addition to the regional MAX lines that will run on the Mall, a shuttle system will be added so that light rail will travel with 5 minute headways; a train will always be visibly approaching when people look down the street.

A notable difference between the two options is in the bus capacity. *Actual* PM peak hour bus volumes today are approximately 110 (6th Avenue) and 145 (5th Avenue) buses per hour, and bus volumes on the Mall will be reduced if the proposed transit concept moves forward and some buses are rerouted to other areas of downtown. Reducing bus volumes would have the benefit of improving the pedestrian environment along the Mall which is currently compromised by the obtrusive noise and fumes produced by the high volumes. Regardless, the existing level of bus service in downtown will be preserved.

Auto capacity (averaged for the full length of the Mall) is higher with the Right Side option at 450 autos per hour versus the 300 per hour under existing conditions and with the Left Side option.

A final distinction is that the Right Side Platforms puts all transit loading on one side of the street, thereby facilitating transfers and enhancing system clarity.

Central Mall	Existing Conditions	Left Side Platform	Right Side Platform
Sidewalk Widths:			
Non-Station Blocks (left/right side sidewalks)	18 ft/26 ft	18 ft/26 ft	18 ft/26 ft
Station Blocks or Existing Extended Sidewalk Blocks (left/right side sidewalks)	30 ft/26 ft	30 ft/26 ft	18 ft/23-26 ft
Light Rail Travel Headways (minutes)	N/A	5	5
Light Rail Travel Time Between Union Station and PSU (minutes)	N/A	10.2	10.3
Number of Bus Stops Between Stations	N/A	5	6
Bus Capacity at Peak Hour ¹	175	126 - 144	106-127
Bus Travel Time			
5 th Ave – Glisan to Madison (minutes)	9.9	8.2	8.9
6 th Ave – Madison to Glisan (minutes)	8.6	8.1	8.2
Auto Capacity (per hour) ²	300	300	450 ³

¹ Actual peak-hour bus volumes today are approximately 110 (6th Avenue) and 145 (5th Avenue) buses/hour in the Central Mall.

² Automobile capacities provided are for an average condition over the entire Mall and could be higher or lower in different parts of the transit Mall depending upon localized factors such as pedestrian volumes and turn volumes. Note that peak hour auto volumes on SW Morrison and Yamhill average approximately 270 autos/hour.

³ Assumes Right Side Platforms in the North and Central Mall and through auto access is permitted between PSU and Union Station. Traffic analyses indicate that auto capacity is not impacted by access across Burnside.

Figure 25: Central Mall Station Platform Options - Comparison Chart

CENTRAL MALL STATION LOCATIONS

Along most of the downtown light rail alignment stations have been proposed in locations that strongly support the concept of “station as place.” A light rail station in the immediate vicinity of Union Station will help create a strong transportation hub and potentially spur the redevelopment of key properties in the area. A station at City Hall can celebrate the symbolic and architectural significance of this public space. Stations at PSU’s Urban Center will create synergies with the new urban landmark and the Streetcar, and support the considerable development planned by PSU, PDC and others in this area.

The station locations originally proposed for the Central Mall were largely driven by a desire to utilize the existing extended sidewalks for the light rail stations (i.e., the Left Side Platform) and by the necessity to place Left Side Platforms only at blocks that work with the pattern of one-way streets downtown. The Left Side Platform at these locations minimize costs and introduce the least change to the existing configuration of the Mall.

However, the Right Side Platform provides the opportunity to reconsider station locations in the Central Mall to better support the urban design concept of “station as place.” There are two

significant sites in the heart of downtown that could be strategically integrated with light rail. Shifting stations to these locations will give the light rail project an enhanced presence and have a more positive impact on redevelopment opportunities downtown.

The two station locations include:

Pioneer Courthouse Square, Portland’s “Living Room,” is the city’s most celebrated civic space. Combined with Pioneer Courthouse and Pioneer Place to the east, it is the heart of downtown. It is also a transportation hub, flanked by light rail on the north and south and by the Transit Mall on the east. It is an area full of history, architectural significance and urban vitality.

The Left Side Platform option places stations at the existing sidewalk extensions one block to the south of the Square and the Courthouse. Although the station could be visually and physically connected to the Square and the light rail stations on Yamhill, it is at the edge of this urban focal point. The Right Side Platform would move the stations into the core of this area, with platforms on the east and west side of the Courthouse. While both station locations present an exciting opportunity to further enhance this dynamic area, a station between SW Morrison and Yamhill could be more effectively integrated into this important place in the heart of downtown.

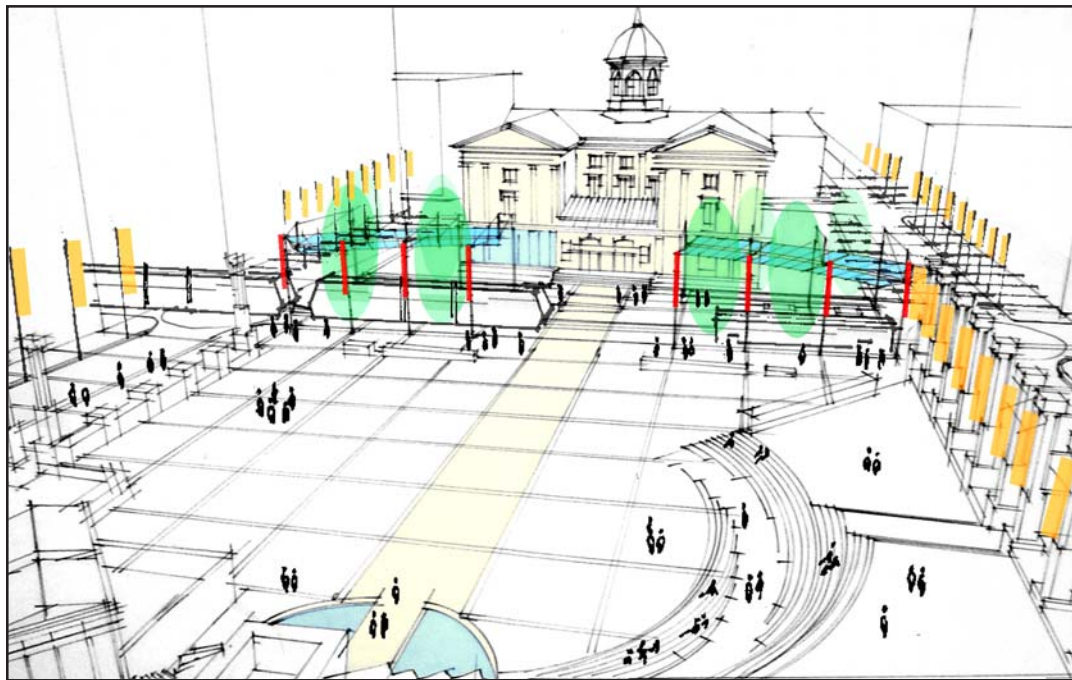


Figure 26: Conceptual perspective of the Right Side station integrated with Pioneer Courthouse Square.



Figure 27: Conceptual rendering of the of the US Bancorp Plaza renovation planned by Unico.

US Bancorp Plaza at SW Oak Street provides a different kind of opportunity. Given that plans are underway for a significant renovation of the Plaza and that various properties in this area are prime for redevelopment (fig. 27), this could become a more significant civic space. Here, light rail could play a defining role in revitalizing this underdeveloped and dispirited part of town. By moving the platforms from SW Stark/Washington to SW Oak/Pine, the station could be integrated with the redesign of the Plaza, help catalyze redevelopment and serve as a gateway to the downtown.

RECOMMENDED STATION “PACKAGE” OPTIONS

Based on the Project Team’s analysis and the response from public outreach, two station “packages” are proposed for further consideration.

