BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE SOUTH/NORTH LAND USE FINAL ORDER, TO INCLUDE THE TWO PHASES OF THE SOUTH CORRIDOR PROJECT CONSISTING OF THE ADDITION OF THE I-205 LIGHT RAIL TRANSIT PROJECT FROM GATEWAY TO CLACKAMAS REGIONAL CENTER WITH THE DOWNTOWN PORTLAND TRANSIT MALL ALIGNMENT, AND MODIFICATION OF THE PROPOSED LIGHT RAIL BETWEEN DOWNTOWN PORTLAND AND MILWAUKIE, DELETION OF PLANS TO EXTEND LIGHT RAIL FROM MILWAUKIE TO CLACKAMAS REGIONAL CENTER, AND TO REFLECT THE FINAL INTERSTATE MAX DESIGN	)	**RESOLUTION NO. 03-3372**
	)	Introduced by:
	)	COUNCILOR NEWMAN

WHEREAS, the Oregon Legislature enacted Oregon Laws 1996, Chapter 12 (the Act) establishing procedures for siting the South/North Light Rail Project through adoption by the Metro Council of a Land Use Final Order ("LUFO") following application by TriMet; and

WHEREAS, in accordance with Section 4 of the Act, the Oregon Land Conservation and Development Commission, following a public hearing, adopted the South/North Project land use final order criteria on May 30, 1996; and

WHEREAS, a plan for the South/North Light Rail Project was prepared and, in compliance with the Act, on July 2, 1998, TriMet applied for a corresponding LUFO; and

WHEREAS, the Metro Council, after public notice and public hearing, concluded that the TriMet LUFO application met all requirements of the Act, including the criteria, and on July 23, 1998, adopted 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, and

WHEREAS, in 1999, the Interstate MAX design and alignment was proposed and an amendment to the South/North Land Use Final Order was requested by a second application by TriMet and the Metro Council, after public notice, a public hearing and consideration of the criteria and facts, concluded that the application met all requirements of the Act and on October 28, 1999, adopted Resolution 99-2853A, For the Purpose of Adopting a Land Use Final Order Amending the Light Rail Route, Light Rail Stations, and Park-and-Ride Lots, Including Their Locations, For That Portion of the South/North Light Rail Project Extending From the Steel Bridge to the Exposition Center; and

WHEREAS, extensive analysis was completed in the South Corridor Supplemental Draft Environmental Impact Statement (SDEIS), published on December 20, 2002, which evaluated a no-build alternative, a Bus Rapid Transit Alternative, a Busway Alternative, a Milwaukie Light Rail Alternative, an I-205 Light Rail Alternative and a Combined Light Rail Alternative along with various design options; and

WHEREAS, the public was invited to comment on the SDEIS during the public comment period from December 20, 2002 through February 7, 2003, and comments received during the comment period, including at two public hearings, are documented in the South Corridor Project Public Comment Report (February 2003); and

WHEREAS, the South Corridor Policy Committee reviewed the SDEIS, considered the public comments and adopted a recommendation to amend the South/North LPS through a two-phased major transit investment strategy for the South Corridor, with the I-205 Light Rail Project as the Locally Preferred Alternative (LPA) for Phase 1 and the Milwaukie LRT for Phase 2; and

WHEREAS, the local jurisdictions in the South Corridor reviewed the Policy Committee's recommendations for a two-phased approach, including the I-205 and Milwaukie light rail transit (LRT) projects and the TriMet Board, ODOT, and the local jurisdictions each adopted a resolution supporting these recommendations; and

WHEREAS, the Metro Council, after public notice and holding a public hearing, adopted Resolution No. 03-3303 on April 17, 2003, 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, a *Downtown Amendment to the South Corridor Project Supplemental Draft Environmental Impact Statement* (ASDEIS) was published on October, 2003, the public was invited to comment on the ASDEIS during the public comment period from October 3, 2003 through November 17, 2003, and the comments received during the public comment period and a public hearing before the Mayor's Task Force and South Corridor Policy Committee on October 21, 2003 are documented in the LRT on the Downtown Transit Mall Public Comment Report dated November, 2003; and

WHEREAS, on November 24, 2003, the LUFO Steering Committee recommended to TriMet a LUFO amendment that establishes light rail routes, stations and park-and-ride lots as described in LPA described in Resolution No. 03-3303 and adopted by the Metro Council on April 17, 2003, as well as amendments showing LRT on the Downtown Portland Transit Mall and amendments that reflect final engineering changes constructed in the Interstate MAX LRT segment and deletion of plans to extend LRT from Milwaukie to the Clackamas Regional Center; and

WHEREAS, in a letter dated November 24, 2003 from Matthew Garrett, representing the Oregon Department of Transportation (ODOT), recommended to TriMet the same LUFO amendment as was recommended by the LUFO Steering Committee; and

WHEREAS, on December 10, 2003, following consideration of the recommendations from the LUFO Steering Committee and the Oregon Department of Transportation, TriMet submitted to Metro its application for an amendment of the LUFO consistent with the recommendations of the LUFO Steering Committee and ODOT; and

WHEREAS, the light rail route, stations and lot locations in TriMet's application are in the form of boundaries within which the light rail route, stations and lots shall be located, as provided for in Section 6(1)(a) of the Act; and

WHEREAS, following receipt of TriMet's application, public notice of a January 8, 2004, public hearing to consider Tri-Met's application was published on December 12, 2003 in the Oregonian, which

the Metro Council finds to be a newspaper of general circulation within Metro's jurisdictional area, and that this public notice was published more than the fourteen days prior to the January 8, 2004, public hearing; and

WHEREAS, the above-identified notice contains all of the information required by Section 7(1)(b) of the Act to be included in the Metro Council's published notice of this LUFO amendment proceeding; and

WHEREAS, the Metro Council provided additional public notice of the January 8, 2004, public hearing by mailing a notices to Clackamas and Multnomah counties, the cities of Portland, Milwaukie, Gladstone, and Oregon City; and the Oregon Department of Transportation and by posting this information on TriMet's and Metro's web pages, mailing notices to interested parties and to property owners within 100 feet of proposed changes to the past LUFO decisions; and

WHEREAS, the Metro Council finds and determines that the above-described requires published notice along with earlier notices provided to interested parties during the draft environmental impact statement process is reasonable notice calculated to give notice to persons who may be substantially affected by its decision on the proposed LUFO amendment; and

WHEREAS, on December 31, 2003, a copy of the staff report, identifying and addressing compliance with the applicable South/North land use criteria and also including a description of the proposed boundaries within which the light rail route, stations and lots are proposed to be located, was made available for public inspection; and

WHEREAS, on January 8, 2004, the Metro Council held a public hearing at which it accepted oral and written public testimony on TriMet's application for a LUFO amendment as described in these recitals; and

WHEREAS, at the January 8, 2004, public hearing the Council commenced the hearing by making a statement containing the information identified in Section 7(3) of the Act pertaining to the criteria, location of light rail, appeals and record requirements and other provisions of the Act; and

WHEREAS, the Metro Council has considered TriMet's application, the recommendations of the LUFO Steering Committee and ODOT, the staff report and the testimony provided in support of, or in opposition to TriMet's application; and

WHEREAS, the Metro Council has an interest in improving the LRT connections between Clackamas regional center and Gateway, along the Portland Transit Mall and between Milwaukie and downtown Portland, now, therefore,

BE IT RESOLVED:

1. That the Metro Council hereby adopts the Land Use Final Order amendment of the South/North Light Rail Project and the North Corridor Interstate MAX Light Rail Project as attached hereto as Exhibit A and incorporated herein by this reference, amending the light rail route, stations and lots, including their locations. As indicated in Exhibit B, attached hereto and incorporated herein by this reference, the South/North LUFO amendment hereby adopted by the Metro Council is identical to the LUFO amendment application submitted by TriMet.

2. That the Metro Council finds that the South/North Land Use Final Order, as amended, is consistent with Metro Council policies and regulations including the latest adopted versions of the *Regional*

Framework Plan, Urban Growth Management Functional Plan, 2000 Regional Transportation Plan and the *Metropolitan Transportation Improvement Plan.*

3. That the Metro Council hereby adopts the Findings of Fact and Conclusions of Law in support of the Land Use Final Order Amendment, attached hereto as Exhibit C and incorporated herein by this reference, to demonstrate that the Metro Council's decision in its adopted Land Use Final Order amendment comply with the applicable review criteria.

ADOPTED by the Metro Council this 15th day of January, 2004

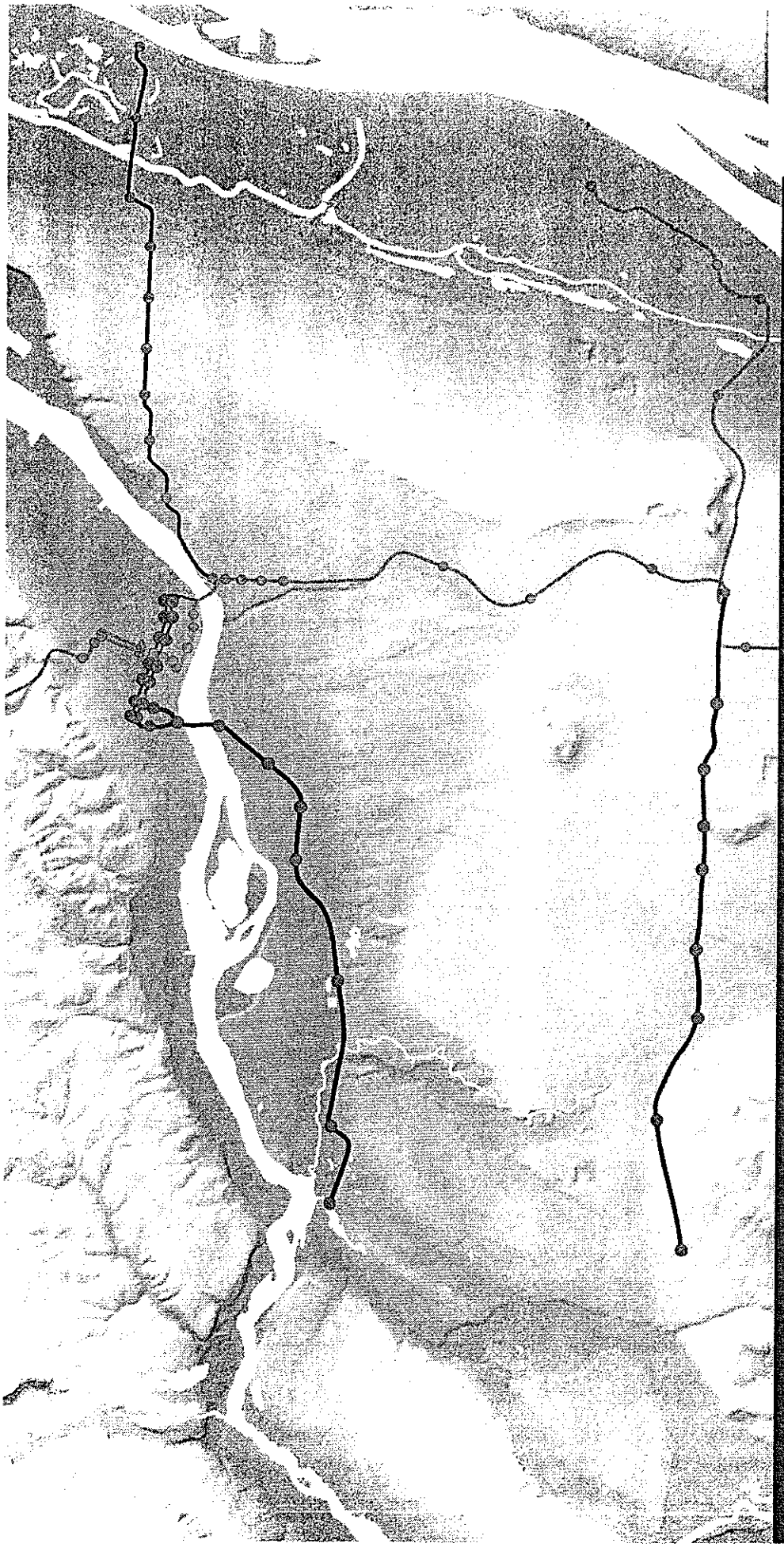
David Bragdon, President

Approved as to Form:

Daniel B. Cooper, Metro Attorney

APPROVATO APPROVED METRO COUNCIL CONSIGLIO METROPOLITANO

Exhibit A
Resolution No 03-3372



2004 SOUTH/NORTH Land Use Final Order Amendment

South Corridor Project

January 8, 2004

METRO
PEOPLE PLACES
OPEN SPACES

Metro
People places • open spaces
Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy and good transportation choices for people and businesses in our region. Voters have asked Metro to help with the challenges that cross those lines and affect the 24 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to protecting open space, caring for parks, planning for the best use of land, managing garbage disposal and increasing recycling. Metro oversees world-class facilities such as the Oregon Zoo, which contributes to conservation and education, and the Oregon Convention Center, which benefits the region's economy.

Your Metro representatives

Metro Council President
David Bragdon

Metro Councilors
Rod Park, deputy council president, District 1
Brian Newman, District 2
Carl Hosticka, District 3
Susan McLain, District 4
Rex Burkholder, District 5
Rod Monroe, District 6

Metro Auditor
Alexis Dow, CPA

Metro's Web site:
www.metro-region.org

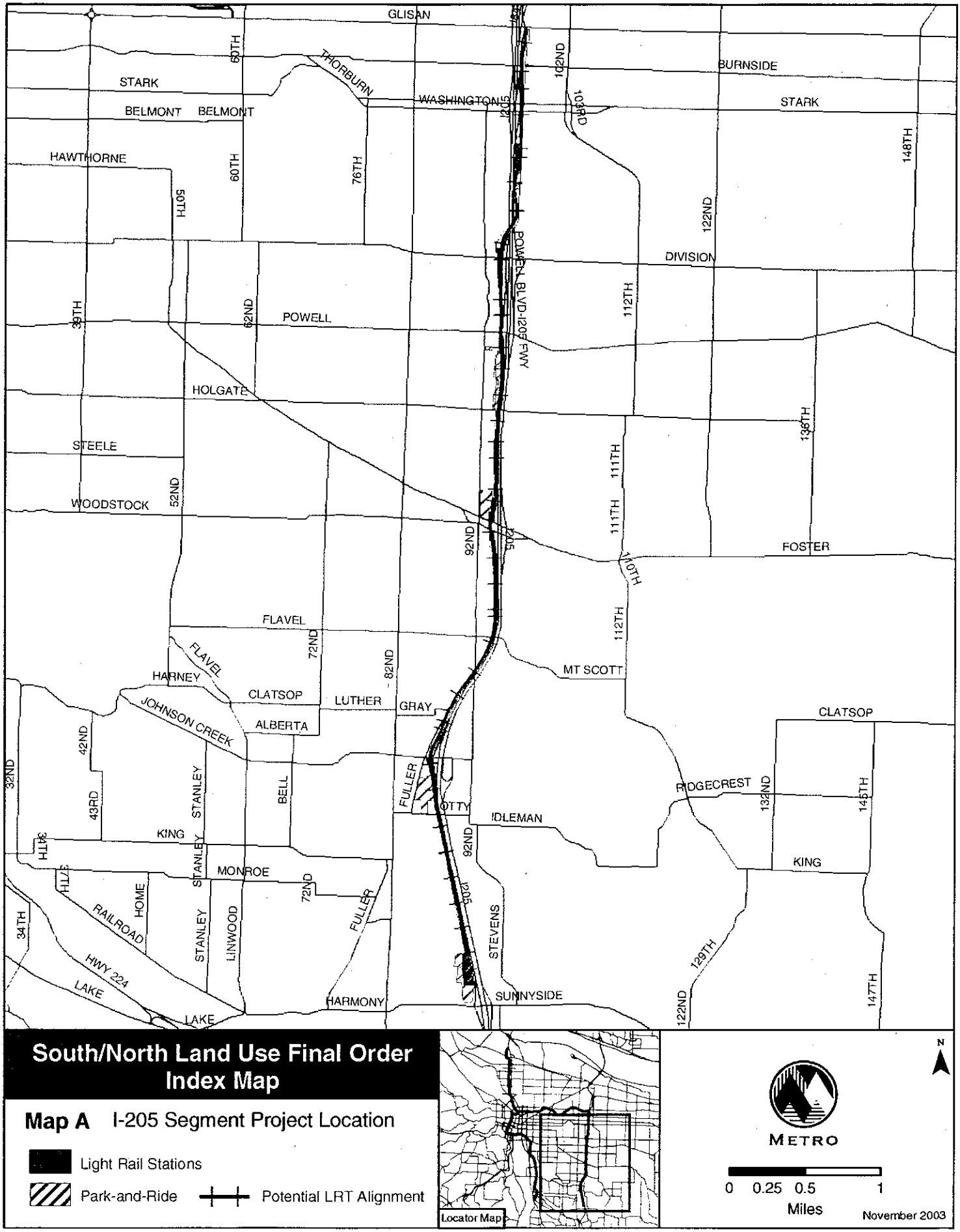
Table of Contents

1. Introduction

This document constitutes a Land Use Final Order (LUFO) for the South/North Light Rail Project (Project), in accordance with Oregon Laws 1996, Chapter 12 (House Bill 3478). The 2004 South/North LUFO Amendment amends earlier LUFOs for the Project, including the original South/North LUFO adopted by the Metro Council by Resolution No. 98-2673, on July 23, 1998, and the North Corridor Interstate MAX LUFO Amendment adopted by the Metro Council by Resolution No. 99-2853A on October 28, 1999.