Option A - Base Case Package is the lowest cost option that has the least construction impacts and introduces the least change to the existing configuration of the Mall. The existing extended sidewalks at Yamhill/Taylor and Washington/Stark are utilized as station platforms (Left Side platform) and the Right Side platforms are used at Madison.

Station Location/Platform Recommendation:

6th Ave @ Jefferson/Madison	Right Side
5th Ave @ Jefferson/Madison	Right Side
6th Ave @ Taylor/Yamhill	Left Side
5th Ave @ Taylor/Yamhill	Left Side
6th Ave @ Washington/Stark	Left Side
5th Ave @ Washington/Stark	Left Side

Option B - Right Side Package shifts stations to locations with stronger “place-making” potential and Right Side platforms are used throughout.

Station Location/Platform Recommendation:

6th Ave @ Jefferson/Madison	Right Side
5th Ave @ Jefferson/Madison	Right Side
6th Ave @ Yamhill/Morrison	Right Side
5th Ave @ Yamhill/Morrison	Right Side
6th Ave @ Oak/Pine	Right Side
5th Ave @ Oak/Pine	Right Side

Note that in both package options the Right Side Platform is proposed for the City Hall stations (Jefferson/Madison Streets). On 5th Avenue a Left Side platform is not desired because of traffic impacts that would result from forcing autos to take a left turn down SW Madison Street along with the high volume of buses that make that turn. It would also restrict auto access to City Hall’s *porte cochere* and through the block, which is permitted today. Therefore, only the Right Side option is put forth. On 6th Avenue both platform options could work. However, the Right Side platform has numerous advantages:

- Provides extra sidewalk space to protect the heritage elm tree in front of the Ambassador Condominiums.
- Fulfills the unique loading requirements for the Ambassador Condominiums and University Club.
- Continues to provide through auto access from the I-405 Freeway’s 6th Avenue exit into the downtown core.

NEW SOUTH MALL CONFIGURATION

The proposed configuration of the South Mall is illustrated in Figures 28-29. Throughout the South Mall, the light rail alignment and station platforms will be on the right side.

On 6th Avenue buses and light rail will operate in the two right lanes. There are two auto lanes on the left side until Clay Street to accommodate traffic coming off of I-405. At SW Clay Street one lane forces a left turn and one continues north.

Also on 5th Avenue buses and light rail will operate in the two right lanes. One auto lane travels southbound until College Street, after which autos have the left lane and share two middle lanes with a low volume of buses. Streetcar shares the left auto lane for two blocks between SW Market and Montgomery. At Montgomery autos in the left lane must turn left and through traffic will use the center lane. Bicycles will have access through the South Mall just as autos do, but safe streetcar track crossings will need to be considered during Preliminary Engineering.

On-street parking is significantly reduced along 5th and 6th Avenues because there is not enough width to maintain parking for the entire length and autos will not be allowed to cross the light rail tracks. Sidewalk widths will generally remain the same as exist today (15' - 0") on non-station blocks, and range from 15' - 30' for station platforms. Vehicles will continue to be able to take left turns off the Mall, but right turns will be prohibited (with the exception of SW Mill and SW Jackson Streets for local traffic only). Figure 30 summarizes a comparison between existing conditions and the proposed configuration.

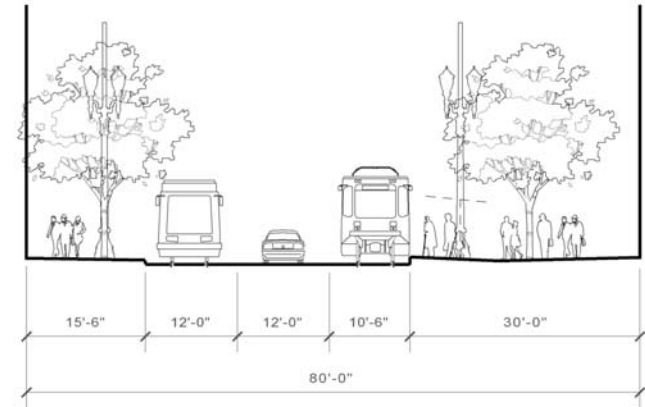


Figure 28: Section of South Mall Station Block - 5th Avenue looking south. PSU's Urban Center to the right.

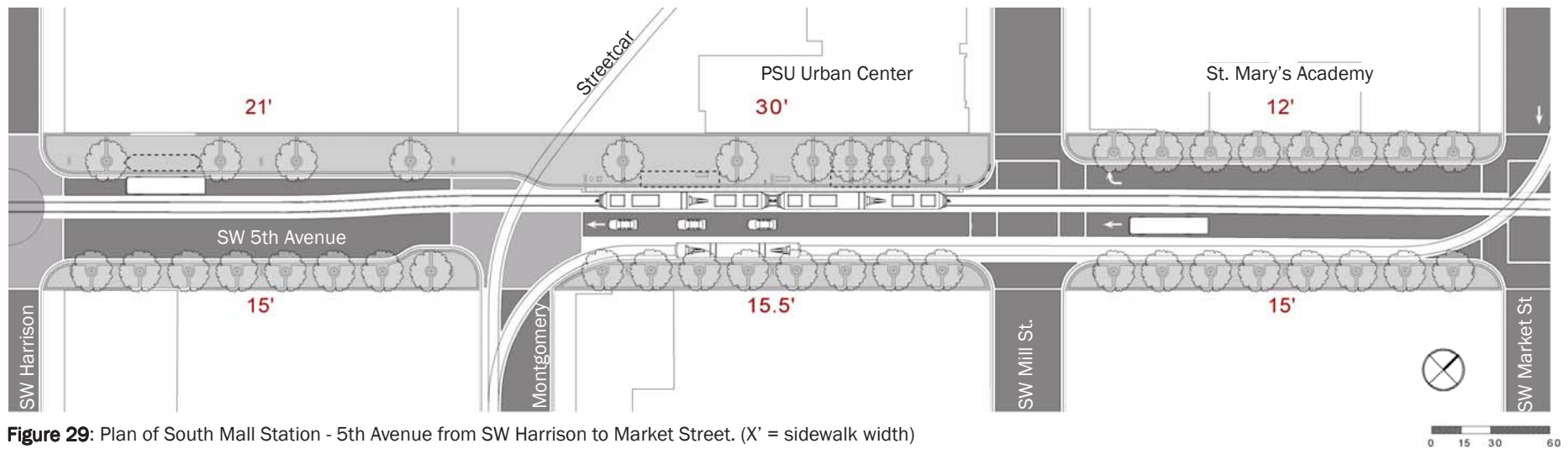


Figure 29: Plan of South Mall Station - 5th Avenue from SW Harrison to Market Street. (X' = sidewalk width)

South Mall	Existing Conditions	Right Side Platform
Sidewalk Widths:		
Non-Station Blocks (left/right side sidewalks)	15 ft/15 ft	15 ft/15 ft
Station Blocks (left/right side sidewalks)	N/A	15 ft/15-30 ft
Light Rail Travel Headways (minutes)	N/A	5
Light Rail Travel Time Between Union Station and PSU (minutes)	N/A	10.2 - 10.3
Bus Travel Time		
5 th Ave – Glisan to Madison (minutes)	9.9	8.2 - 8.9
6 th Ave – Madison to Glisan (minutes)	8.6	8.1 - 8.2
Auto Capacity (per hour) ¹	300	300 - 450 ²
<p>¹ Automobile capacities provided are for an average condition over the entire Mall and could be higher or lower in different parts of the transit Mall depending upon localized factors such as pedestrian volumes and turn volumes. Note that peak hour auto volumes on SW Morrison and Yamhill average approximately 270 autos/hour.</p> <p>² Auto capacity is approximately 300 autos/hour if Option A - Left Side Platforms and 450 autos/hour with Option B - Right Side Platforms in both the Central and North Mall.</p>		

Figure 30: South Mall Comparison Chart - Existing and Proposed Configurations

Figure 30 provides a comparison between existing conditions with the proposed configuration. Sidewalk widths at non-station blocks remain the same as exist today (15 ft) and increase where light rail station platforms are introduced.

The new configuration provides numerous transit enhancements. There will be some time savings on bus travel over what is provided today. And in addition to the regional MAX lines that will run on the Mall, a shuttle system will be added so that light rail will travel with 5 minute headways; a train will always be visibly approaching when people look down the street. Furthermore, Right Side Platforms will put all transit loading on one side of the street, thereby facilitating transfers and enhancing system clarity.

PRELIMINARY ENGINEERING RECOMMENDATIONS

In addition to the Revitalization Strategy put forth in the previous section of this report, the Project Team proposes the following recommendations as the project moves into Preliminary Engineering. Many of the issues outlined below offer basic concepts that need to be further explored in the next phase of design work.

LIGHT RAIL OPERATIONS

LIGHT RAIL ALIGNMENT/TERMINATION

Recommendation: Light rail alignment to travel along 5th and 6th Avenues from Union Station (west end of Steel Bridge) to Portland State University (S.W. Jackson Street).

Rationale/Discussion: As discussed in the Introduction, the alignment for light rail in Downtown Portland has been the subject of much discussion and analysis since planning for the Banfield Light Rail Project began in 1979. North-south alignments were explored on most downtown avenues, and all were deemed less favorable than 5th and 6th Avenues.

The City of Portland convened the Downtown Rail Advisory Committee in 1993 to provide recommendations to the City on future light rail alignments within downtown Portland. Numerous surface and subway alignments within downtown were reexamined and a surface light rail alignment on 5th and 6th Avenues was reconfirmed as the preferred surface alignment. This Mall alignment is consistent with many years of planning and development policies endorsed by the City of Portland, Metro and TriMet, including the adopted Downtown Plan (1972) and the Central City Plan (1988).

Options for terminating the south end of the alignment short of Jackson Street have been considered, primarily because it would provide a

project cost savings of approximately \$50 million. However, finding an operable terminus on another street in the South Mall proved to be problematic due to grade issues and traffic impacts.

Extending the alignment to SW Jackson Street has numerous operating advantages. It provides superior access to the South Mall and the 24,000 students at Portland State University; can accommodate a second track; provides a layover location for trains to allow for schedule recovery and special event service; and incorporates a turnaround that would be off-street with limited impact on traffic. Furthermore, it would generate additional ridership which could help in competing for federal funds for this project.

LIGHT RAIL STATION LOCATIONS

Recommendation: Light rail stations to be located at

- Union Station (NW Glisan/NW Hoyt Streets)
- NW Couch/Davis Streets
- SW Washington/Stark Streets or SW Oak/Pine
- SW Taylor/Yamhill Streets or Yamhill/Morrison
- SW Jefferson/Madison Streets
- SW Montgomery/Mill Streets*
- SW Jackson/College Streets

Rationale/Discussion: The station spacing provides easy access to transit throughout downtown with approximately 800 to 1,000 feet between stations. It also allows for good transit accessibility while balancing the need to reduce travel time. The option of shifting the two pairs of Central Mall stations to Pioneer Courthouse (SW Yamhill/Morrison) and US Bank Plaza (SW Oak/Pine) is compelling from an urban design standpoint as it better supports the concept of “station as place”; it would integrate light rail with two prominent civic spaces in Downtown

(see page 41 for additional discussion of Central Mall station locations).

*Consideration is being given to moving the 6th Avenue station at SW Montgomery/Mill Streets to SW Harrison/Montgomery to reduce access impacts and Streetcar conflicts.

LIGHT RAIL/STREETCAR INTERFACE

Recommendation: Design the light rail alignment and rebuild two blocks of streetcar to allow an additional auto lane on 5th Avenue from SW Market to Montgomery.

Rationale/Discussion: The streetcar will continue to serve a station on SW 5th Avenue at Montgomery. For several years the streetcar will be operating two-way on the tracks on Montgomery - potentially beyond the opening of light rail on the Mall. The streetcar may need to wait up to several minutes on 5th Avenue before it can turn onto Montgomery. Adding a second auto lane on 5th Avenue between SW Mill and Montgomery will prevent subsequent delays to autos and buses.



Portland Streetcar at PSU's Urban Center Plaza

BUS OPERATIONS

TRANSIT CONCEPT PLAN

Recommendation: Incorporate conceptual bus service elements of the Transit Concept Plan to inform engineering and public discussion.

Rationale/Discussion: The role for bus service on the Mall shifts as a result of placing light rail on 5th and 6th Avenues. Light rail brings substantial passenger capacity and a strong, coherent shuttle function to the Mall that can replace and enhance the shuttle function of buses. The capital investment in light rail will allow TriMet to provide more efficient bus service, enabling service to be provided to locations off the Mall, consistent with “grid” service envisioned in the Central City Transportation Management Plan. Some of the primary elements, such as the cross-town service on Jefferson/Columbia will require passenger facilities and have parking impacts, while traffic streets of Market/Clay would no longer require bus facilities. Transit and auto circulation will be studied during Preliminary Engineering to evaluate impacts.

The Transit Concept Plan is proposed for either Option A (Left Side Platforms) or Option B (Right Side Platforms). Primary elements include: adding a light rail circulator the length of 5th/6th Avenues; rerouting some bus lines to transit streets of SW Columbia/Jefferson and Morrison/Yamhill (limited) and removing some or all buses from traffic streets of Market/Clay and Salmon/Washington; using the new SW Harrison Connector to provide access to South Waterfront; turning buses at Burnside instead of laying over at North Terminal; and rerouting some bus service to SW 10th/11th Avenues and Naito Parkway. Fewer buses will provide service on the Mall; however, overall transit service to downtown will improve.

MALL BUS STOP LOCATIONS

South of Burnside:

Recommendation: Relocate bus stops to respond to light rail station placement.

If Option A (Left Side Platform) is selected: Locate two to four bus stops on the three to four blocks between light rail platforms. Bus stop spacing shifts from existing two-block spacing to a two to four-block spacing.