This 2004 South/North LUFO Amendment includes revisions and additions which consist of: the South Corridor Project Locally Preferred Alternative, revisions to reflect the final design of the Interstate MAX alignment and station location and deletion of LRT from Milwaukie to the Clackamas Regional Center. More particularly, this LUFO amendment:

- Adds I-205 Light Rail Transit (LRT), including the extension of LRT from Gateway regional center to the Clackamas regional center and revision and extension of LRT along the Portland Transit Mall;
- Amends the Milwaukie LRT for some segments and features between downtown Portland and the Lake Road terminus;
- Deletes planned LRT from Milwaukie to the Clackamas regional center; and
- Revises Interstate Max light rail to reflect the final design.



South/North Land Use Final Order Index Map

Map A I-205 Segment Project Location

Light Rail Stations

Park-and-Ride

Potential LRT Alignment

Locator Map

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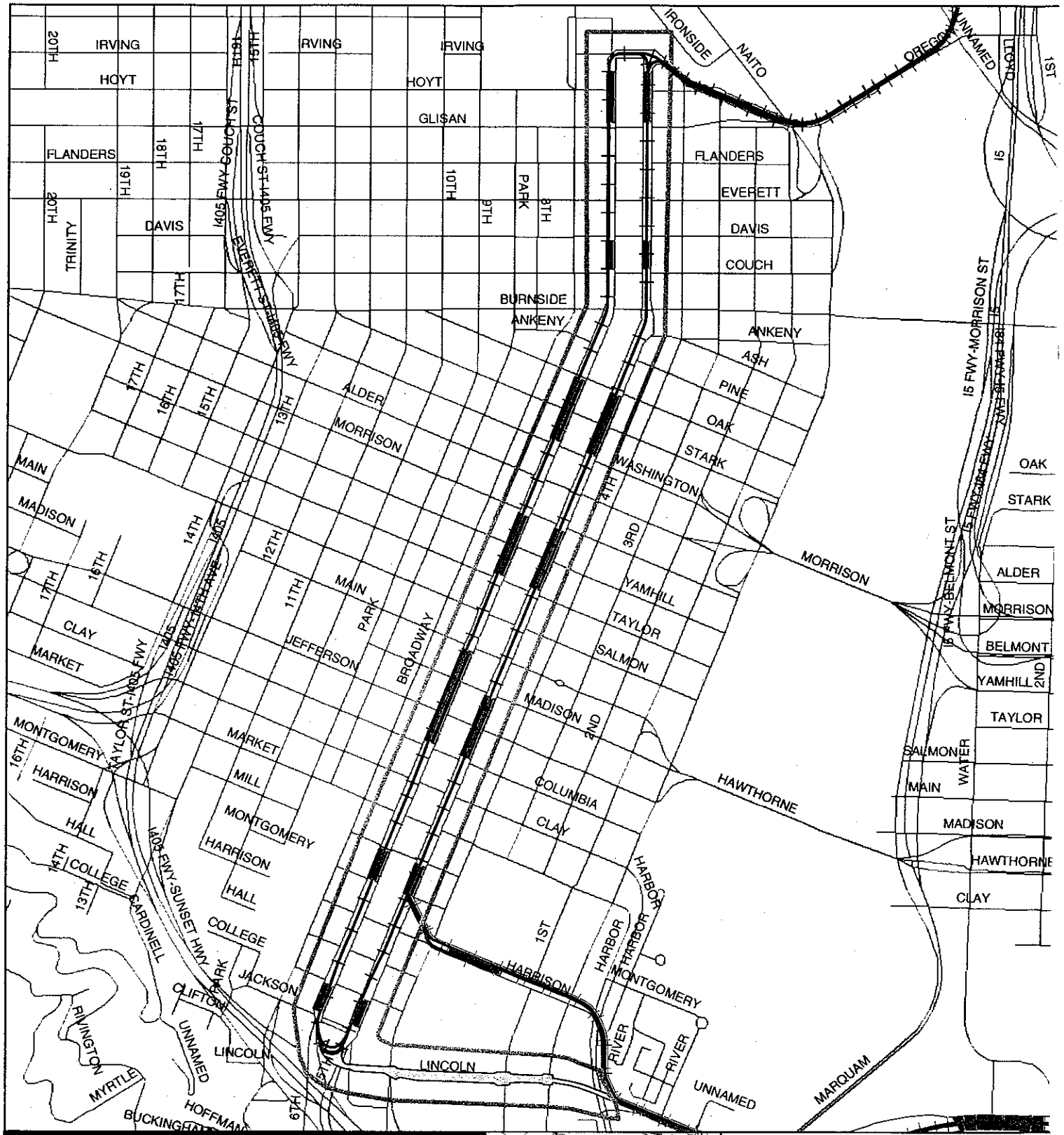
November 2003



South/North Land Use Final Order Index Map

Map B Downtown Segment Project Location

- Light Rail Stations
- Study Area
- Potential LRT Alignment
- Changes to the LUFO
- Light Rail Route

Locator Map

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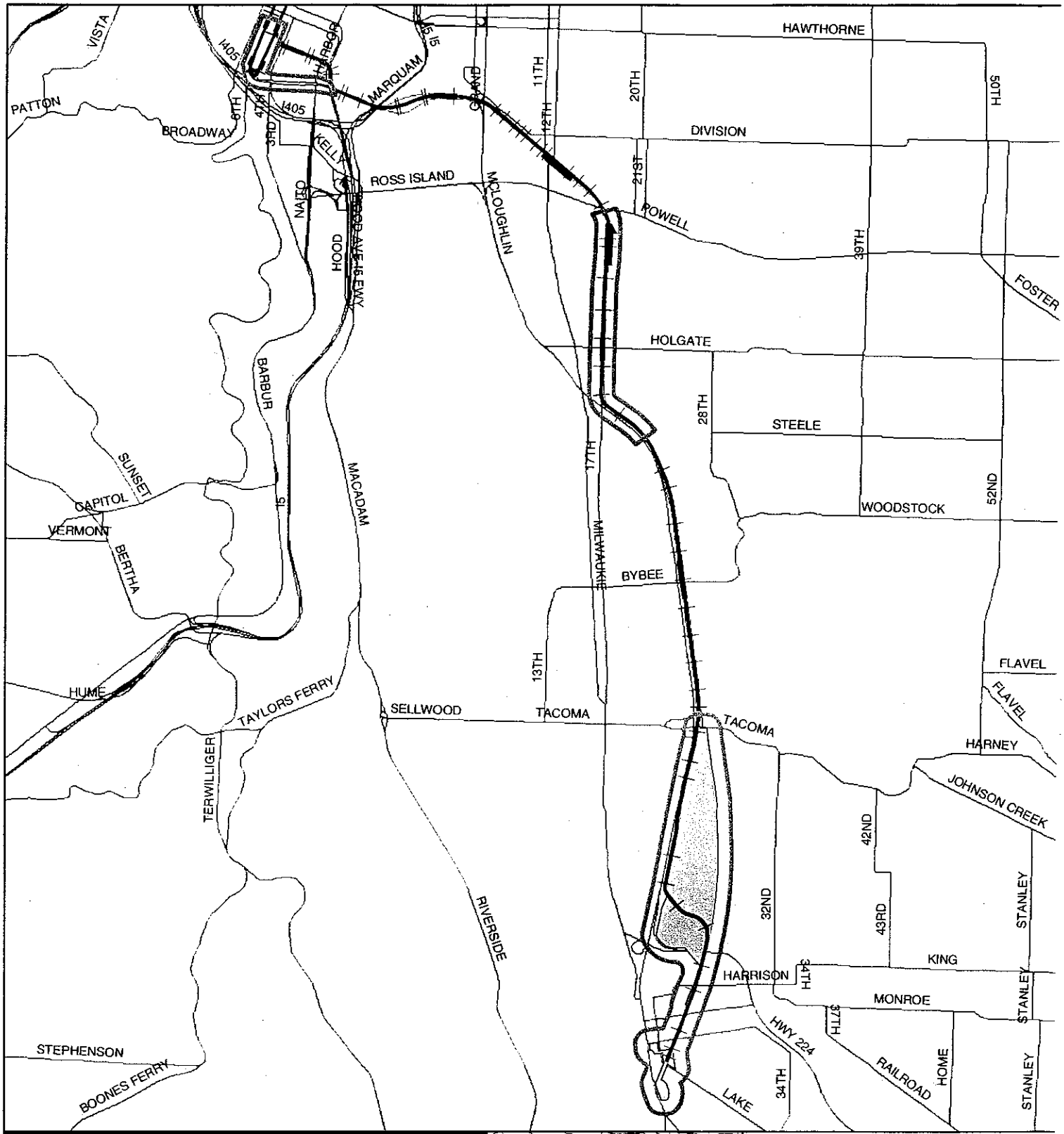
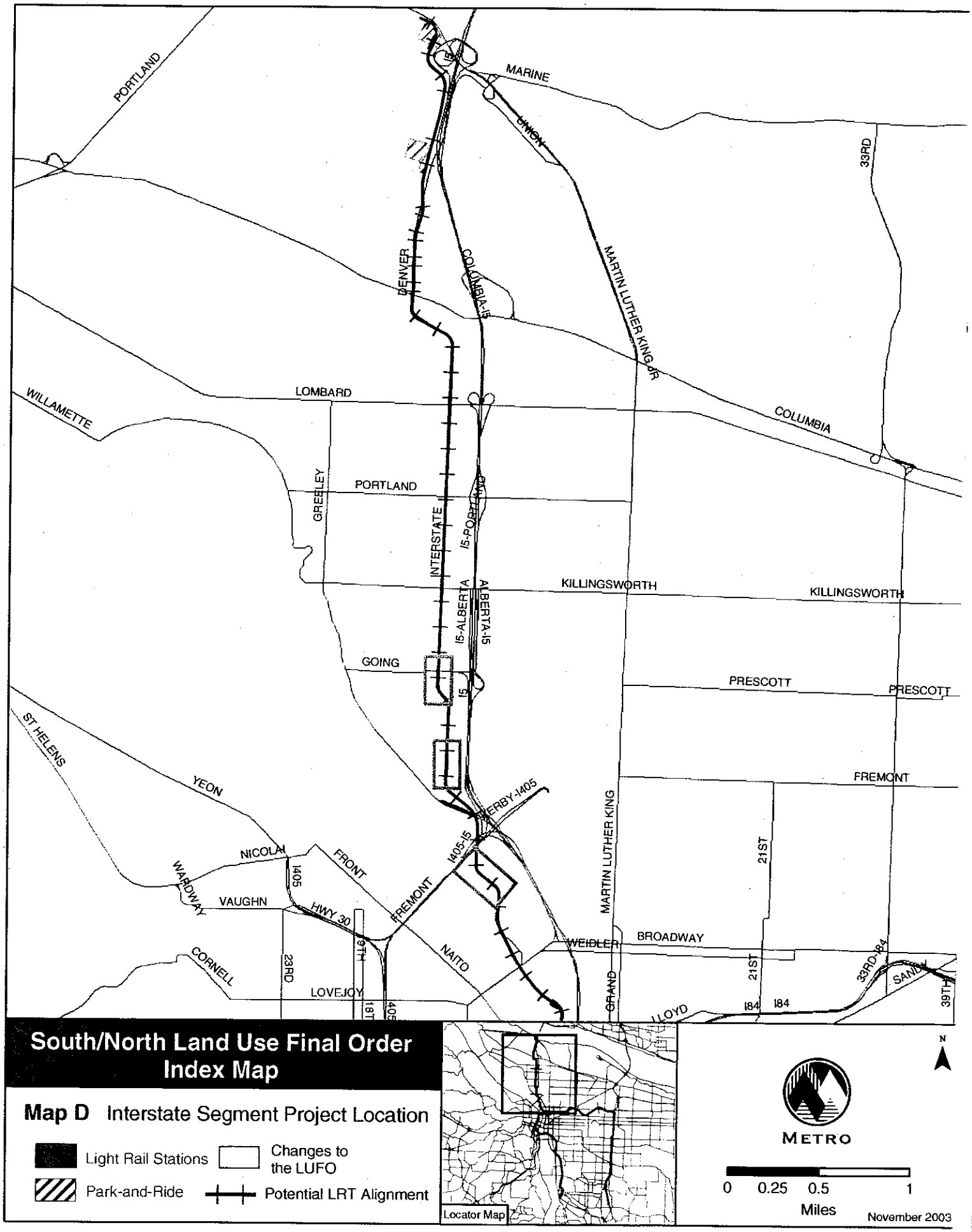


South/North Land Use Final Order Index Map

Map C Milwaukie Segment Project Location

- Light Rail Stations
- Study Area
- Changes to the LUFO
- Potential LRT Alignment



South/North Land Use Final Order Index Map

Map D Interstate Segment Project Location

- Light Rail Stations
- Changes to the LUFO
- Park-and-Ride
- Potential LRT Alignment

Locator Map

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2. Requirements of House Bill 3478

Chapter 12 of the 1996 Oregon Laws (House Bill 3478) provides procedures for siting the South/North light rail line and associated light rail and highway facilities. In brief, it provides a set of regulations for how land use decisions related to the South/North light rail project are to be made and how they may be appealed. The law includes provisions for creation of criteria by the Land Conservation and Development Commission, a requirement that TriMet make application for a land use final order, requirements for how the Metro conducts its public hearing and procedures for appeal.

Pursuant to House Bill 3478, upon application by TriMet and following a public hearing held on January 8, 2004, and in consideration of the whole record and based on a finding that there is substantial evidence supporting the proposed action, the Metro Council hereby adopts this 2004 South/North LUFO Amendment for the Project by Resolution No. 03-3372.

3. Establishment of Light Rail Routes, Stations, Park-and-Ride Lots, Maintenance Facilities and Highway Improvements, Including their Locations.

The Metro Council approves the light rail route, station and lot amendments identified below and illustrated in the following location boundary maps. These light rail facilities and improvements are identical to those for which TriMet requested Metro Council approval. Likewise, the location boundary maps are the same as those attached to TriMet's application requesting Metro Council approval.

The following attached maps are printed from a regional geographic information system database (Metro's *Regional Land Information System*, RLIS). The maps illustrate the adopted boundaries at a scale of one inch equals 500 feet. The boundaries shown on these maps represent the areas within which the light rail facilities may be located. The maps include year 2002 aerial photographs with existing property lines added to provide orientation and illustrate project facility locations, to the extent that they have been determined.

The final location of the light rail facilities, as constructed, may be built anywhere within the boundaries found on the following LUFO maps. For example, along the I-205 LRT Project, the track alignment and most of the stations and park-and-ride lots have been approved and illustrated in the Locally Preferred Alternative (LPA). However, preliminary engineering and final design have not been completed. Some variations from to the illustrations in the LPA may be needed when the project is built. Accordingly, the LUFO shows a larger, more generalized boundary than that actually needed for the track alignment, stations, etc. The final location of facilities may be constructed anywhere within the locations shown on the attached maps and be consistent with this LUFO.