Figure 31: Diagram of existing transit system

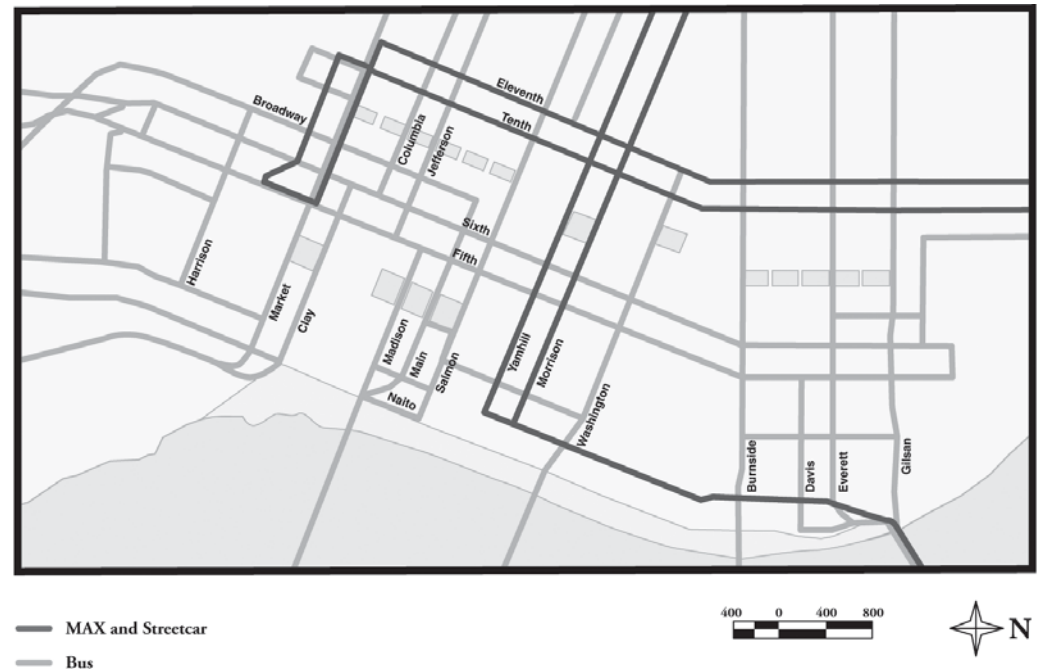
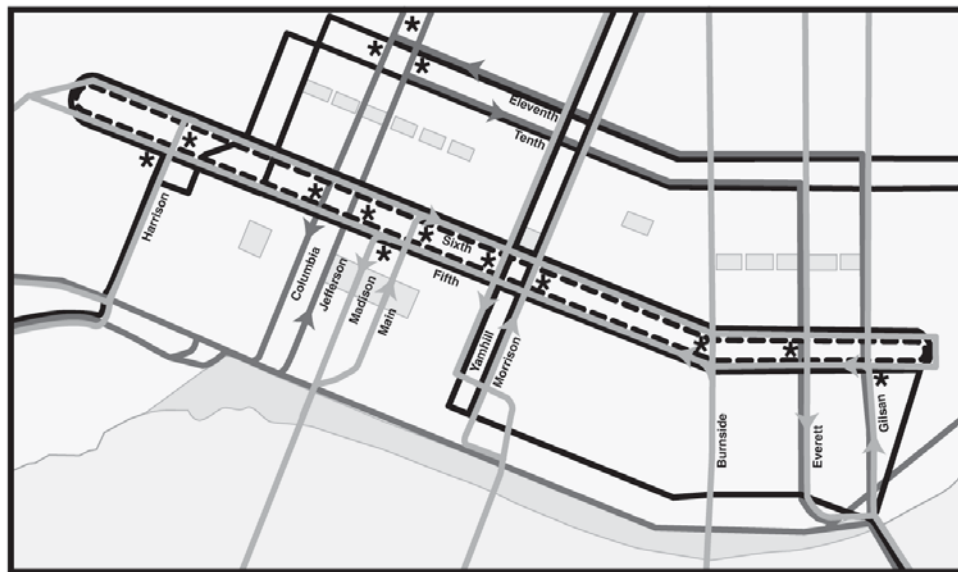


Figure 32: Diagram of proposed transit concept plan



- Bus
- Transit Lines
- Off-Mall Routing
- Rail
- Mall Loop Service
- MAX and Streetcar

★ Bus Stop Improvement



If Option B (Right Side Platform) is selected: Locate four to six bus stops on the two to five blocks between light rail platforms. Bus stop spacing shifts from the current two-block spacing to two to four-block spacing.

Rationale/Discussion: The addition of light rail to the Mall would require changes to current bus stop locations. Bus stop locations would adjust to accommodate the LRT platforms plus safe bus maneuvering. The average walk time and distance to reach a chosen bus stop may increase by one-two blocks for current bus riders.

North of Burnside:

Recommendation: Relocate bus stops to respond to light rail station placement. Location is the same for Option A or B.

Rationale/Discussion: Light rail would provide the primary function of shuttle service between Old Town, Union Station and central downtown. Bus service can move to a central location of bus stops between Davis/Everett on 5th/6th. High quality bus stops between 5th/6th on Everett would provide service to the mall without requiring buses to stop on the Mall.

CROSS-MALL BUS STOPS

Recommendation: Develop high quality bus stops and pedestrian environments on cross-mall streets near SW 5th and 6th.

Rationale/Discussion: Placing stops on the cross-Mall streets will help to reduce bus/train/auto conflicts on the Mall, provide access in areas near the Mall for bus passengers and speed up transit and traffic flow. A loss of parking on cross-mall streets would be required to accommodate these stops.

BUS LAYOVER

Recommendation: Evaluate concept to reconfigure bus layover facilities to accommodate bus circulation changes.

North Terminal & Burnside Rationale/Discussion: Currently, layovers for approximately 12 - 15 Mall buses are accommodated at the North Terminal and several on-street bus zones in the North Mall area. Many buses currently run through the North Mall without making any stops to reach the layover facility. Reducing the number of buses traveling to the North Terminal and

LOOKING AT BUS SERVICE OPPORTUNITIES

The Portland Mall Revitalization Project presents an opportunity to improve not just MAX service but also bus service in downtown—and ultimately for the entire system. As efforts get underway to refine how MAX service will look on the Mall, options and ideas for downtown bus service are being identified and studied.

TRANSIT SERVICE IMPROVEMENTS

- Currently 40 bus lines travel some portion of the Mall, where most bus service through downtown is concentrated. Most of these buses operate frequently during rush hour, but little service provided in off peak hours.
- A new MAX line would bring high-capacity service to the length of the Mall throughout rush hour, middays and evenings.
- Rather than simply focusing more service on the Mall, a key consideration is how to best distribute bus service to more of downtown.

Benefits

As a new bus service concept is developed, we'll be looking to create as many benefits as possible, including:

- Broadening distribution of downtown transit service to give customers more choices that get you closer to your destination.
- Shortening the time customers spend on the bus or MAX going through downtown.
- Providing better service on the Mall during off-peak hours.
- Creating a system that is well coordinated, particularly for transfers.
- Finding efficiencies and savings that can be redirected to where more service is needed.
- Decreasing air pollution and noise on the Mall and using cleaner, quieter buses.

BUS SERVICE IDEAS

At this initial stage, a variety of options and ideas are being considered:

Downtown shuttle

- Many bus riders on the Mall make short trips within downtown's Fareless Square during lunch or at other times.
- The Interstate MAX Yellow Line and the proposed I-205 line would travel on the Mall between Union Station and Portland State University.
- Downtown-only trains that just circulate on the Mall could be added, making light rail the foundation of service within downtown.

Focus Frequent Service lines on Mall

- Currently, 48 percent of bus riders travel on TriMet's 15 Frequent Service lines, providing 15-minute or better service, everyday. Frequent Service lines are expected to carry 65 percent of bus ridership by 2009 as more lines are upgraded to Frequent Service.
- Focusing Frequent Service lines on the Mall would maintain the Mall as a transfer and connection point for a majority of customers.

More service throughout downtown

- Currently, cross-mall lines (those that run on east-west streets rather than on the Mall) are limited to a few lines such as the 15-Belmont/NW 23rd Ave, 20-Burnside and 6-MLK Jr Blvd. Many others travel some portion of the Mall, turning onto cross streets at some point. Examples include lines 40-Tacoma, 38-Boones Ferry and 45-Garden Home.
- Taking some of these lines off the Mall and focusing them on key cross streets would distribute more service throughout downtown while still providing transfer connections to MAX and buses on the Mall.
- Targeting transit service on streets such as on Columbia/Jefferson, Everett/Glisan, 10th/11th and Naito Parkway would take buses off key auto traffic streets such as Market/Clay and Salmon/Washington.

More efficient North Mall service

- Weekday ridership on the North Mall (Burnside to Glisan) is just one-fifth that of the Central Mall, and only an eighth as much during rush hour.
- Turning buses around at Burnside rather than going all the way up the North Mall would save time and produce efficiencies that could allow service to be expanded on some routes.
- Light rail would continue to offer frequent service to the North Mall.

Stop spacing

- Light rail stations would be spaced every three to five blocks, with four to six bus stops between them, depending on the final platform design chosen.
- Bus stop spacing could be increased from every two blocks to every four, making service through downtown faster for both bus and MAX customers.

shifting some to cross-Mall routes will affect how buses circulate and layover. There may be an opportunity to modify current layover facilities. Weekday ridership productivity on the North Mall is about a fifth of the productivity on the Central Mall and only an eighth during the rush hour. In order to reduce the number of lightly used buses traveling on the North Mall to loop at North Terminal, it would be necessary to loop buses at W Burnside instead. There would be a need for buses to have a place to pause in order to recover their schedule time for a few minutes. This function is different from North Terminal in that the time that a bus waits would be much shorter. The intent is to give time to make up for schedule recovery, not to give the drivers a break. Though this may be possible, it would likely require a second or replacement layover facility closer to Burnside. This issue is still under evaluation.

Jefferson/Columbia Rationale/Discussion: The routes that would use Jefferson/Columbia from the south would loop from Jefferson to Columbia. These routes would require on-street locations for schedule recovery.

PEDESTRIAN ACCESS

Recommendation: Preserve and enhance the high quality pedestrian environment of the Mall.

Rationale/Discussion: City policy classifies 5th and 6th Avenues as Pedestrian-Transit Streets and clearly indicates that transit and pedestrian use are a priority. The recreated Mall will continue to serve its important function as a north-south pedestrian spine through downtown. Therefore, it is essential to allocate an appropriate amount of space for pedestrians and transit users to create a safe and comfortable environment.

BICYCLE ACCESS

Recommendation: Preserve bicycle circulation on all streets where auto circulation is allowed.

Rationale/Discussion: Bicycle circulation along the Mall will be affected by platform configuration, consistent with auto circulation. Currently, bicycles are allowed on the Mall only where autos are allowed. If additional auto access is provided, then bicycles would be able to take advantage of this access as well. The Right Side Platform option in both the North and Central Mall could provide through bicycle access between PSU and Union Station. Still to be considered are bicycle safety issues on the blocks on 5th Avenue in the South Mall that have streetcar tracks, and the opportunity to allow bicycle access across Burnside even if auto access is not permitted.

AUTO TRAFFIC OPERATIONS

THROUGH AUTO ACCESS

Recommendation: Consider station platform options in the Central Mall that provide through auto access.

Rationale/Discussion: Currently, there are four blocks in the Central Mall (5th and 6th Avenues at Taylor/Yamhill and Washington/Stark) with sidewalk extensions that prevent autos from traveling through the block. Autos are also prevented from crossing Burnside on both 5th and 6th avenues. There are conflicting opinions in the community regarding the benefit or disadvantage of this limited auto access. Some believe that improving auto access would enhance activity, strengthen retail and provide better clarity for drivers navigating through downtown. Others argue that limiting auto access (and expanding the sidewalks) is essential to enhancing the pedestrian environment and reinforcing the transit emphasis of the Mall. A design solution that provides the flexibility to adapt to either configuration would best serve the Mall today and into the future.

Options that could provide off-peak auto access through the Central Mall (Option A) or all-hour auto access from Union Station to PSU (Option B) are being considered. Figures 33 and 34 illustrate the auto access and circulation of each option.

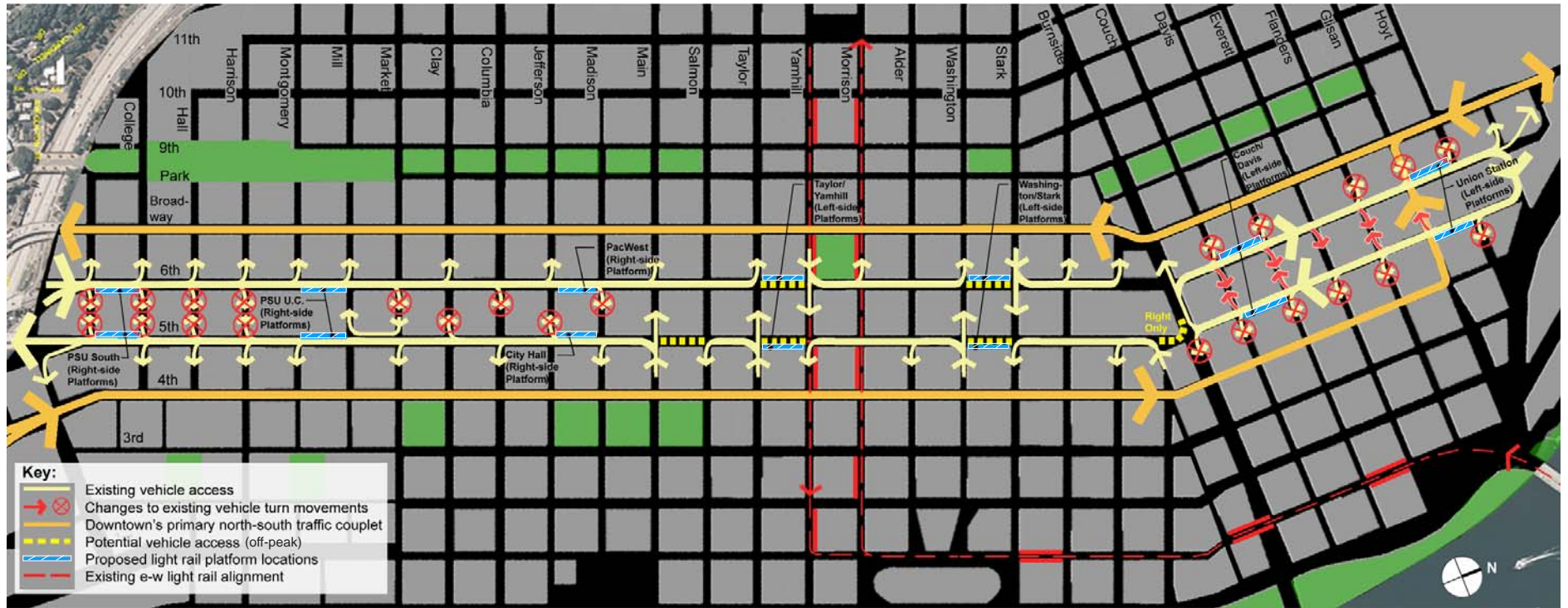


Figure 33: Auto Access Diagram - Option A: Left Side Platforms at SW Taylor/Yamhill, Washington/Stark, Couch/Davis and Union Station. Right Side Platforms at SW Jackson/College, Montgomery/Mill and Jefferson/Madison.

Figure 33 indicates that the opportunity for off-peak auto access at SW Taylor/Yamhill and SW Washington/Stark is being evaluated. The loading/prisoner transfer access at the Multnomah County Courthouse on 5th Avenue between Main and Salmon needs to be resolved to allow through auto access (a turnout or relocation may be necessary). Right turns from Burnside onto 5th Avenue may also be permitted pending further analysis.