Where there are location issues yet to be resolved, they are so noted on the maps as study areas. Once the study area issues are resolved, an amendment to this LUFO will be needed in order to proceed. Such future amendment would include public notice and other public process steps as specified by statute.

3.1 I-205 LRT

The I-205 LRT segment is a new alignment providing light rail service to the Clackamas Regional Center portion of the South Corridor. It replaces the previously approved alignment that would have provided light rail service to Clackamas Town Center via Highway 224 and Harmony Road in Milwaukie. The general location of the Project is shown on Map A, above.

The I-205 LRT Project extends south from the Gateway Transit Center station (which includes a park-and-ride lot) along an LRT route to be located primarily within the I-205 right of way, serving stations located at SE Main Street (including a park-and-ride lot), Division Street, Powell Boulevard (including a park-and-ride lot), Holgate Boulevard (including a park-and-ride lot), Foster Road, Flavel Street and Fuller Road (including a park-and-ride lot), ending at a station at the Clackamas Regional Center terminus (which also includes a park-and-ride lot).

In addition, the I-205 Project increases the number of trains in downtown Portland to a point where the capacity of the downtown cross-mall is exceeded and light rail on the downtown Transit Mall is proposed. The general location is shown in Map B. The proposed downtown Transit Mall alignment is similar to the alignment approved in the original 1998 South/North LUFO with the following changes:

- The location of a proposed station in the vicinity of NW Irving has been changed to a nearby location on NW Sixth Avenue between Glisan and Irving streets;
- The location of proposed stations between Burnside and NW Couch streets has been proposed to be changed to a location between NW Couch and NW Davis streets.
- The location of proposed stations between SW Washington and SW Stark streets has been extended to a location between SW Washington and SW Oak streets.
- The proposed location of stations on SW Fifth and SW Sixth avenues at Madison and Jefferson have been changed to allow stations on SW Fifth and Sixth within the existing street right-of-way between Main and Columbia streets on SW Sixth Avenue and between SW Madison and Columbia on SW Fifth Avenue;
- The proposed light rail route has been revised to include an alternative that extends south on SW Fifth and SW Sixth avenues south of Montgomery Street to a terminus at PSU at SW Lincoln.This extension includes a pair of stations on SW Fifth and Sixth avenues between SW Mill and SW Montgomery streets and a second set of stations on SW Fifth and Sixth avenues between SW College and SW Jackson streets.

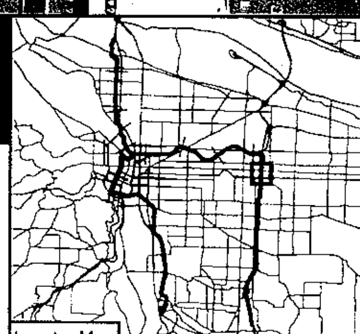
There are no maintenance facilities or highway improvements in this segment.

The specific boundaries within which the above-described light rail improvements may be located for South/North LUFO purposes are as illustrated as attached hereto in Figures 1-1 through 1-9, for the I-205 LRT segment and Figures 2-1 and 2-2 for the downtown Portland Transit Mall.

South/North Land Use Final Order Amendment Boundary Map

Figure #1-1 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform



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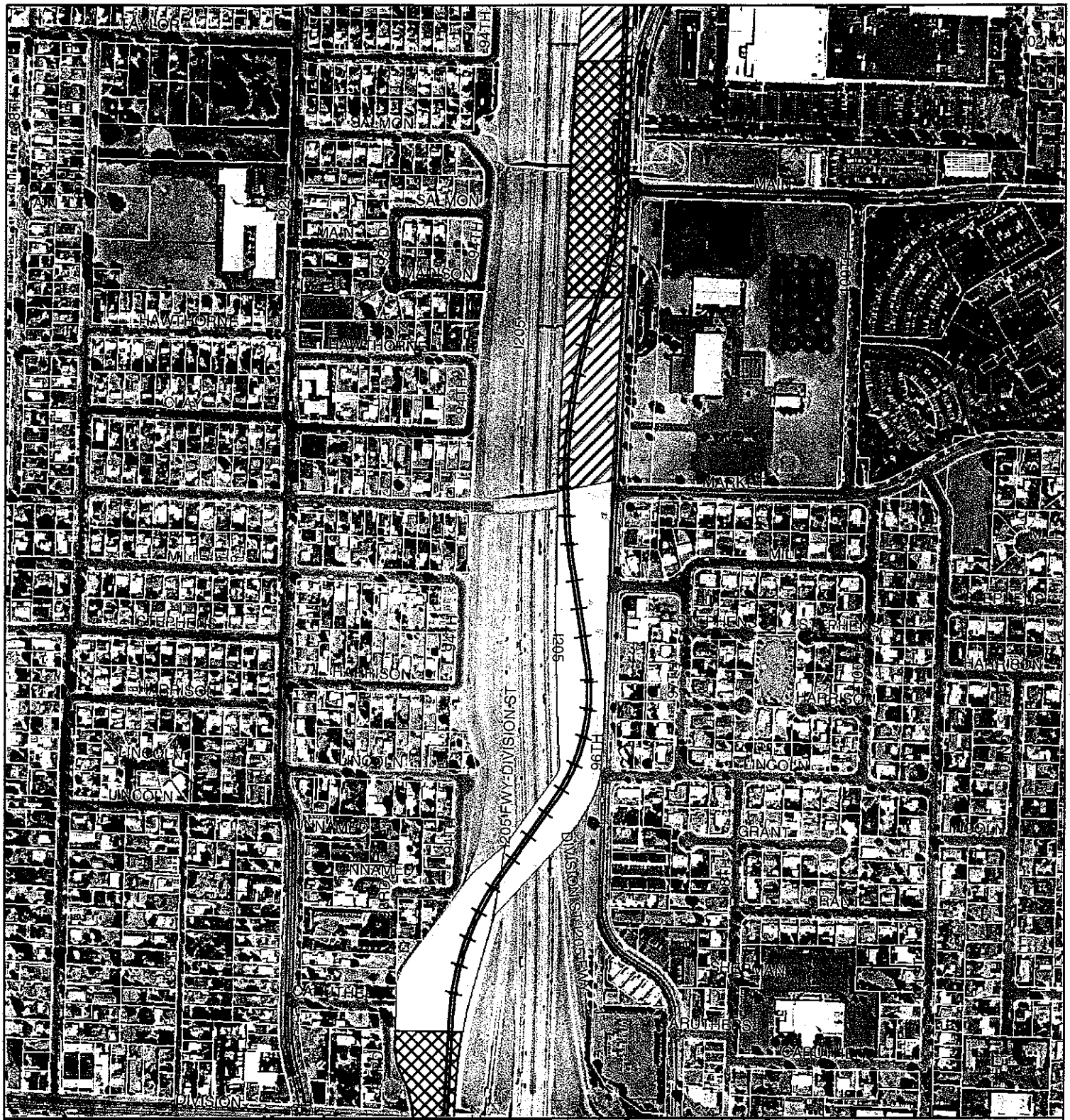
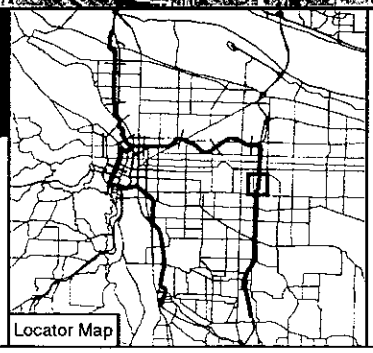


South/North Land Use Final Order Amendment Boundary Map

Figure #1-2 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform



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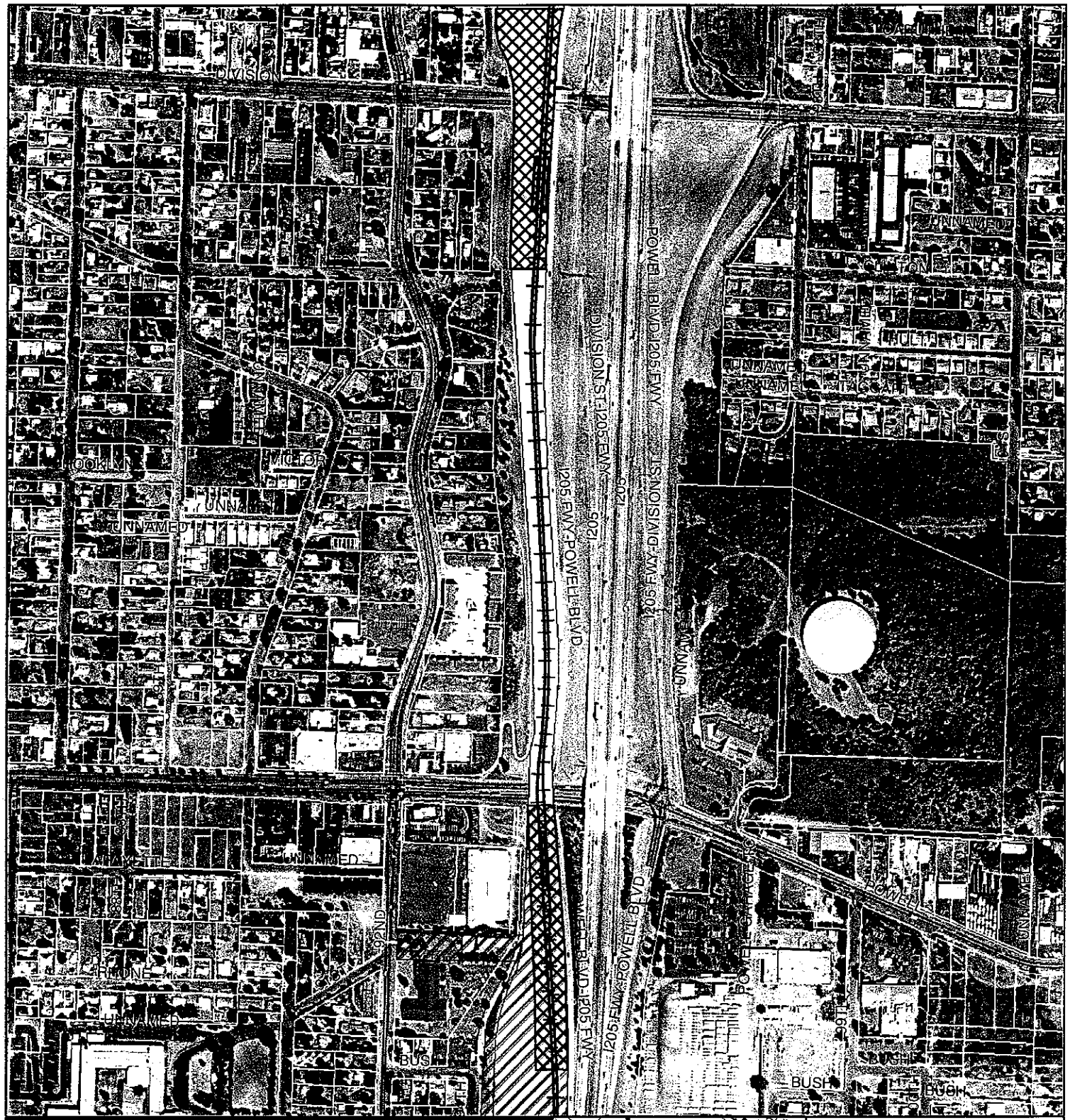

South/North Land Use Final Order Amendment Boundary Map

Figure #1-3 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform

Locator Map

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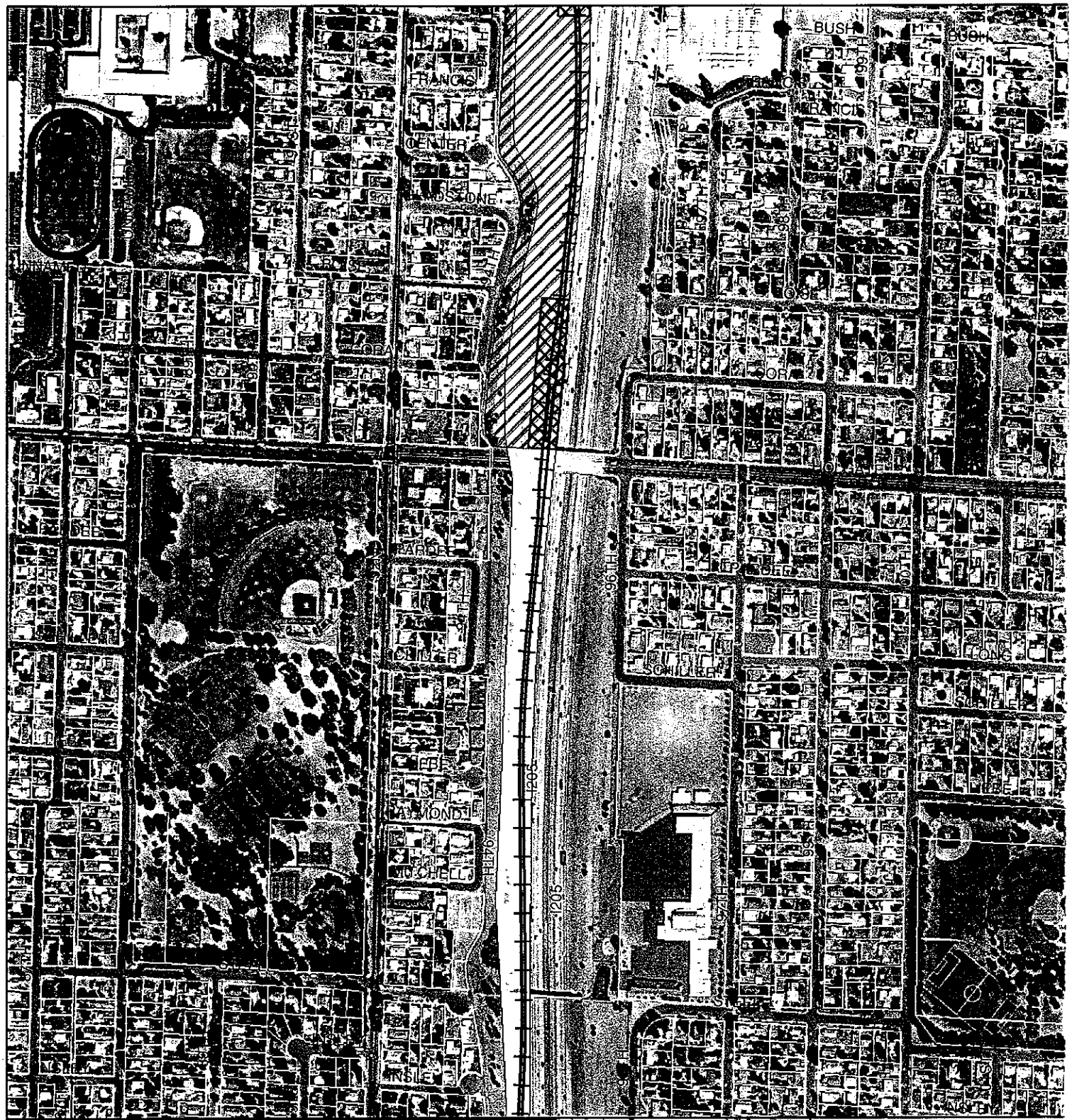