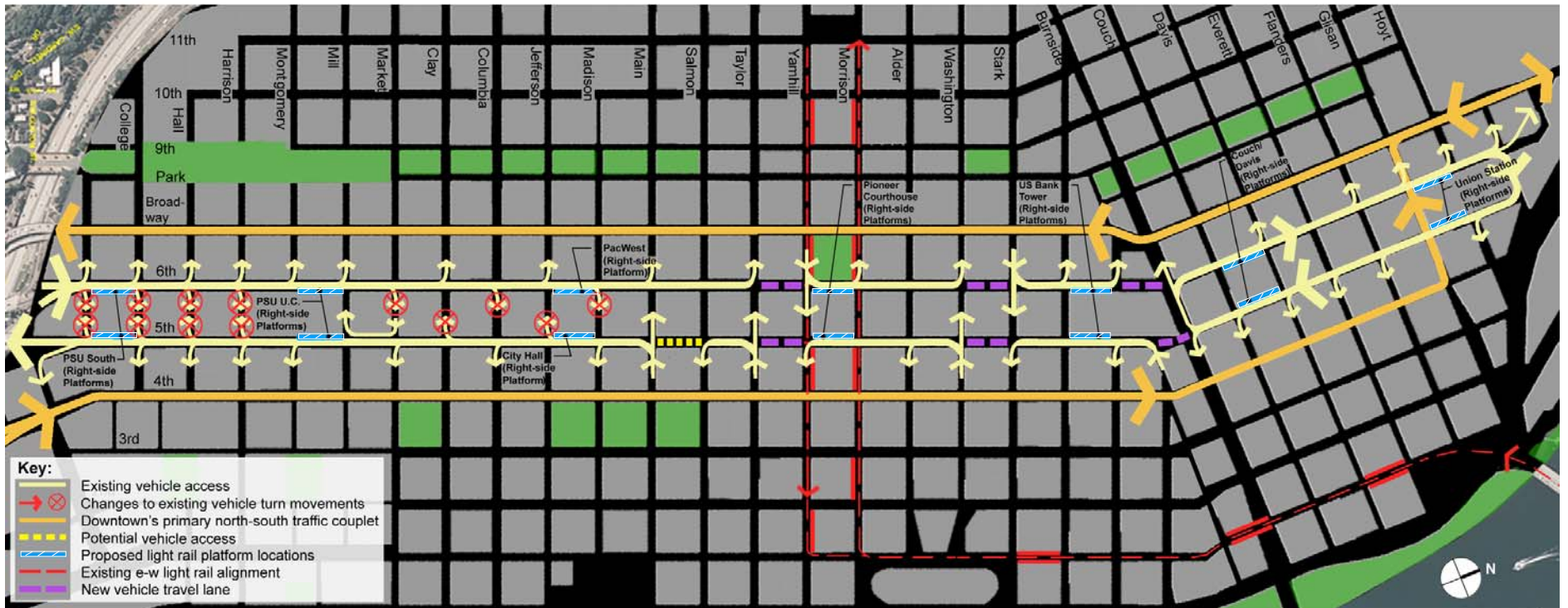


Figure 34: Auto Access Diagram - Option B: Right Side Platforms at all stations. Central Mall stations shift to SW Yamhill/Morrison and Oak/Pine.

Figure 34 illustrates auto access and circulation for Option B, which utilizes Right Side platforms throughout the Mall.* In this case continuous auto access is possible from Union Station to PSU (pending final traffic studies), although the issue at the Multnomah County Courthouse remains. Autos would also be able to turn right onto 5th Avenue from Burnside, and turn left from 6th Avenue onto Burnside.

* Note that it is possible to integrate Right Side Platforms in the Central Mall with Left Side Platforms in the North Mall, and vice-versa.

AUTO TURNING MOVEMENTS

Recommendation: Restrict/limit auto turning movements that require crossing over two transit lanes to make the turn.

Rationale/Discussion: Auto turns across transit require dedicated turning lanes, which in most cases impacts either sidewalk widths (North and Central Mall) or any remaining on-street parking (South Mall). These movements are not being considered for the Central Mall, but analyses are in progress to determine whether some turns could be added to the North and South Mall without degrading operations and the quality of the pedestrian environment.

Auto turning movements are depicted in Figures 33 and 34).

PARKING

Recommendation: On the South Mall all on-street parking will be removed from both sides of 6th Avenue and on the west side of 5th Avenue. Some parking will be available on the east side of 5th Avenue in the South Mall. Additional off-peak parking will be considered on 6th Avenue in the South Mall. There will continue to be no on-street parking available in the rest of the Mall.

Rationale/Discussion: The South Mall is seen as a traffic portal to Downtown and will continue to carry a relatively high volume of auto traffic. In order to preserve this capacity, the South Mall will typically maintain 15-foot wide sidewalks while accommodating two lanes of auto traffic. This leaves insufficient width to provide the necessary traffic and transit lanes while still maintaining on-street parking except on portions of 5th Avenue.

PICK-UP AND DELIVERY ACCESS

Recommendation: Consider pull outs where the loss of parking presents a hardship for pick-up and delivery access or where substantial benefit of revitalization is likely and tied directly to redevelopment.

Rationale/Discussion: The Central Mall has existed for more than 25 years without pick-up and delivery access on the Mall (with the exception of the pull-out on 6th Avenue to serve the Hilton). However, other portions of 5th and 6th to the south currently have parking and at least one does not have an alternate location for pick up and delivery on a side street. In addition, at least the Multnomah County Courthouse may require a pull out simply to allow auto access past that block.

Vehicle pullouts require a width of approximately 8' - 0" and a length of 50' - 0" (for two vehicles) which directly impacts sidewalks. A draft policy has been created to establish a methodology for determining where vehicle pullouts could be considered and where they would not be permitted. (Appendix B)



Vehicle pullout on SW Morrison

STREETSCAPE IMPROVEMENTS

The Project Team has not advanced design work on streetscape improvements since the Draft CDR was issued. This work will be developed during Preliminary Engineering. However, a summary of issues and guidelines are provided below.

PAVING MATERIALS

The intersections in the Central Mall, built in 1978, consist of brick crosswalks, granite stopbars and accent circles and asphalt over concrete inside the circle and in the remainder of the intersection. This design serves to extend the pedestrian zone into and across the street to the next block. The circle design is one of the Mall's iconic elements, common to each of the intersections. Because of the construction of light rail trackway through the intersections, there is an opportunity to consider a change in design of some or all of the intersections.

A change in the materials and or design may be desirable for maintenance purposes as well. Over the years, the existing rigid brick and granite system has proven difficult to maintain. The heavy bus traffic takes a toll on any surface, but it is particularly harsh on rigid and flexible materials that are joined together. The City's experience has been that the current intersections have a life of 7 to 10 years before substantial repairs are required.

Note that a major change in design or materials will lengthen the construction schedule and increase construction costs.

BUS SHELTERS

Like other Mall features, the bus shelters are showing their age. Up close, they look “beat up” and they are increasingly expensive to maintain, in part because the components, such as the curved panels, must be custom made. Some businesses complain that the shelters are too bulky, obscuring the view of the street from ground floor businesses and conversely the view of the businesses from across the street. In some locations, the shelters provide the wrong kind of protection by obscuring views, making the location feel less safe.

The project team has not yet developed alternative designs. Instead, the team focused on creating a set of criteria to guide the design process and decision-making on the issue. The criteria are based upon the Project Goals and Objectives, the studies of the Mall conducted by the Portland Business Alliance and the Urban Design Principles described in preceding sections of this report.

Shelters for waiting bus transit patrons will be provided at all blocks in the Central and North Mall except at designated light rail station blocks. The South Mall may have bus shelters every other block depending on final route and stop designations. Two options exist for bus shelter design: one, refurbish the existing Central Mall shelters to comply with the following criteria, or; two, provide new bus shelters in a design that is derivative of the new light rail shelters for the Mall.



Bus shelter at Pioneer Courthouse

General design criteria are as follows:

- Represent the highest quality design and materials in TriMet’s system, hence a visual icon for 5th and 6th Avenues
- Complement the formal design of the Mall
- Fit within designated sidewalk zones comfortably as part of a family of furnishings
- Design and place shelter canopies to encourage transit patrons to use the shelter and not storefront/awning areas
- Provide maximum transparency to storefronts by minimizing the bulk of structural and roof elements

STREET FURNITURE

Currently, street furniture in the Mall is periodically refurbished. Options for replacing or refurbishing the street furniture as part of this project will be evaluated during Preliminary Engineering.

STREETLIGHTS

Street lighting options will be evaluated during Preliminary Engineering.

STREET TREES

Public comments received to date indicate that in general people want to maintain the tree canopy on 5th and 6th Avenues. There is a sense that the trees help define the overall character of the streets.