South/North Land Use Final Order Amendment Boundary Map

Figure #1-4 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform

Locator Map

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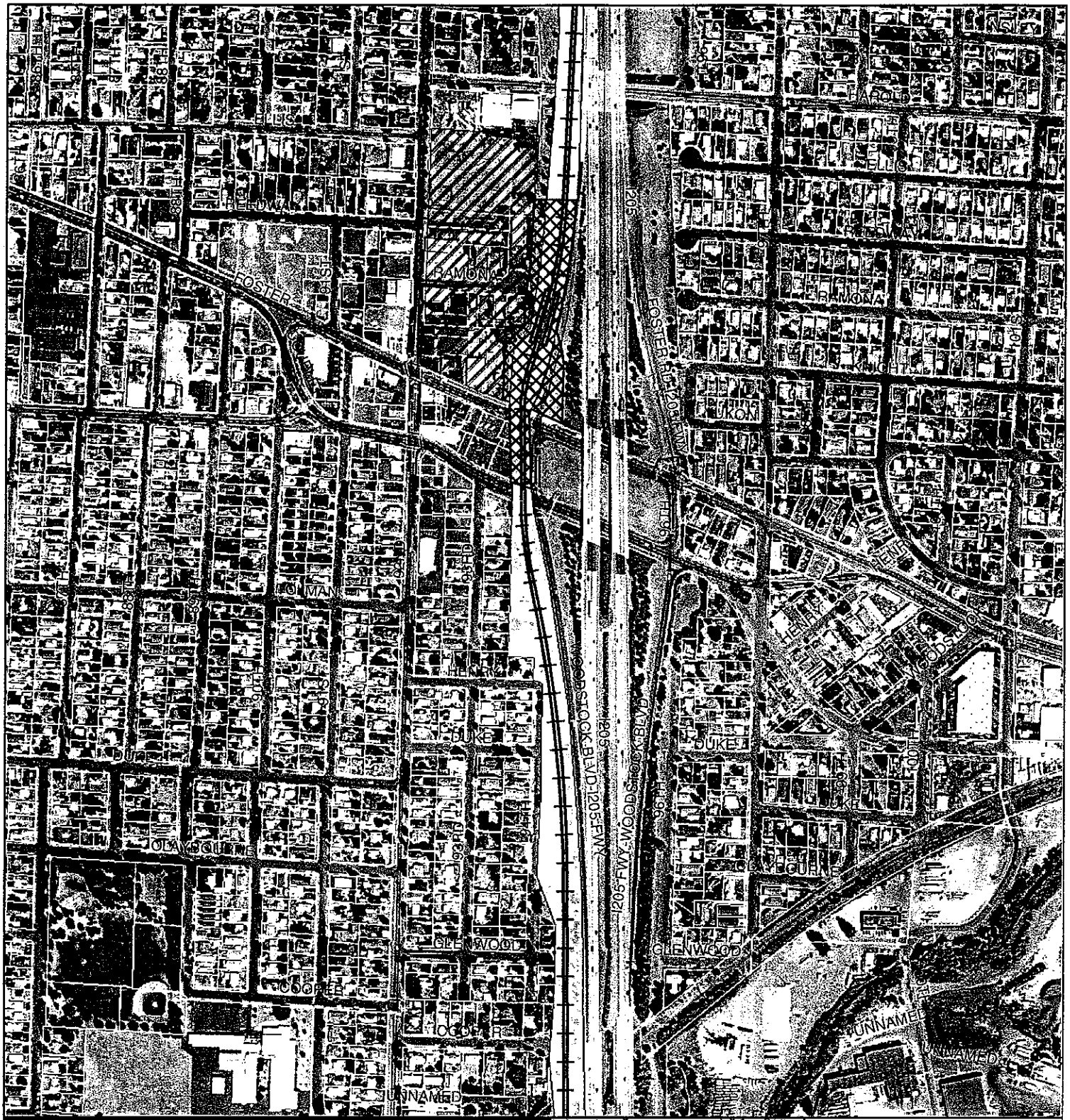
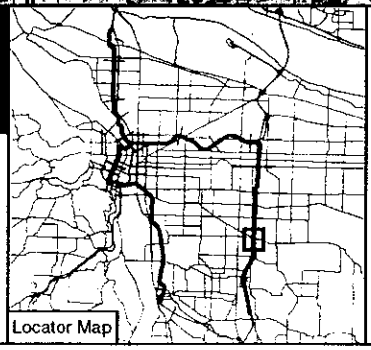


South/North Land Use Final Order Amendment Boundary Map

Figure #1-5 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform



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South/North Land Use Final Order Amendment Boundary Map

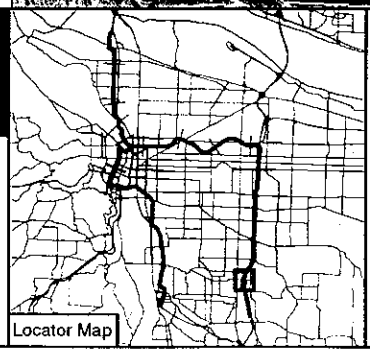
Figure #1-6 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform

South/North Land Use Final Order Amendment Boundary Map

Figure #1-7 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform



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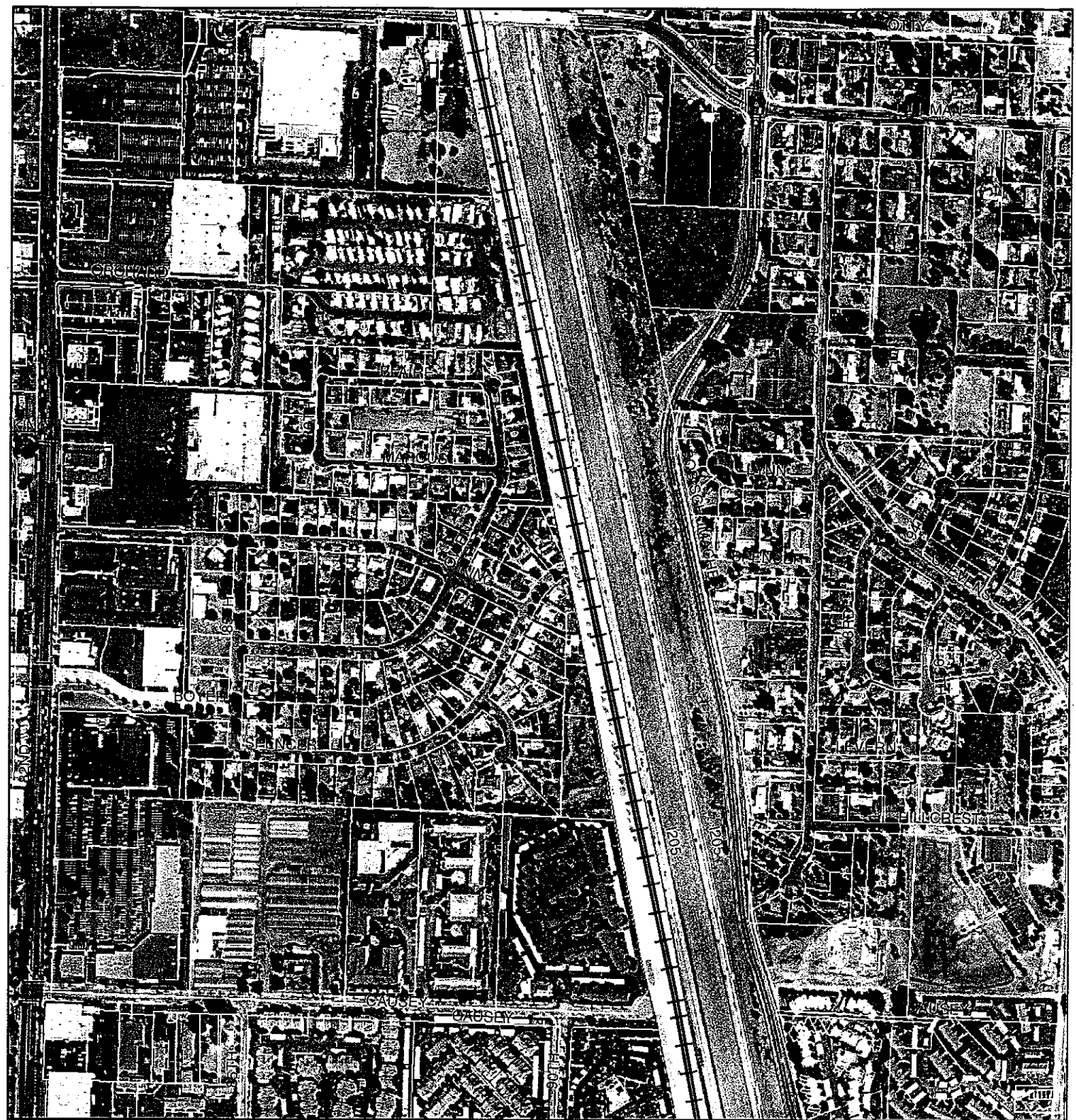
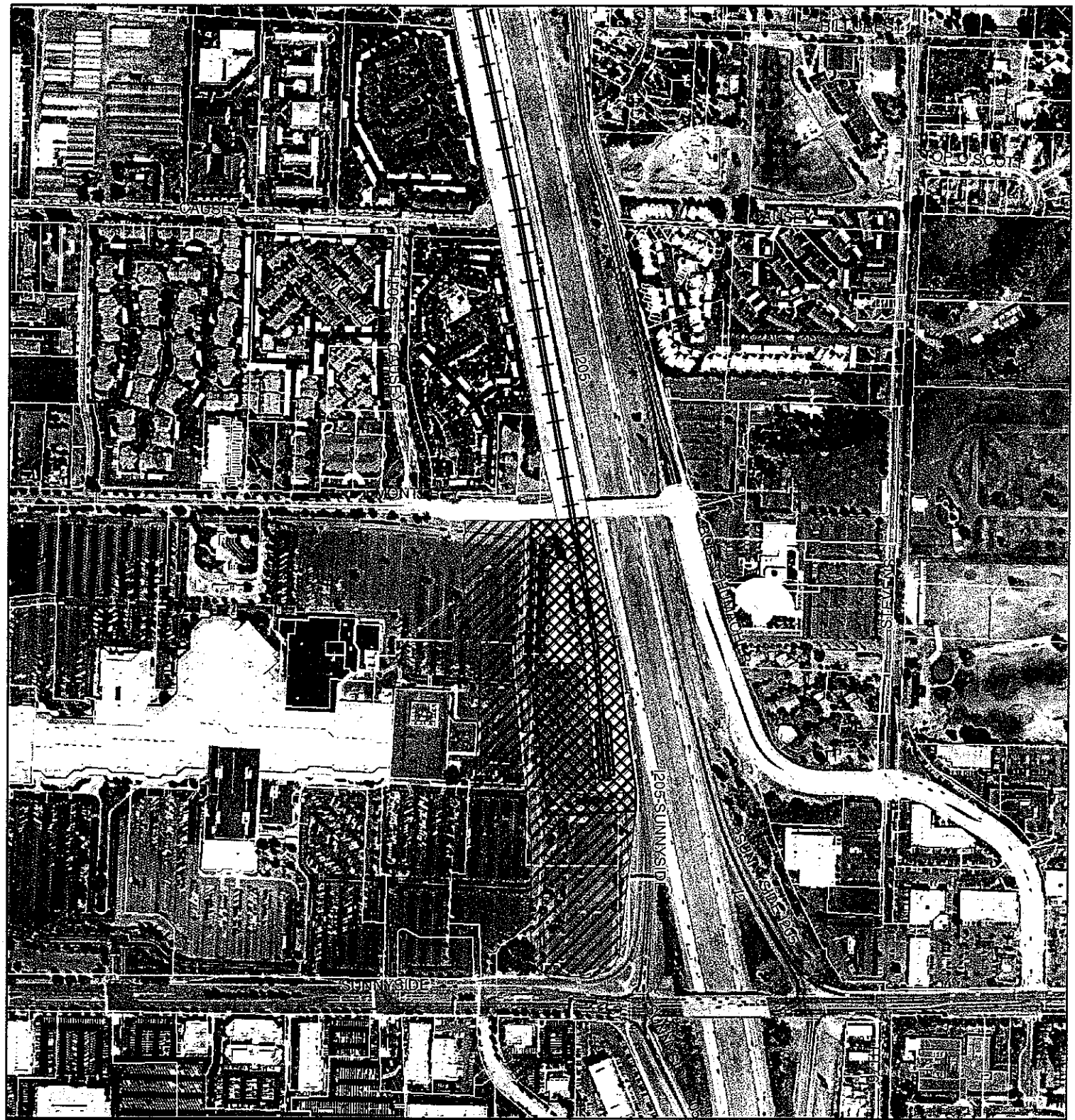


South/North Land Use Final Order Amendment Boundary Map

Figure #1-8 I-205 Light Rail Project

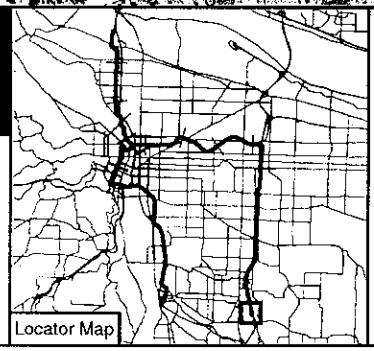
- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform



South/North Land Use Final Order Amendment Boundary Map

Figure #1-9 I-205 Light Rail Project

- Light Rail Route
- Light Rail Stations
- Park-and-Ride Lots
- Potential Alignment
- Potential Station Platform



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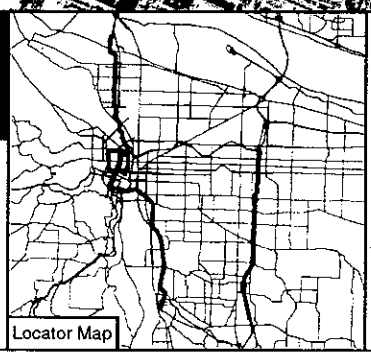
South/North Land Use Final Order Amendment Boundary Map

Figure 2-1 Downtown Light Rail Project

Light Rail Route
Study Area
Light Rail Stations
Potential Alignment



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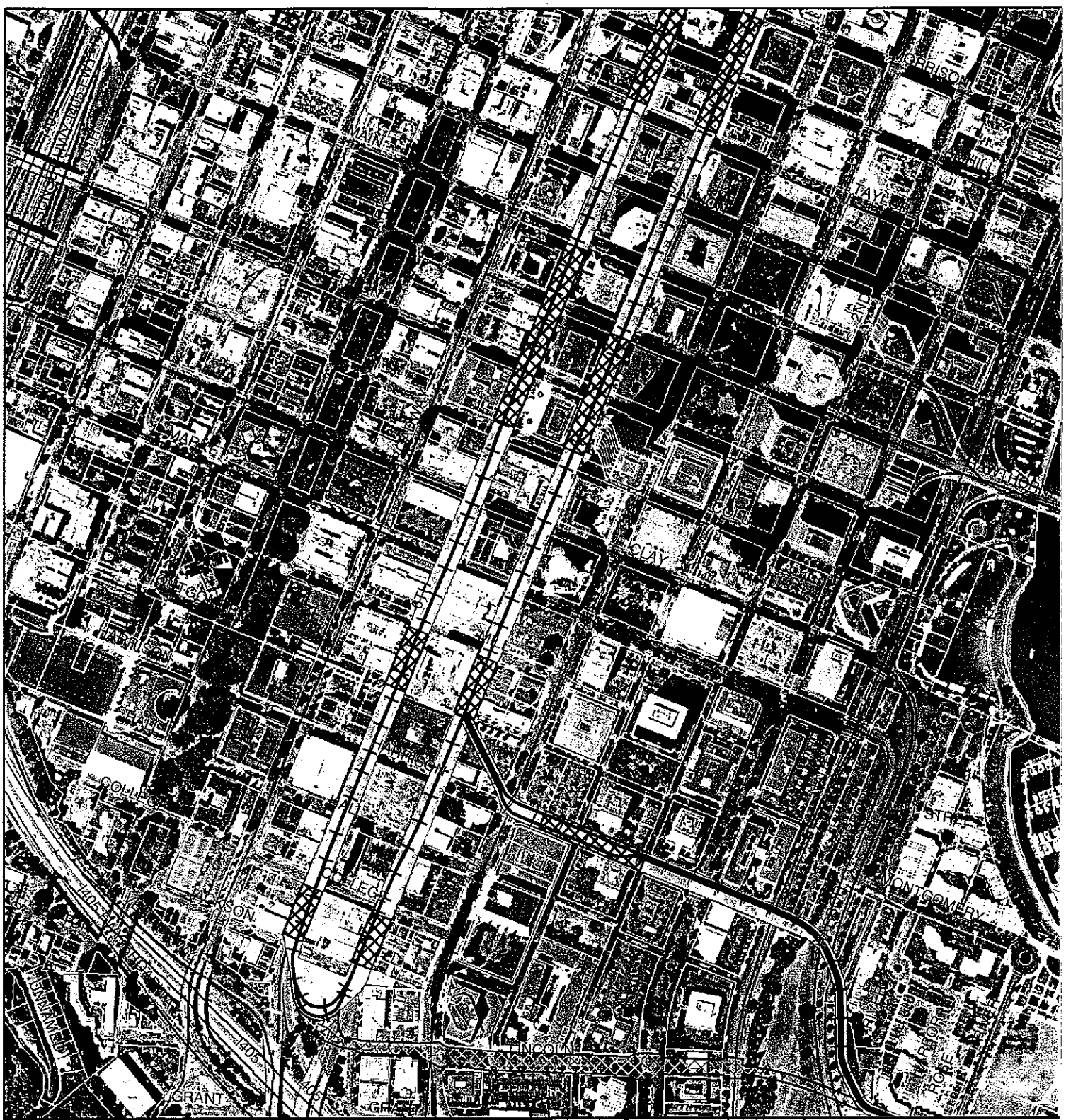
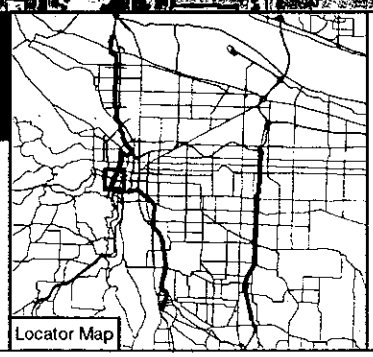