However, there are also concerns regarding the lack of light penetrating to the street, the health of the trees and their impacts on potential station locations. Possible solutions include pruning or removing some trees in the Central Mall to provide more light at the sidewalk level or removing trees if they are diseased or to accommodate new LRT platforms.

The trees on 5th and 6th Avenues contribute to the quality and appearance of the Mall as well as performing an important urban ecological function. However, there has been some criticism that the trees are too dense in places and create a dark and uninviting environment on some blocks. The London Plane trees that are dominant in the Central Mall were a controversial choice 25 years ago when the Mall opened.

As part of this project a professional arborist was retained to evaluate the general condition of the trees and to provide options for providing additional

day and night light at the sidewalk level. The report was completed early in spring 2003 (see Appendix C).

As a follow-up to this analysis, a tour was arranged with the arborist, as well as a few of the City Foresters and various members of the Project Team to collaboratively discuss issues related to the Mall trees. Construction documents illustrating vault conditions were used to gain a better understanding of potential below-grade issues.

Once station platforms have been selected and the Project enters Preliminary Engineering, the Project Team will develop recommendations about the trees and the appropriate solution for each specific block.



Aerial view of trees lining the Mall

UTILITY RELOCATIONS

ANTICIPATED SCOPE OF WORK

The scope of required private and public utilities relocations is critical to project cost, schedule and community impacts during construction. The number and complexity of the utility relocations drive the overall project schedule because they must be completed in advance of the follow-on improvements. In addition, the age of the utility systems and unforeseen underground conditions make cost for this work, as well as the time to perform it, difficult to predict.

Also, the scope of utility relocations will differ depending upon which station platforms are utilized and what criteria for relocation are mandated by the respective utility bureaus and private entities. The base case (Steel Bridge to Jackson Street) involves reconstruction of 58 intersections. In general, there are utilities that must be relocated in each of these intersections and in the blocks in between.

Because of the significant cost, schedule and community impact consequences that would otherwise arise, a policy direction is recommended that utility relocations be kept to an absolute minimum without compromising the integrity of the systems.

Even so, based upon preliminary analysis, a base case scope of work might include:

- Modification of water lines that cross under light rail tracks in 30 intersections
- Relocation of water mains under or near the proposed light rail alignment (dependent upon final alignment)
- Relocation of building water services in 93 locations
- Relocation of fire hydrants in 48 locations
- Relocation or lining of sewer piping that remains under light rail tracks

- Reconstruction of 37 sewer manholes in 26 intersections
- Reconstruction of 45 electrical utility vault tops in 17 intersections
- Relocation of gas lines and telephone wiring in five blocks
- Relocation of 6 phone utility vaults in 5 intersections

Key Conclusions

Sewer Impacts: The Bureau of Environmental Services (BES) remains concerned regarding potential conflicts between sewers and utilities, the effect of light rail on its access and maintenance obligations, storm water management, no net loss of street trees and increased BES operations costs. During Preliminary Engineering, it will be necessary to resolve scope of work and Project costs related to these and other items.

Water Impacts: The Bureau of Water Works (BWW) remains concerned regarding direct and indirect impacts to its system, including stray electrical currents from light rail, access, maintenance, and increased BWW operations costs. During Preliminary Engineering, it will be necessary to resolve scope of work and Project costs related to these and other items.

Recommendations

The following is recommended for the next phase of analysis and Preliminary Engineering for the Project:

- Establish policy that utility relocations shall be kept to an absolute minimum without compromising the integrity of the systems
- Work with utility bureaus to establish criteria and scopes of work that fit the overall objectives of the Project including: (a) completion within budget; (b) shortest construction schedule; and (c) minimal impacts to downtown businesses and traffic flow
- Confirm the scope of private utility relocations under the City franchise agreements

BUDGET & FINANCIAL STRATEGY

PROJECT COSTS & FUNDING SOURCES

Project costs

An updated Conceptual Design Cost Estimate for the Portland Mall Revitalization Project has been prepared by TriMet based on the Conceptual Design outlined in this report and recent experience with construction of the Interstate MAX and Portland Streetcar projects. This estimate will be further refined during the Preliminary Engineering phase in conjunction with a detailed civil survey of the Downtown alignment and resolution of outstanding design and engineering issues as outlined later in this report.

The Portland Mall Revitalization project is proposed as part of the South Corridor Project, which includes expansion of light rail along the I-205 Corridor and future expansion to downtown Milwaukie. The I-205 and the Portland Mall project would be built at the same time at a total cost of approximately \$495M in Year 2007 dollars.

The total estimated cost of the Portland Mall segment from Union Station to PSU is currently estimated at between \$149M and \$160M in Year 2007 dollars. The lower figure assumes the left side stations in the Central Mall and no new sidewalks in the South Mall. The higher estimate assumes the right side stations in the Central Mall and new brick sidewalks and street trees in the South Mall. A summary of the conceptual cost estimate is outlined in Figure 35. A detailed breakdown of the estimate and the key assumptions behind the estimate are outlined in Appendix B.

Proposed Funding Sources

Funding sources for the entire South Corridor Project and for the Downtown Portland segment are shown in Figures 36 and 37 respectively. For purposes of determining potential sources of local funding for the downtown segment, a match ratio of 60% Federal/40% Local has been assumed. Therefore, the local funding requirement for the Downtown segment at a total cost of \$160M is approximately \$64M. A detailed description of the proposed local resources is outlined below.

Figure 35: CONCEPTUAL DESIGN COST ESTIMATE SUMMARY

ITEM DESCRIPTION	COST (\$M)
Bus Shelters and Light Rail Platforms	\$22.0
Sidewalk Elements	11.8
Roadway Elements	23.6
Light Rail Elements	35.1
North Entry - Steel Bridge to Irving Street	12.1
South Entry - Jackson Street Terminus	1.6
Utilities	16.3
Real Property Acquisitions	9.1
Impacts/Mitigations	5.3
TOTAL IN 2004\$*	\$136.9
TOTAL IN MID-YEAR 2007 \$*	\$149.0
Additional Costs of South Mall Brick Sidewalks	5.6
Additional Cost of Option B - Right Side Stations	5.4
TOTAL COST IN 2007\$ WITH OPTION B AND SOUTH MALL BRICK SIDEWALKS	\$160.0

* Assumes Left Side Platforms in the Central Mall and no new sidewalks in the South Mall.

Figure 36: PROPOSED FUNDING FOR THE SOUTH CORRIDOR PROJECT
(Includes Portland Mall Segment)

SOURCE	Cost (\$M)
Federal Transit Administration	\$297.0
MTIP/Metro	39.4
TriMet	20.0
City of Portland	60.0
Clackamas County	35.0
STIP/ODOT	20.0
Other	23.6
TOTAL	\$495.0

Figure 37: PROPOSED FUNDING FOR PORTLAND MALL REVITALIZATION PROJECT

SOURCE	Cost (\$M)
Federal Transit Administration	\$96.0
TriMet	5.0
Metro	5.0
City of Portland	
Urban Renewal Funds	10.0
Bonding of New On-Street Parking Meter Revenues	15.0
Public Utility Contributions (towards facility reloc.)	5.0
Local Improvement District	15.0
Portland State University	5.0
Subtotal	50.0
Other Local Funds	4.0
TOTAL	\$160.0

The following summarizes the proposed funding sources for the Portland Mall portion of the Project.

- **TriMet and Metro Contributions.** TriMet and Metro have a long-term interest in completion of the full Downtown alignment and have already allocated \$20M and \$39.4M respectively to the South Corridor Project, some of which is shown in Figure 37 as allocated to the Mall project. Contingent on development of a final strategy (including property owner and PSU participation) for completion of the full alignment, these agencies may be able to increase regional participation to the overall South Corridor Project. These funds may be in the form of local working capital or formula Federal funds dedicated to the region.
- **Urban Renewal Funds.** The Downtown alignment is within or adjacent to several existing urban renewal districts including the River District, Downtown Waterfront and South Park Blocks. Through reprogramming of existing projects, it appears that \$10 million could be made available for the Project (an additional \$10 million in Portland urban renewal funds from Eastside urban renewal districts is proposed to contribute to the I205 portion of the South Corridor Project).
- **Bonding of Downtown Parking Meter Revenues.** The policy for collection of revenues from parking meters in the Downtown area has not changed in many years despite changes to downtown shopping and general usage patterns. A preliminary analysis of opportunities for enhanced revenues indicates that approximately \$15M could be raised through the bonding of a program of enhanced parking revenues in the Downtown area. PDOT will involve the community and downtown businesses to evaluate the various parking options to evaluate which option or options would best manage downtown parking concerns and yield the

revenue needed to support the Portland Mall Revitalization Project for capital financing and ongoing management and maintenance.

The following revenue enhancement options could be considered:

1. **Extended Meter Hours.** Meter operation currently ceases at 6:00 PM while many retail establishments are open until at least 8:00 PM. Extending meter hours until 8:00 PM would create additional turnover while not disadvantaging the entertainment sector. It should be noted that this is already done in the Lloyd District.
2. **Metering on Sundays.** Several decades ago, few retail stores were open in the Downtown on Sundays. Today, with the exception of a few major holidays, many Downtown businesses operate on a daily basis. Because the meter system is only in operation six days a week, retail and office uses do not fully benefit from the parking turnover metering is designed to create.
3. **Long-Term Meter Rates.** The long-term meter rate is currently 60 cents/hour and has not been increased since FY1997-98. Consideration should be given to increasing the rate to \$1.00/hour.
4. **Short-Term Meter Rates.** The short-term meter rate is \$1.00/hour and has not been increased since 1997-98. Consideration should be given to increasing the rate to \$1.10/hour.
5. **Metering of Truck Loading Zones.** Truck loading zones have become increasingly busy and, to some degree, abused over the past several years. This has resulted in an increasing number of trucks “double parking” and causing congestion and driver frustration in the downtown. Metering the loading zones would increase the turnover rate and create better utilization.

- **City Utility Relocation Costs.** Current project estimates include approximately \$17.8M for the relocation, reconstruction and upgrading of municipally owned sewer and water facilities. It is estimated that this work will result in increased value by extending the useful life of these facilities, which approximately equates to the local funding requirements for the project of \$5-7 million based on a 60/40 (federal/local) split.
- **Property Owner Participation through a Local Improvement District (LID).** Most recent major infrastructure investments have included some level of participation from the benefiting property owners. This was the case with recent transportation improvements in the Lloyd District, construction of the current downtown MAX lines and Portland Streetcar. In considering the amount of direct property owner participation in the project it is important to be cognizant of the cost and value of other improvements property owners can and should be encouraged to make with respect to building frontages. Sensitivity to the existing business climate is also warranted. However, the formation of a Local Improvement District is at least two years away and assessments to property owners are not levied until completion of the Project. Payment programs for assessments, at tax-exempt interest rates, are available for periods up to 20 years.

- **Portland State University.** As PSU continues to acquire additional property and expand its educational and research facilities, providing transportation choices to both students and faculty plays an ever more important role in lessening requirements for structured parking. Helping the region invest in the cost of expanded transit service to PSU is a reasonable trade-off for not having to build additional parking capacity in the future.

On-Going Operation and Maintenance Funding

Beyond the initial construction funding for the Project, there is also a desire to identify potential resources to fund on-going management, operation, maintenance and security of the Mall (see Mall Management section, page 26). To a degree, the present physical and social condition of the Mall is reflective of the limited resources available for these functions in the current environment. Therefore, this analysis looks beyond the local funding required for construction and provides start-up funds for the establishment of an enhanced management, maintenance and security program for the Mall.

To address the funding of an on-going maintenance and operation program for the Mall, it is recommended that the capital funding strategy include consideration of a revenue stream that can carry forward beyond construction of the Project. Specifically, consideration should be given to tapping the parking meter system revenue enhancements outlined above to fund a combination of initial capital costs and a maintenance and operations program.¹ This is an important step toward the total revitalization of the retail and office corridor adjacent to and surrounding the Mall.

Under this approach, new resources from parking meter revenue enhancements would be combined with existing maintenance funding from TriMet, the City and the Downtown Clean & Safe program to provide an enhanced level of management, maintenance and security on the Mall.

As with any new infrastructure, heavy maintenance requirements would be expected after the first 7-10 years of operation. Unspent maintenance funds in the early years should be reserved to bolster out year requirements. At the end the ten-year debt term for the bonds supported by the enhanced parking meter revenue, the debt service funds would be dedicated exclusively to maintenance of the Mall to insure long-term, high quality maintenance. Usual and customary increases in future hourly parking rates should be made to accommodate inflationary pressure on maintenance activities.

(Footnote)

¹ Through some combination of the revenue enhancements outlined above, it seems reasonable that between \$2.5 and \$2.7 million per year in additional revenue can be generated. In order to partially address the need for management, oversight and security of the Transit Mall, it is recommended that at least \$500,000 per year be set aside for this purpose from the increased revenue stream. Additional funding for these operations should be negotiated within the confines of existing agency budgets and existing outlays for these types of services. The residual revenue, ranging from \$2.0 to \$2.2 million per year, should be bonded for a period of ten years to created additional local funding capacity for the project. Bond proceeds under this scenario are conservatively estimated at 6% per annum to be in the range of approximately \$14.7 to \$16.2 million.

PROJECT SCHEDULE

PROJECT SCHEDULE

Figure 38 summarizes the schedule for the Portland Mall Revitalization Project. When this report is distributed on March 1, 2004, there will be a public review of the recommendations and the options put forth for consideration. Following the public review process, City Council will adopt the Final CDR and thereby approve the conceptual design of the project.

It is essential that the Final CDR be adopted with two key issues resolved so that the project can move forward into the next phase of design; the light rail station configurations and the station locations need to be defined. Furthermore, a commitment to the comprehensive revitalization strategy outlined herein will be essential to continue developing the concepts and realizing the vision of this project.

Once the Conceptual Design is approved in April, the project will move into Preliminary Engineering. The Federal Transit Administration's approval of the project for Final Design is planned for March 2005. The Full Funding Grant Agreement is planned for in the first quarter of 2006. Construction of the project will begin spring 2006 and the new light rail service will commence in the first quarter of 2009.

SUMMARY PROJECT SCHEDULE

Release Draft Final Conceptual Design Report (F-CDR) for Public Review	March 1, 2004
Public Review	March/April 2004
City Council Approval of Conceptual Design	Late April 2004
Preliminary Engineering	Spring/Summer 2004
Complete Final Environmental Impact Statement (FEIS)	October 2004
Federal Transit Administration (FTA) Approval of FEIS	December 2004
FTA Approval to Begin Final Design	March 2005
Full Funding Grant Agreement Executed by FTA	First Quarter, 2006
Complete Final Design	February 2006
Construction	2006-2009
Project Opening	Early 2009

Figure 38: Summary Project Schedule

PROJECT TEAM INVOLVEMENT

PROJECT TEAMS

Project Managers

Richard Brandman	Metro
Abe Farkas	Portland Development Commission
Neil McFarlane	TriMet
Douglas Obletz	Shiels Obletz Johnsen, Inc.
Brant Williams	Portland Office of Transportation
Joe Zehnder	Portland Planning Bureau

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Coral Ten Fingers	TriMet
Dave Unsworth	Metro
JC Vannatta	TriMet
Gina Whitehill-Baziuk	Metro

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John Cullerton	Metro
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Don Miles	Zimmer Gunsul Frasca
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Mark Raggett	Portland Planning Bureau
Dave Unsworth	Metro
Karen Whitman	Karen Whitman Projects