South/North Land Use Final Order Amendment Boundary Map

Figure 2-2 Downtown Light Rail Project

Light Rail Route
Study Area
Light Rail Stations
Potential Alignment



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3.2 Milwaukie LRT

The original South/North LUFO adopted in 1998 included the alignment of light rail from downtown Portland to Milwaukie and beyond to Clackamas Regional Center. This 2004 South/North LUFO Amendment deletes the segment from Milwaukie to Clackamas Regional Center and makes the following changes to the existing downtown Portland to Milwaukie LUFO alignment:

- Identifies a study area for a possible light rail route alignment from the downtown Portland Transit Mall at SW Lincoln Street and SW Fifth Avenue eastward along SW Lincoln Street, and an extension of SW Lincoln Street, to I-5. (This study area will be further analyzed. Any final decision would require a further proposed amendment of this LUFO, with all public notice and hearing requirements to be met.) This area is immediately adjacent to the proposed extension of the Portland Transit Mall, a change from the 1998 LUFO.
- Revises the light rail route and station locations from the intersection of SE Powell Boulevard south to McLoughlin Boulevard, changing the alignment from SE 18th Avenue to SE 17th Avenue.
- Designates a study area for a section of land south of Tacoma Street and generally north of Highway 224, between McLoughlin Boulevard east to the Tillamook Branch railroad line. This provides an opportunity to address issues of concern identified by City of Milwaukie, Resolution 03-2003 and included in the South Corridor Locally Preferred Alternative as Exhibit A. Once solutions are identified and there is agreement to proceed, an amendment to this LUFO would be addressed. This future LUFO amendment would need to conform to all applicable procedural and public notice requirements in the LUFO statute.
- Designates a study area at the Lake Road terminus south of Washington Street in Milwaukie and north and north east of McLoughlin Boulevard.

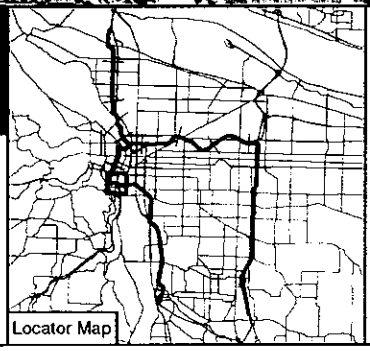
There are no maintenance facilities in this segment.

The boundaries within which the above-described light rail improvements may be located are as illustrated in Figures 3-1 through 3-6, attached hereto.

South/North Land Use Final Order Amendment Boundary Map

Figure #3-1 Milwaukie Light Rail Project

- Light Rail Route
- Light Rail Stations
- Study Area
- Potential Alignment



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0 150 300 600

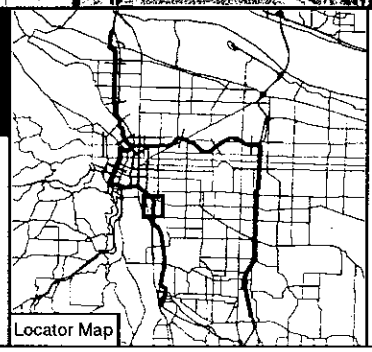
Feet

November 2003

South/North Land Use Final Order Amendment Boundary Map

Figure #3-2 Milwaukie Light Rail Project

- Light Rail Route
- Light Rail Stations
- Study Area
- Potential Alignment



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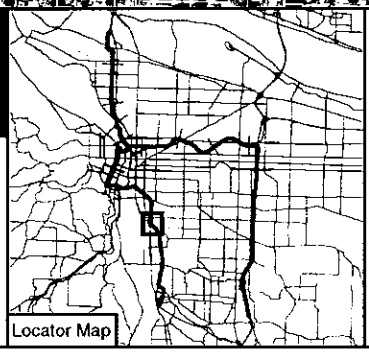
November 2003

South/North Land Use Final Order Amendment Boundary Map

Figure #3-3 Milwaukie Light Rail Project

- Light Rail Route
- Light Rail Stations
- Study Area
- Potential Alignment



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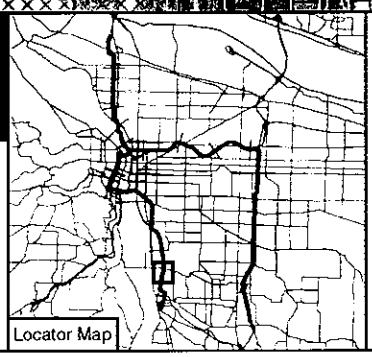
South/North Land Use Final Order Amendment Boundary Map

Figure #3-4 Milwaukie Light Rail Project

Light Rail Route

Potential Alignment

Study Area



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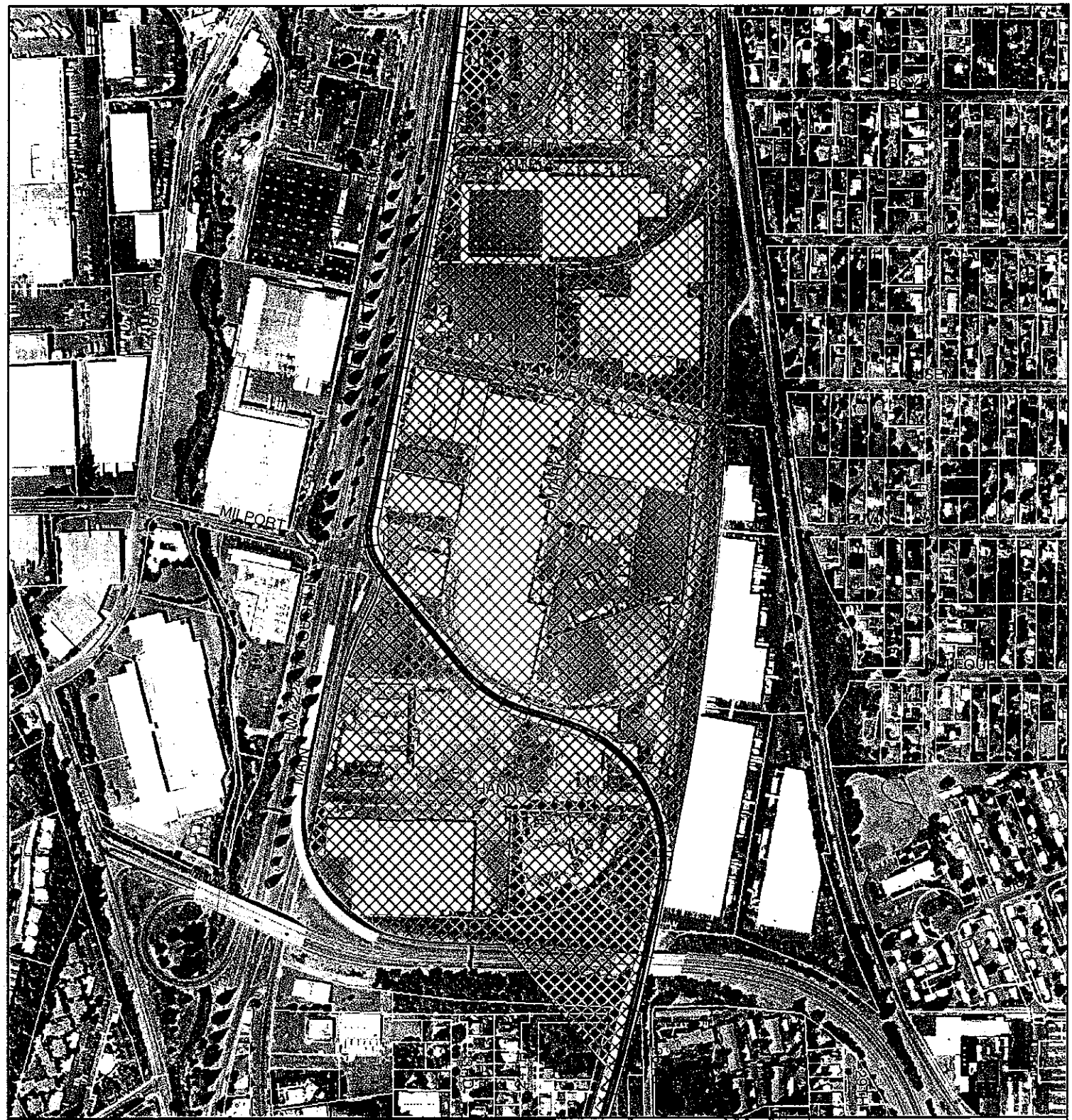
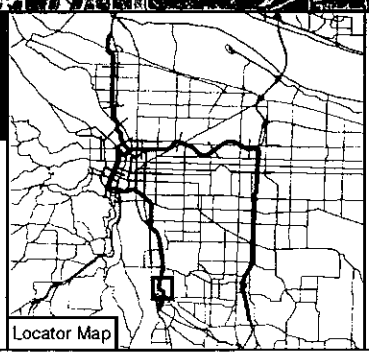


South/North Land Use Final Order Amendment Boundary Map

Figure #3-5 Milwaukie Light Rail Project

Light Rail Route

Potential Alignment



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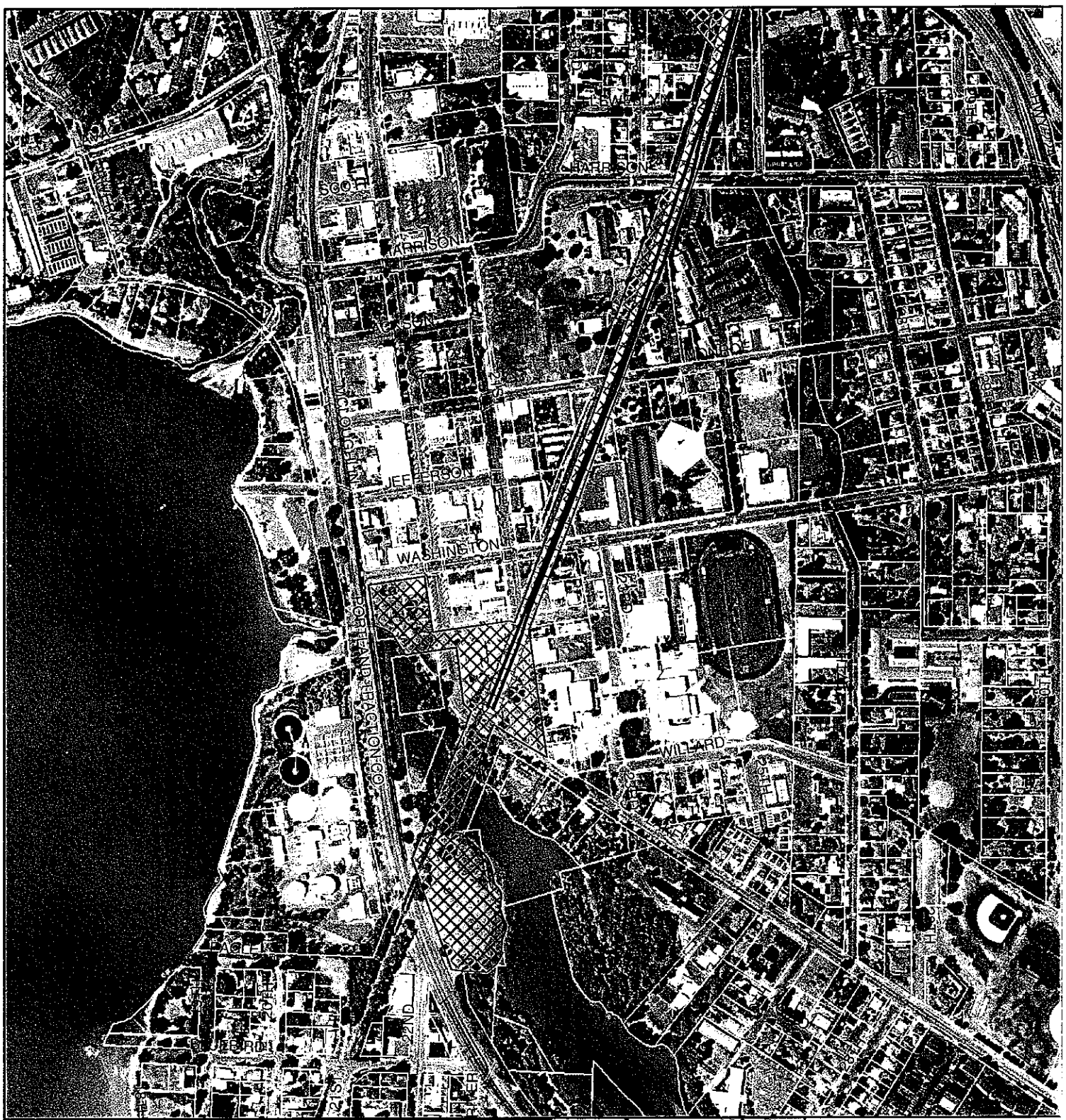

South/North Land Use Final Order Amendment Boundary Map

Figure #3-6 Milwaukie Light Rail Project

Light Rail Route

Potential Alignment

3.3 Interstate MAX

After the approval of the North Corridor Interstate MAX Land Use Final Order Amendment on October 28, 1999 and during final design and construction of the Interstate MAX, several changes were made to the location of the light rail route, stations and park-and-ride lots. These changes were made to be consistent with the full-funding agreement approved by the US Department of Transportation, Federal Transit Administration. These technical changes from the 1999 North Corridor Interstate MAX LRT Project LUFO are:

- Albina Station: the light rail station was relocated from the block between N Knott and N Russell Streets approximately 800 feet south along N Interstate Avenue to the block between N Mississippi and N Albina Avenues.

- Overlook Park Station: the Overlook Park light rail station platforms were relocated approximately 325 feet south along N Interstate Avenue, such that the south bound platform extends south from N Overlook Boulevard and the northbound platform extends north from N Fremont Street.

- Prescott Station (former North Going Street Station): the North Going Street station boundary shown north and south of the intersection between N Going Street and N Interstate Avenue was relocated to a position on the north side of North Prescott Street along North Interstate Avenue to North Skidmore Street.

- The Kenton Station was shifted from the center to the east side of N Interstate Avenue. However, the shift was entirely within the Kenton Station boundary approved in the1999 LUFO.

There are no maintenance facilities in this segment.

The boundaries within which the above-described light rail improvements may be located are as illustrated in Figures 4-1 and 4-2, attached hereto.

South/North Land Use Final Order Amendment Boundary Map

Figure #4-1 Interstate Light Rail Project

Light Rail Route

Potential Alignment

Station Platform

Locator Map

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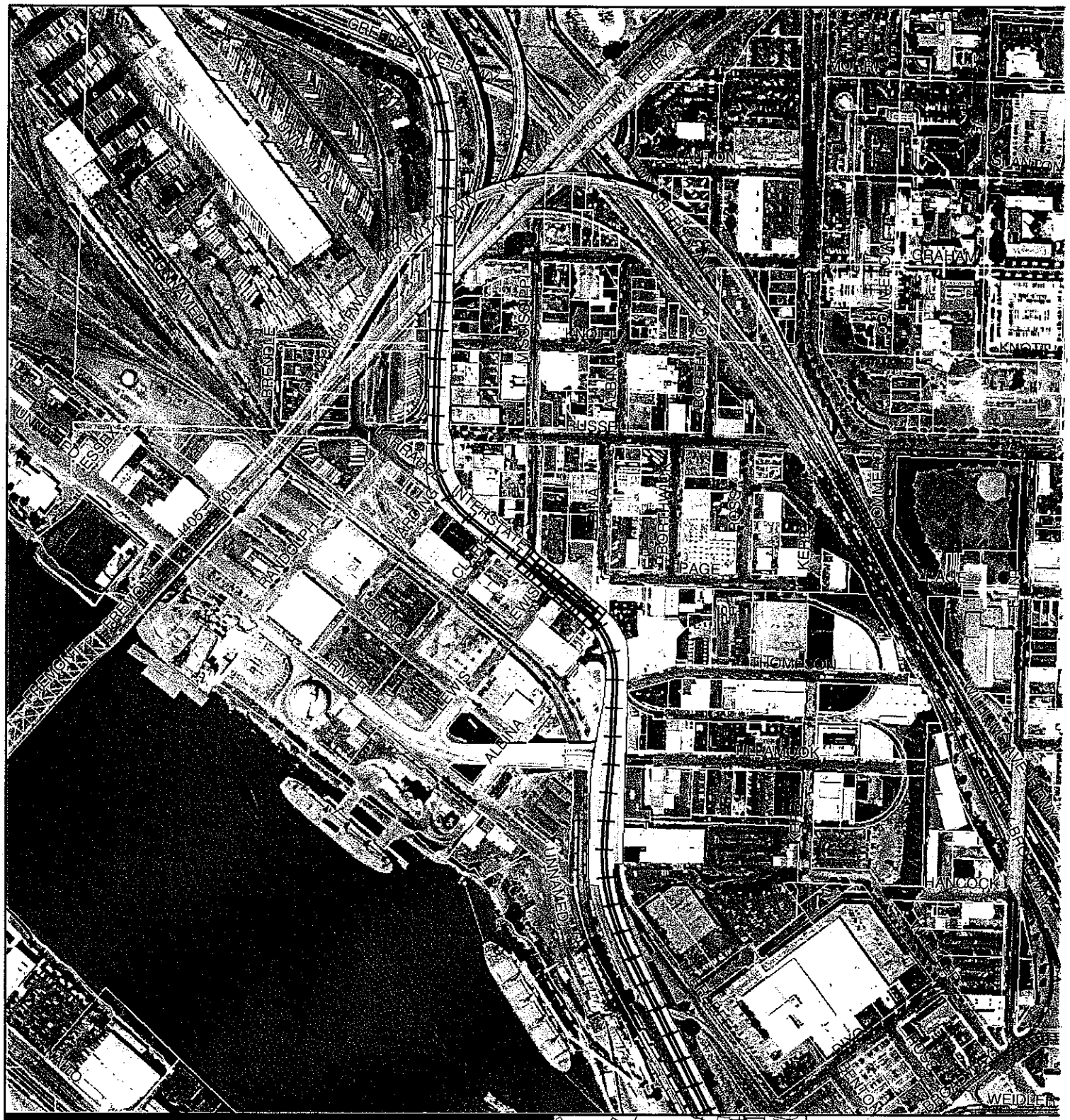
METRO

0 150 300 600

Feet

November 2003



South/North Land Use Final Order Amendment Boundary Map

Figure #4-2 Interstate Light Rail Project

Light Rail Route

Potential Alignment

Station Platform

Locator Map

N

METRO

0 150 300 600

Feet

November 2003

3.4 Milwaukie to Clackamas Regional Center

As noted in Sections 3.1 and 3.2 above, the original South/North LUFO approved extending light rail south to Milwaukie and then eastward to the Clackamas Regional Center. With the South Corridor LPA identifying extension of LRT from Gateway to Clackamas Regional Center as a first phase and a downtown Portland to Milwaukie segment as a later phase, LRT service to both Clackamas Regional Center and Milwaukie would be provided. In addition, examination of alignments between Milwaukie to Clackamas Regional Center segment were found not to garner very much local interest. Accordingly, the 2000 Regional Transportation Plan was amended to delete this segment. In turn, this LUFO amends the original South/North LUFO by also deleting planned light rail transit from Milwaukie to Clackamas Regional Center.

There are no maintenance facilities or highway segments involved in this segment.

As the plans for this light rail improvement have been removed from the 2040 Growth Concept Map and from the 2000 Regional Transportation Plan and are now proposed to be deleted from the South/North LUFO, no map of the deleted connection is included. The resulting 2004 South/North LUFO maps simply show what has been built or is proposed to be built.

4. Interpretation of Terms

For the purposes of this Land Use Final Order, the Metro Council has interpreted the terms "light rail route", "stations", "lots", "maintenance facilities" and "highway improvements" to have the following meanings:

- "***Light rail route***" means the alignment upon which the light rail tracks will be located. The light rail route will be located on land to be owned by or under the operating control of TriMet.
- "***Stations***" means those facilities to be located along the light rail route for purposes of accessing or serving the light rail system. Stations include light rail station platforms; kiss-and-ride areas; bus transfer platforms and transit centers; vendor facilities; and transit operations rooms.
- "***Lots***" means those parking structures or surface parking lots that are associated with a station, owned by or under the operating control of either TriMet or another entity with the concurrence of TriMet, and intended primarily for use by persons riding transit or carpooling. Parking structures may include some retail or office spaces in association with the primary use.
- "***Maintenance facilities***" means those facilities to be located on land to be owned or controlled by TriMet for purposes of operating, servicing, repairing or maintaining the light rail transit system, including but not limited to light rail vehicles, the light rail tracks, stations, lots, and ancillary facilities and improvements. Maintenance facilities include maintenance facility access trackways; storage tracks for light rail vehicles; service, repair and maintenance

shops and equipment; office facilities; locker rooms; control and communications rooms; transit district employee and visitor parking lots; and storage areas for materials and equipment and non-revenue vehicles.

- "***Highway improvements***" include new roads, road extensions or road widenings outside existing rights-of-ways that have independent utility in themselves and are not needed to mitigate adverse traffic impacts associated with the light rail route, stations, lots or maintenance facilities.

Additionally, the Metro Council has determined that implementation of the South/North LUFO under sections 8(1)(a) and (b) of Chapter 12 of the 1996 Oregon Laws (HB 3478), including the construction, operation and maintenance of the light rail route, stations, lots and maintenance facilities and the highway improvements for the Project, necessitates and requires development approval of certain associated actions and the permitting of certain associated or ancillary facilities or improvements. These associated actions or ancillary facilities or improvements generally are required: (1) to ensure the safe and proper functioning and operation of the light rail system; (2) to provide project access; (3) to improve traffic flow, circulation or safely in the vicinity of the Project; or (4) to mitigate adverse impacts caused to the adjoining roadway network resulting from the alignment, stations, lots or maintenance facilities. For these reasons, the Metro Council has determined that these actions, facilities or improvements are integral and necessary parts of the Project.

The Metro Council has further determined that the associated actions and ancillary facilities or improvements for the South/North Project include, but are not limited to: ties, ballast, and other track support materials such as tunnels and bridges; modifications to existing tracks; retaining walls and noise walls, culverts and other drainage systems; traction electrification equipment including maintenance facility accesses, including road accesses, pedestrian bridges and pedestrian and bicycle stops, bus pullouts, shelters, bicycle storage facilities and similar facilities. They also include temporary LRT construction-related roadways, staging areas and road or lane closures; roadway reconstruction, realignment, repair, widening, channelization, signalization or signal modification, lane reconfiguration or reduction, addition or modification of turning lanes or refuges, modification of traffic circulation patterns, or other modifications or improvements that provide or improve project access, improve traffic flow, circulation or safety in the vicinity of the Project, facilitate or are necessary for the safe or proper functioning and operation of the Project, or are necessary to mitigate adverse traffic impacts created by the Project; modifications of private roadways adjoining the Project; permanent road, lane or access closures associated with and necessitated by the Project; and other associated actions or associated or ancillary facilities or improvements related to the Project.

5. Applicable Land Use Criteria

The Oregon Land Conservation and Development Commission, as required by Section 4 of Chapter 12, 1996 Oregon Laws, adopted land use final order criteria on May 30, 1996. These criteria are to be used by the Metro Council "...in making decisions in a land use final order on the light rail route, stations, lots and maintenance facilities, and the highway improvements for the project and extension, including their locations." Compliance with these criteria must be demonstrated.

Procedural LUFO Criteria

1. Coordinate with and provide an opportunity for Clackamas and Multnomah counties, the cities of Gladstone, Milwaukie, Oregon City and Portland, the Tri-County Metropolitan Transportation District of Oregon and the Oregon Department of Transportation to submit testimony on the light rail route, light rail stations, park-and-ride lots and vehicle maintenance facilities, and the highway improvements, including their locations.

2. Hold a public hearing to provide an opportunity for the public to submit testimony on the light rail route, light rail stations, park-and-ride lots, vehicle maintenance facilities and the highway improvements, including their locations.

Substantive LUFO Criteria

3. Identify adverse economic, social and traffic impacts on affected residential, commercial and industrial neighborhoods and mixed use centers. Identify measures to reduce impacts which could be imposed as conditions of approval during the National Environmental Policy Act (NEPA) process, or, if reasonable and necessary, by affected local governments during the local permitting process.

    A. Provide for a light rail route and light rail stations, park-and-ride lots and vehicle maintenance facilities, including their locations, balancing:
        i. the need for light rail proximity and service to present or planned residential, employment and recreational areas that are capable of enhancing transit ridership;
        ii. the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and
        iii. the need to protect affected neighborhoods from the identified adverse impacts.

    B. Provide for associated highway improvements, including their locations, balancing:
        i. the need to improve the highway system with
        ii. the need to protect affected neighborhoods from the identified adverse impacts.

4. Identify adverse noise impacts and identify measures to reduce noise impacts which could be imposed as conditions of approval during the NEPA process, or if reasonable and necessary, by affected local governments during the permitting process.

5. Identify affected landslide areas, areas of severe erosion potential, areas subject to earthquake damage and lands within the 100-year floodplain. Demonstrate that adverse impacts to persons or property can be reduced or mitigated through design or construction techniques which could be imposed during the NEPA process or , if reasonable and necessary, by local governments during the permitting process.

6. Identify adverse impacts on significant fish and wildlife, scenic and open space, riparian, wetland and park and recreational areas, including the Willamette River Greenway, that are protected in acknowledged local comprehensive plans. Where adverse impacts cannot practicably be avoided, encourage the conservation of natural resources by demonstrating that there are measures to reduce or mitigate impacts which could be imposed as conditions of approval during the NEPA process, or if reasonable and necessary, by local governments during the permitting process.

7. Identify adverse impacts associated with stormwater runoff. Demonstrate that there are measures to provide adequate stormwater drainage retention or removal and protect water quality which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

8. Identify adverse impacts on significant historic and cultural resources protected in acknowledged comprehensive plans. Where adverse impacts cannot be practicably be avoided, identify local, state or federal review processes that are available to address and to reduce adverse impacts to the affected resources.

Alignment-Specific Criteria

9. Consider a light rail route connecting the Clackamas Town Center area with the City of Milwaukie's Downtown. Consider an extension of the light rail route connecting the City of Oregon City and the City of Gladstone with the City of Milwaukie via the Interstate 205 corridor and/or the McLoughlin Boulevard corridor.

10. Consider a light rail route connecting Portland's Central City with the City of Milwaukie's Downtown via inner southeast Portland neighborhoods and, in the City of Milwaukie, the McLoughlin Boulevard corridor, and further connecting the Central City with north and inner northeast Portland neighborhoods via the Interstate 5/Interstate Avenue corridor.

TRIMET

Exhibit B
Resolution No 03-3372

December 11, 2003

David Bragdon, President
Metro
600 NE Grand Avenue
Portland, OR 97232-2736

Re : Application to Amend South/North LUFO

Dear Mr. Bragdon:

Enclosed please find TriMet's Application for approval of a Land Use Final Order (LUFO) amending the original South/North Light Rail Project (South/North Project) LUFO adopted by the Metro Council in July 1998, and the North Corridor Interstate MAX LUFO Amendment adopted by the Metro Council in October 1999. Also enclosed is a copy of TriMet's Board Resolution authorizing submission of the LUFO Application to Metro.

The LUFO application is being submitted to Metro pursuant to the provisions of 1996 Oregon Laws, Chapter 12 (House Bill 3478), which directs TriMet to submit such an application to the Metro Council after TriMet has received recommendations from the LUFO Steering Committee and the Oregon Department of Transportation. I am pleased to report that TriMet has now received and considered both of those recommendations as noted in the Application and its attachments.

This LUFO Application is consistent with the recommendations of the Steering Committee and ODOT, in both the facilities and improvements it proposes.

The enclosed LUFO Application will provide the basis for the findings to be made as part of Metro's adoption of the subject Amendment to the Land Use Final Order. I am requesting that Metro schedule a public hearing and Council action on this application by the end of January 2004.

Thank you for your cooperation and assistance on this very important component of our planned regional transportation system.

Very truly yours,

Fred Hansen

Fred Hansen
General Manager

Enclosures

cc: Neil McFarlane
Brian Playfair
Tamara Lewis
Richard Brandman
Sharon Kelly

Application for South/North Land Use Final Order Amendment
South/North Light Rail Project
December 10, 2003

A. Introduction.

This document constitutes TriMet's application to the Metro Council for approval of a Land Use Final Order (LUFO) amending the original South/North Light Rail Project (South/North Project) LUFO adopted by the Metro Council by Resolution No. 98-2673 on July 23, 1998, and the North Corridor Interstate MAX LUFO Amendment adopted by the Metro Council by Resolution No. 99-2853A on October 28, 1999. A LUFO is a written order or orders of the Metro Council deciding the light rail route, the light rail stations, park-and-ride lots and maintenance facilities, and the highway improvements for the South/North Project, including their locations.

This application seeks to amend the original LUFO by adding the South Corridor Project Locally Preferred Alternative (LPA) and deleting light rail transit (LRT) from Milwaukie to the Clackamas Regional Center, and to amend the North Corridor Interstate MAX LUFO Amendment to reflect the final design of the Interstate MAX alignment and station locations. More particularly, this LUFO amendment:

- Adds I-205 LRT, including the extension of LRT from Gateway Regional Center to the Clackamas Regional Center and revision and extension of LRT along the Portland Transit Mall;
- Amends the Milwaukie LRT for some segments and features between downtown Portland and the Lake Road terminus;
- Deletes planned LRT from Milwaukie to the Clackamas Regional Center; and
- Revises Interstate Max light rail to reflect final design changes made to be consistent with the full-funding grant agreement approved for the project.

B. Requirements of House Bill 3478.

Section 6(1) of House Bill 3478 authorizes the Metro Council, upon application by TriMet, to adopt land use final orders for the South/North Project. The LUFO identifies the light rail route, stations, lots and maintenance facilities, and the highway improvements that comprise the South/North Project, and it further specifies the locations within which these facilities and improvements may be located. As explained in Section 6(1)(a) of the Act:

> "The applied-for locations shall be in the form of boundaries within which the light rail route, stations, lots and maintenance facilities, and the highway improvements, shall be located. These boundaries shall be sufficient to accommodate adjustments to the specific placements of the light rail route, stations, lots and maintenance facilities, and the highway improvements for which

need commonly arises upon the development of more detailed environmental or engineering data following approval of a Full Funding Grant Agreement."

Section 6(2) of the Act addresses amendments to the original LUFO. As relevant to this proceeding, it provides that any siting of the light rail route or a station, lot or maintenance facility outside the boundaries previously established in a LUFO, or any new station, lot or maintenance facility, "shall require a land use final order amendment or a new land use final order which shall be adopted in accordance with the process provided for in subsection (1) of this section."

Section 6(1) of House Bill 3478 directs TriMet to file its application with the Council following its receipt of recommendations from the Department of Transportation and the South/North LUFO Steering Committee established pursuant to Section 1(21) of the Act. On November 24, 2003, the South/North LUFO Steering Committee adopted its recommendations to TriMet on the light rail route, stations and park-and-ride lots for that portion of the South/North Project subject to this LUFO amendment application. On November 26, 2003, the Oregon Department of Transportation provided recommendations in the form of a letter to the TriMet Board of Directors from Matt Garrett, Region 1 Manager, endorsing the LUFO amendments recommended by the LUFO Steering Committee. TriMet has received and considered these recommendations from the South/North LUFO Steering Committee and ODOT, copies of which are attached to this application. TriMet's application is consistent with those recommendations.

House Bill 3478 further requires the Metro Council to demonstrate that its decisions comply with approval criteria established by the Land Conservation and Development Commission (LCDC) under Section 4 of the Act. These criteria are identified later in this application.

C. **Requested Light Rail Improvements.**

TriMet requests that Metro Council adopt a LUFO amending the original July 23, 1998 South/North Project LUFO and the October 28, 1999 Interstate MAX LUFO Amendment to approve the light rail route and the stations and park-and-ride lots identified textually below and in the maps attached to the Steering Committee recommendation (Figures 1-1 through 1-9, 2-1 through 2-2, 3-1 through 3-6, and 4-1 through 4-2), which illustrate the location "boundaries" as required by Section 6(1)(a) of HB 3478. Those maps are incorporated herein and made a part of this application.

All of the maps are printed from a regional geographic information system database (Metro's *Regional Land Information System*, RLIS). The maps illustrate the recommended boundaries at a scale of one inch equals 500 feet.

The boundaries shown on the maps represent the areas within which the light rail facilities may be located. The maps generally show the existing property lines and major buildings to provide orientation and clarity with respect to the proposed project facility locations. The exact location of the light rail tracks and station platforms may fall anywhere within the light rail route and station boundaries shown on the maps. For example, for I-205 LRT, the track alignment and most of the stations and park-and-ride lots have been approved and illustrated in the LPA.

However, preliminary engineering and final design have not been completed. As a result, some variations from the illustrations in the LPA may be needed when the project is built. The LUFO maps accordingly show a larger, more generalized boundary than that actually needed for the track alignment, stations, and park-and-ride lots.

In some instances, there are location issues yet to be resolved. These are noted on the maps as study areas. Once the study area issues are resolved, an amendment to this LUFO will be needed in order to proceed. Such a future amendment would include public notice and other public process steps as specified in House Bill 3478.

The applied-for amendments primarily consist of the following: (1) addition of I-205 LRT from Gateway regional center to the Clackamas regional center; (2) revision and extension of LRT along the Portland Transit Mall; (3) amendment of Milwaukie LRT for some segments and features between downtown Portland and the Lake Road terminus; (4) deletion of planned LRT from Milwaukie to the Clackamas regional center; and (5) revision of Interstate Max LRT to reflect the final design. For each of these amendments, this application begins with a brief summary of the area, followed by identification of the applied-for light rail route, stations and park-and-ride lots. No maintenance facilities or highway improvements are requested in this application.

The light rail route, and the light rail stations and park-and-ride lots for which TriMet seeks approval are as follows:

I-205 LRT

The I-205 LRT segment is a new alignment providing light rail service to the Clackamas Regional Center portion of the South Corridor. It replaces the previously approved alignment that would have provided light rail service to Clackamas Regional Center via Highway 224 and Harmony Road in Milwaukie. The general location of the alignment is shown on Index Map A to the Steering Committee recommendation, incorporated by this reference herein.

The I-205 LRT alignment extends south from the Gateway Transit Center station (which includes a park-and-ride lot) along an LRT route to be located primarily within the I-205 right of way, serving stations located in the vicinity of SE Main Street (including a park-and-ride lot), Division Street, Powell Boulevard (including a park-and-ride lot), Holgate Boulevard (including a park-and-ride lot), Foster Road, Flavel Street and Fuller Road (including a park-and-ride lot), ending at a station at the Clackamas Regional Center terminus (which also includes a park-and-ride lot).

There are no maintenance facilities or highway improvements proposed for this segment.

The proposed boundaries within which the above-described light rail improvements may be located are as illustrated in Figures 1-1 through 1-9, attached to the LUFO Steering Committee recommendation.

Portland Transit Mall

The I-205 LRT segment of the South/North Project will increase the number of trains in downtown Portland to a point where the capacity of the downtown cross-mall is exceeded and light rail on the downtown Transit Mall is proposed. The general location is shown in Map B to the Steering Committee recommendation, incorporated by this reference herein.

The proposed downtown Transit Mall alignment is similar to the alignment approved in the original 1998 South/North LUFO with the following changes:

- The location of a proposed station in the vicinity of NW Irving has been changed to a nearby location on NW Sixth Avenue between Glisan and Irving streets;

- The location of proposed stations between Burnside and NW Couch streets has been proposed to be changed to a location between NW Couch and NW Davis streets;

- The location of proposed stations between SW Washington and SW Stark streets has been extended to a location between SW Washington and SW Oak streets;

- The proposed location of stations on SW Fifth and SW Sixth avenues at Madison and Jefferson have been changed to allow stations on SW Fifth and Sixth within the existing street right-of-way between Main and Columbia streets on SW Sixth Avenue and between SW Madison and Columbia on SW Fifth Avenue;

- The proposed light rail route has been revised to include an alternative that extends south on SW Fifth and SW Sixth avenues south of Montgomery Street to a terminus near Portland State University at SW Lincoln. This extension includes a pair of stations on SW Fifth and Sixth avenues between SW Mill and SW Montgomery streets and a second set of stations on SW Fifth and Sixth avenues between SW College and SW Jackson streets.

There are no maintenance facilities or highway improvements proposed for this segment.

The proposed boundaries within which the above-described light rail improvements may be located are as illustrated in Figures 2-1 and 2-2, attached to the LUFO Steering Committee recommendation.

Milwaukie LRT

The original South/North LUFO adopted in 1998 included the alignment of light rail from downtown Portland to Milwaukie and beyond to Clackamas Regional Center. The applied-for amendment deletes the segment from Milwaukie to Clackamas Regional Center and makes the following changes to the existing downtown Portland to Milwaukie LUFO alignment:

- Identifies a study area for a possible light rail route alignment from the downtown Portland Transit Mall at SW Lincoln Street and SW Fifth Avenue eastward along SW

Lincoln Street, and an extension of SW Lincoln Street, to I-5. (This study area will be further analyzed. Any final decision would require a further proposed amendment of this LUFO, with all public notice and hearing requirements to be met.) This area is immediately adjacent to the proposed extension of the Portland Transit Mall, a change from the 1998 LUFO.

- Revises the light rail route and station locations from the intersection of SE Powell Boulevard south to McLoughlin Boulevard, changing the alignment from SE 18th Avenue to SE 17th Avenue.

- Designates a study area for a section of land south of Tacoma Street and generally north of Highway 224, between McLoughlin Boulevard east to the Tillamook Branch railroad line. This provides an opportunity to address issues of concern identified by City of Milwaukie Resolution 03-2003, and included in the South Corridor Locally Preferred Alternative as Exhibit A. Once solutions are identified and there is agreement to proceed, an amendment to this LUFO would be addressed. This future LUFO amendment would need to conform to all applicable procedural and public notice requirements in the LUFO statute.

- Designates a study area at the Lake Road terminus south of Washington Street in Milwaukie and north and north east of McLoughlin Boulevard.

There are no maintenance facilities or highway improvements proposed for this segment.

The proposed boundaries within which the above-described light rail improvements may be located are as illustrated in Figures 3-1 through 3-6, attached to the LUFO Steering Committee recommendation.

Interstate MAX

After the approval of the North Corridor Interstate MAX Land Use Final Order Amendment on October 28, 1999 and during final design and construction of Interstate MAX, several changes were made to the location of the light rail route, stations and park-and-ride lots. These changes were made to ensure consistency with the full-funding grant agreement approved by the US Department of Transportation, Federal Transit Administration. As such, these changes are considered technical or environmental changes under Section 12(2) of House Bill 3478.

The technical changes from the 1999 North Corridor Interstate MAX LRT Project LUFO are:

- Albina Station: the light rail station was relocated from the block between N Knott and N Russell Streets approximately 800 feet south along N Interstate Avenue to the block between N Mississippi and N Albina Avenues.

- Overlook Park Station: the Overlook Park light rail station platforms were relocated approximately 325 feet south along N Interstate Avenue, such that the south bound

platform extends south from N Overlook Boulevard and the northbound platform extends north from N Fremont Street.

- Prescott Station (former North Going Street Station): the North Going Street station boundary shown north and south of the intersection between N Going Street and N Interstate Avenue was relocated to a position on the north side of North Prescott Street along North Interstate Avenue to North Skidmore Street.

- The Kenton Station was shifted from the center to the east side of N Interstate Avenue. However, the shift was entirely within the Kenton Station boundary approved in the1999 LUFO.

The boundaries within which the above-described light rail improvements have been located are as illustrated in Figures 4-1 and 4-2, attached to the Steering Committee recommendation.

Milwaukie to Clackamas Regional Center

As discussed above, the original South/North LUFO approved the extension of light rail south to Milwaukie and then eastward to the Clackamas Regional Center. This LUFO amendment deletes the extension of LRT eastward from Milwaukie to the Clackamas Regional Center and replaces it with the extension of LRT southward from Gateway to the Clackamas Regional Center.

D. Applicable Land Use Criteria.

On May 30, 1996, pursuant to Section 4 of House Bill 3478, LCDC established the criteria to be used by the Council in making land use decisions establishing or amending the light rail route, stations, lots and maintenance facilities, and the highway improvements for the South/North Project, including their locations. The approved criteria include two procedural, six substantive, and two alignment-specific standards, set out below. In its LUFO, the Council must demonstrate compliance with these criteria.

Procedural Criteria

1. Coordinate with and provide an opportunity for Clackamas and Multnomah counties, the cities of Gladstone, Milwaukie, Oregon City and Portland, the Tri-County Metropolitan Transportation District of Oregon and the Oregon Department of Transportation to submit testimony on the light rail route, light rail stations, park-and-ride lots and vehicle maintenance facilities, and the highway improvements, including their locations.

2. Hold a public hearing to provide an opportunity for the public to submit testimony on the light rail route, light rail stations, park-and-ride lots, vehicle maintenance facilities and the highway improvements, including their locations.

Substantive Criteria

3. Identify adverse economic, social and traffic impacts on affected residential, commercial and industrial neighborhoods and mixed use centers. Identify measures to reduce those impacts which could be imposed as conditions of approval during the National Environmental Policy Act (NEPA) process, or, if reasonable and necessary, by affected local governments during the local permitting process.

   A. Provide for a light rail route and light rail stations, park-and-ride lots and vehicle maintenance facilities, including their locations, balancing (1) the need for light rail proximity and service to present or planned residential, employment and recreational areas that are capable of enhancing transit ridership; (2) the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and (3) the need to protect affected neighborhoods from the identified adverse impacts.

   B. Provide for associated highway improvements, including their locations, balancing (1) the need to improve the highway system with (2) the need to protect affected neighborhoods from the identified adverse impacts.

4. Identify adverse noise impacts and identify measures to reduce noise impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by affected local governments during the permitting process.

5. Identify affected landslide areas, areas of severe erosion potential, areas subject to earthquake damage and lands within the 100-year floodplain. Demonstrate that adverse impacts to persons or property can be reduced or mitigated through design or construction techniques which could be imposed during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

6. Identify adverse impacts on significant fish and wildlife, scenic and open space, riparian, wetland and park and recreational areas, including the Willamette River Greenway, that are protected in acknowledged local comprehensive plans. Where adverse impacts cannot practicably be avoided, encourage the conservation of natural resources by demonstrating that there are measures to reduce or mitigate impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

7. Identify adverse impacts associated with stormwater runoff. Demonstrate that there are measures to provide adequate stormwater drainage retention or removal and protect water quality which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

8. Identify adverse impacts on significant historic and cultural resources protected in acknowledged comprehensive plans. Where adverse impacts cannot practicably be

avoided, identify local, state or federal review processes that are available to address and to reduce adverse impacts to the affected resources.

Alignment-Specific Criteria

9. Consider a light rail route connecting the Clackamas Town Center area with the City of Milwaukie's Downtown. Consider an extension of the light rail route connecting the City of Oregon City and the City of Gladstone with the City of Milwaukie via the Interstate 205 corridor and/or the McLoughlin Boulevard corridor.

10. Consider a light rail route connecting Portland's Central City with the City of Milwaukie's Downtown via inner southeast Portland neighborhoods and, in the City of Milwaukie, the McLoughlin Boulevard corridor, and further connecting the Central City with north and inner northeast Portland neighborhoods via the Interstate 5/Interstate Avenue corridor.

Attachment A

South/North Land Use Final Order Amendment
LUFO Steering Committee Recommendation

November 24, 2003

TRIMET

MEMORANDUM

Date: December 10, 2003

To: Board of Directors

From: Fred Hansen

Subject: RESOLUTION 03-12-79 OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING AN APPLICATION TO BE FILED WITH METRO REQUESTING AMENDMENT OF THE SOUTH/NORTH LIGHT RAIL PROJECT LAND USE FINAL ORDER

1. **Issue or Purpose of the Item.**

The purpose of this item is to request that the TriMet Board of Directors (Board) approve a resolution authorizing the General Manager to file an application with Metro for a Land Use Final Order Amendment relating to the South Corridor Project.

2. **Reason for Board Action.**

Under House Bill 3478 (1996), a special land use procedure has been adopted by the legislature and is applicable to the South Corridor Project as part of the South/North Light Rail Project (Project). This special legislation requires TriMet to file an application with Metro for a Land Use Final Order (LUFO), which is the guiding land use document for the Project. The special legislation also authorizes TriMet to apply to Metro for amendments to the South/North LUFO. LUFO applications must be approved by the Board.

3. **Background.**

In July 1998, the Metro Council adopted a LUFO for the South/North Light Rail Project. The LUFO was amended in October 1999 for the Interstate MAX Project. An amendment to the LUFO is now required to add the South Corridor Project Locally Preferred Alternative (LPA), delete light rail transit (LRT) from Milwaukie to the Clackamas Regional Center, and amend the North Corridor Interstate MAX LUFO Amendment to reflect the final design of the Interstate MAX alignment and station locations.

According to the governing legislation, the LUFO amendment application must be filed by TriMet and approved by the Metro Council. Favorable recommendation was received unanimously from the LUFO Steering Committee, which met on November 24, 2003 (Exhibit A). A favorable recommendation from the Oregon Department of Transportation is also required and has been received (Exhibit B). These recommendations are attached for your reference.

4. **Options.**

There are only two options available relating to this proposed action. If the Board desires for the South Corridor Project to proceed, the application must be approved. If there is no action (the other option), the South Corridor Project will not go forward.

5. **Recommendation.**

The General Manager recommends approval of the resolution.

RESOLUTION 03-12-79

RESOLUTION OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) AUTHORIZING AN APPLICATION TO BE FILED WITH METRO REQUESTING AMENDMENT OF THE SOUTH/NORTH LIGHT RAIL PROJECT LAND USE FINAL ORDER

WHEREAS, on July 23, 1998 the Metro Council adopted a Land Use Final Order (LUFO) siting the track alignment, stations, park and ride lots, and associated facilities and highway improvements for the South/North Light Rail Project (Project); and

WHEREAS, on October 28, 1999, the Metro Council adopted a LUFO Amendment to modify the LUFO for the Project to include the Interstate MAX alignment; and

WHEREAS, TriMet and Metro staffs have recommended amendments to the 1998 original LUFO and the 1999 Interstate MAX LUFO Amendment; and

WHEREAS, the amendments to the Project, including Interstate MAX, require the adoption of LUFO amendments; and

WHEREAS, the LUFO Steering Committee composed of local government representatives has met and recommended the South Corridor Project, including I-205 light rail with the Portland Mall alignment in downtown, and a revised Milwaukie light rail alignment, and is recommending adoption of this amendment; and

WHEREAS, the State of Oregon, by and through its Department of Transportation (ODOT) has recommended the South Corridor Project, including I-205 light rail with the Portland Mall alignment in downtown, and a revised Milwaukie light rail alignment; and

WHEREAS, this Board has reviewed the recommendations of the LUFO Steering Committee and ODOT recommending that TriMet file an application with Metro to modify the 1998 Land Use Final Order for the Project and the 1999 Interstate MAX LUFO Amendment consistent with the LUFO Steering Committee recommendation.

NOW, THEREFORE, IT IS HEREBY RESOLVED:

1. The General Manager shall file an application with Metro for a Land Use Final Order Amendment relating to the South Corridor Project.

2. The application filed by the General Manager shall identify the modified light rail route, stations, and park and ride lots, including their locations. The location boundaries shall be sufficient to accommodate adjustments to the specific placements of the light rail route and facilities as needed upon the development of more detailed environmental or engineering data following approval of a Full Funding Grant Agreement with the Federal Transit Administration.

3. To the extent practicable, the modified light rail route, stations, and lots, including their locations, included in the application filed by, or on behalf of, the General Manager shall be consistent with those identified in the LUFO Steering Committee and ODOT recommendations.

Dated: December 10, 2003

Presiding Officer

Attest:

Kelly Rennion
Recording Secretary

Approved as to Legal Sufficiency:

M B Playfair
Legal Department

Exhibit C
Metro Council Resolution No. 03-3372

Findings of Fact and Conclusions of Law

1. Introduction

1.1 Nature of the Metro Council's Action

This action adopts a Land Use Final Order (LUFO) for the South/North Light Rail Project. The action is taken pursuant to Oregon Laws 1996 (Special Session), Chapter 12 (referred to herein as "House Bill 3478" or "the Act"), which directs the Metro Council (the "Council") to issue LUFOs establishing the light rail route, the light rail stations, park-and-ride lots and maintenance facilities, and any highway improvements for the South/North Project, including their locations (i.e. the boundaries within which these facilities and improvements may be located).

On July 23, 1998, the Metro Council adopted Resolution No. 98-2673, adopting a LUFO ("the original LUFO") for the South/North Project. The original LUFO established the light rail route, stations, lots and maintenance facilities and the highway improvements, including their locations, for the South/North Project[1,2].

On October 28, 1999, the Metro Council adopted Resolution No. 99-2853A, amending the original LUFO to reflect revisions for that portion of the Project extending from the Steel Bridge northward to the Exposition Center (Expo Center), primarily along Interstate Avenue. This second LUFO (the "IMAX LUFO") modified the northern light rail alignment; established, relocated or expanded light rail station boundaries along that alignment; and authorized park-and-ride lots at Portland International Raceway (PIR) and the Expo Center along the light rail route.

This 2004 LUFO further amends the past South/North LUFO resolutions to:

> 1) add a light rail alignment extension from the Gateway Regional Center south along the Interstate-205 (I-205) right-of-way to Clackamas Regional Center, establishing light rail station boundaries for the Main Street, Division Street, Powell Boulevard, Holgate Boulevard, Lents, Flavel Street, Fuller Road and Clackamas Regional Center stations. Regarding the I-205 LRT Project, the LUFO also authorizes park-and-ride lots at each station of the above-cited stations, except the Division and Flavel streets stations.
>
> 2) revise the downtown Portland Transit Mall to extend LRT to Portland State University (PSU), including the following changes: adjustments to original LUFO station

[1] Metro's Regional Transportation Plan shows northward extension of light rail to Clark County Washington. However, the Metro Council's jurisdiction is limited to the Oregon portion of the South/North Project.

[2]Section 1(18) of HB 3478 defines the "Project" as "the portion of the South/North MAX Light Rail Project within the Portland metropolitan area urban growth boundary including each segment thereof as set forth in the Phase I South North Corridor Project Locally Preferred Alternative Report, as may be amended from time to time or as may be modified in a Final Statement or the Full Funding Grant Agreement". The resulting alignment, including the most recent revisions, extends north from the Rose Quarter station to northeast and north Portland and south from the Gateway Regional Center to the Clackamas Regional Center and includes needed capacity improvements on the Portland Transit mall as a Phase 1. The second phase of the southern LRT corridor is as set forth in the South Corridor LRT Project Locally Preferred Alternative Report, which extends light rail southward from downtown Portland to Milwaukie and the Lake Road terminus. These segments - I-205 LRT, downtown Portland Transit Mall, Milwaukie LRT and IMAX, in total, are defined as the "Project".

locations as described in detail, below, and addition of stations between SW College and SW Jackson streets.

3) modify the original LUFO for the Milwaukie LRT segment to add study areas from PSU to I-5 along SW Lincoln, revise the LRT alignment from SE 18th Avenue to SE 17th Avenue south of Powell to McLouglin Boulevard, and designate a study area for the alignment and stations, transit stations and park-and-ride lots south of SE Tacoma;

4) remove the original LUFO designations from Milwaukie to Clackamas Regional Center;

5) complete technical amendments to the IMAX LUFO alignment to reflect the final built configuration at the Prescott, Overlook and Albina stations, consistent with the Full Funding Agreement Grant approved by the Federal Transit Administration.

1.2 Relationship of Council's Order to Requirements of the National Environmental Policy Act of 1969

Like the first South/North LUFO and the IMAX LUFO amendment, this 2004 South/North LUFO amendment is taken solely to implement the provisions in HB 3478 authorizing the Council to make land use decisions on the light rail route, stations, lots and maintenance facilities and the highway improvements for the South/North Project, including their locations. This land use decision is not required by the National Environmental Policy Act of 1969 (NEPA) or other federal law.

1.3 Requirements of House Bill 3478

Section 6(1) of House Bill 3478 requires the Council to "establish the light rail route, stations, lots and maintenance facilities, and the highway improvements for the project or project extension, including their locations." Section 6(1)(a) further provides that the locations for each of these facilities and improvements:

> "*shall be in the form of boundaries within which the light rail route, stations, lots and maintenance facilities, and the highway improvements shall be located. These boundaries shall be sufficient to accommodate adjustments to the specific placements of the light rail route, stations, lots and maintenance facilities, and the highway improvements for which need commonly arises upon the development of more detailed environmental or engineering data following approval of a Full Funding Grant Agreement*."

Section 6(2) of the Act addresses amendments to the original LUFO. As relevant to this proceeding, it provides that any siting of the light rail route or a station, lot or maintenance facility outside the boundaries previously established in a LUFO, or any new station, lot or maintenance facility,

"shall require a land use final order amendment or a new land use final order which shall be adopted in accordance with the process provided for in subsection (1) of this section."

Section 7 of HB 3478 requires the Council to apply land use criteria established by the Land Conservation and Development Commission ("LCDC") in making decisions in a land use final order on the light rail route, stations, lots and maintenance facilities, and the highway improvements, including their locations, and to prepare and adopt findings of fact and conclusions of law demonstrating compliance with those criteria. *These findings serve to demonstrate compliance with LCDC's criteria for the modifications selected in this LUFO amendment.*

Section 3(1) of HB 3478 provides that the procedures and requirements set out in the Act are the only land use procedures and requirements to which the Council's decisions on the light rail route, the stations, lots and maintenance facilities, and the highways improvements for the Project, including their locations, are subject. Consequently, these findings focus on the matters identified in HB 3478 as land use actions being taken at this time.

2. Amendments to the Light Rail Route, Stations, Lots and Maintenance Facilities for the Project, Including Their Locations

2.1 Introduction

In the original LUFO, the Metro Council approved the light rail route, stations, lots and maintenance facilities, and highway improvements for the Project, including their locations. The Council's 1998 decision considered an alignment from the Clackamas Town Center to downtown Milwaukie to downtown Portland to the Columbia River.

The modifications adopted by this 2004 LUFO amendment include:

1) modifying some portions of the segment extending from downtown Portland to Milwaukie, including a relocation from SE 18th to SE 17th and study areas south of Tacoma street;

2) replacing the previously approved Milwaukie to Clackamas Town Center segment with a segment connecting Clackamas Town Center to the existing light rail alignment at Gateway via Interstate 205, including new stations and park-and-ride lots along this alignment;

3) extending the downtown LRT alignment from SW Harrison Street southward to SW Lincoln Street, providing a new set of stations near Portland State University, and relocating light rail stations in the downtown segment; and 4) revising the IMAX stations in three locations.

The remainder of the Project, as approved in the original LUFO and amended by the IMAX LUFO, is unchanged.

Except as otherwise noted in this document, these 2004 findings replace and supersede the segment-specific findings for the Clackamas Regional Center and East Milwaukie segments that the Council adopted in support of the original LUFO.[3]

Further, to the extent these 2004 findings create inconsistencies with other sections of the original LUFO findings [*see, e.g.*, Sections 2.1 and 6.1 (descriptions of Milwaukie Regional Center, McLoughlin Boulevard, South Willamette River Crossing and Downtown Portland segments)], the 2004 findings control and supersede the earlier findings. To the extent these 2004 findings are not inconsistent with the findings supporting the original LUFO, the original LUFO findings remain valid, and they are incorporated herein by this reference in support of the amendments identified herein.

2.2 Selected South/North Amendments

The Metro Council amends the original LUFO and IMAX LUFO to select the light rail route, stations and lots that are summarized below. More detailed descriptions are provided on a segment-by-segment basis later in these findings. The Council finds that its selected light rail route, stations and lots, including their locations, are identical to those for which TriMet requested Metro Council approval in its "Application for South/North Land Use Final Order Amendment", which TriMet filed on December 12, 2003 and which the Council incorporates herein by this reference. The light rail route, stations and lots selected by this amendment are described textually and illustrated on maps in the Council's adopted LUFO.

I-205 Segment

In the original LUFO, service to Clackamas Regional Center was provided by an alignment that went from downtown Portland to Milwaukie and then on to Clackamas Regional Center. The original LUFO referred to portions of this alignment as the Clackamas Regional Center, East Milwaukie, Milwaukie Regional Center, McLoughlin Boulevard, South Willamette Crossing and Downtown Portland segments. Based on the nature of the changes to the Project, and consistent with TriMet's application and the recommendation of the South/North LUFO Steering Committee, the Council now deems it appropriate to provide LRT service to Clackamas Regional Center with a new segment, I-205 LRT. (In terms of the original LUFO, this action adds a new I-205 alignment, revises the original LUFO's Clackamas Regional Center segment, deletes the original LUFO's East Milwaukie segment, and revises a portion of the original LUFO's Milwaukie Regional Center segment.) In the year 2000, there were an estimated 22,090 people and 23,986 jobs within ½ mile of the stations in the I-205 Segment.

The I-205 LRT segment extends south from the Gateway Transit Center station (which includes a park-and-ride lot) along an LRT route to be located primarily within the I-205 right of way, serving stations located at SE Main Street (including a park-and-ride lot), Division Street, Powell

[3] See original LUFO findings, Sections 6.4.7, 6.4.8 and 7.2

Boulevard (including a park-and-ride lot), Holgate Boulevard (including a park-and-ride lot), Foster Road, Flavel Street and Fuller Road (including a park-and-ride lot), ending at a station at the Clackamas Regional Center terminus (which also includes a park-and-ride lot). This segment is described in more detail in Section 6 of these findings.

Downtown Portland Transit Mall Segment

The I-205 LRT Segment increases the number of trains in downtown Portland to a point where the capacity of the downtown cross-mall will be severely tested and light rail on the downtown Transit Mall has been approved in the Locally Preferred Alternative to relieve capacity concerns. There were an estimated 11,236 people and 124,495 jobs within ½ mile of the stations within the downtown Portland Transit Mall Segment. The resulting downtown Transit Mall alignment is similar to the alignment approved in the original LUFO (page 14, "Figure 5.1.6, Downtown Portland Segment"), with the following changes:

- The location of a proposed station in the vicinity of NW Irving has been changed to a nearby location on NW Sixth Avenue between Glisan and Irving streets;
- The location of proposed stations between Burnside and NW Couch streets has been changed to a location between NW Couch and NW Davis streets.
- The location of proposed stations between SW Washington and SW Stark streets has been extended to a location between SW Washington and SW Oak streets.
- The proposed location of stations on SW Fifth and SW Sixth avenues at Madison and Jefferson have been changed to allow stations on SW Fifth and Sixth within the existing street right-of-way between Main and Columbia streets on SW Sixth Avenue and between SW Madison and Columbia on SW Fifth Avenue;
- The proposed light rail route has been revised to extend south on SW Fifth and SW Sixth avenues south of Montgomery Street to a terminus at PSU at SW Lincoln. This extension includes a pair of stations on SW Fifth and Sixth avenues between SW Mill and SW Montgomery streets and a second set of stations on SW Fifth and Sixth avenues between SW College and SW Jackson streets.

The Downtown Portland Segment is described in more detail in Section 6 of these findings.

Milwaukie LRT Segment

In the Original LUFO, there were four segments that, together, provided LRT service to Milwaukie. These segments were: the downtown Portland Segment, the South Willamette River Crossing Segment, the McLoughlin Boulevard Segment and the Milwaukie Regional Center Segment. The LRT alignment designed to serve Milwaukie from downtown Portland is now identified as the Milwaukie Segment.

The Metro Council now deems it appropriate to approve the 2004 LUFO changes for the Milwaukie Segment as follows:

- the light rail route and station locations from the intersection of SE Powell Boulevard south to McLoughlin Boulevard are revised, changing the alignment from SE 18th Avenue to SE 17th Avenue.

In addition, several areas have been changed from specific designations (light rail route, station area, etc.) to a study area designation. Once solutions are identified and there is agreement to proceed, an amendment to this LUFO would be addressed. This future LUFO amendment would need to conform to all applicable procedural and public notice requirements in the LUFO statute. These changes need no findings as they will be brought back for specific consideration in the future. These study area re-designations:

- Identify a study area for a possible light rail route alignment from the downtown Portland Transit Mall at SW Lincoln Street and SW Fifth Avenue eastward along SW Lincoln Street, and an extension of SW Lincoln Street, to I-5.
- Designate a study area for a section of land south of Tacoma Street and generally north of Highway 224, between McLoughlin Boulevard east to the Tillamook Branch railroad line. This provides an opportunity to address issues of concern identified by City of Milwaukie, Resolution 03-2003 and included in the South Corridor Locally Preferred Alternative as Exhibit A.
- Designate a study area at the Lake Road terminus south of Washington Street in Milwaukie and north and north east of McLoughlin Boulevard.

The Milwaukie Segment is described in more detail in Section 6 of these findings.

Interstate MAX Segment

For the IMAX segment, being that LRT alignment from the Rose Quarter to the Expo Center, the Council now deems it appropriate to approve technical revisions that reflect the Full Funding Agreement Grant approved by the FTA.

The IMAX LUFO was organized into three segments - Albina, Upper Interstate and Expo Center. The 2004 LUFO only reflects changes to the Albina segment, as follows:

- Albina Station: the light rail station was relocated from the block between N Knott and N Russell Streets approximately 800 feet south along N Interstate Avenue to the block between N Mississippi and N Albina Avenues.

- Overlook Park Station: the Overlook Park light rail station platforms were relocated approximately 325 feet south along N Interstate Avenue, such that the south bound platform extends south from N Overlook Boulevard and the northbound platform extends north from N Fremont Street.

- Prescott Station (former North Going Street Station): the North Going Street station boundary shown north and south of the intersection between N Going Street and N

Interstate Avenue was relocated to a position on the north side of North Prescott Street along North Interstate Avenue to North Skidmore Street.

3. South/North Project Land Use Final Order Criteria

On May 30, 1996, pursuant to Section 4 of HB 3478, LCDC established the criteria to be used by the Metro Council in making land use decisions establishing or amending the light rail route, stations, lots and maintenance facilities, and the highway improvements for the Project or Project Extension, including their locations. The approved criteria include two procedural, six substantive, and two alignment-specific standards, set out as follows:

3.1 Procedural Criteria

1. Coordinate with and provide an opportunity for Clackamas and Multnomah Counties, the cities of Gladstone, Milwaukie, Oregon City and Portland, the Tri-County Metropolitan Transportation District of Oregon and the Oregon Department of Transportation to submit testimony on the light rail route, light rail stations, park-and-ride lots and vehicle maintenance facilities, and the highway improvements, including their locations.

2. Hold a public hearing to provide an opportunity for the public to submit testimony on the light rail route, light rail stations, park-and-ride lots and vehicle maintenance facilities, and the highway improvements, including their locations.

3.2 Substantive Criteria

3. Identify adverse economic, social and traffic impacts on affected residential, commercial and industrial neighborhoods and mixed use centers. Identify measures to reduce those impacts which could be imposed as conditions of approval during the National Environmental Policy Act (NEPA) process or, if reasonable and necessary, by affected local governments during the local permitting process.

    A. Provide for a light rail route and light rail stations, park-and-ride lots and vehicle maintenance facilities, including their locations, balancing (1) the need for light rail proximity and service to present or planned residential, employment and recreational areas that are capable of enhancing transit ridership; (2) the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and (3) the need to protect affected neighborhoods from the identified adverse impacts.

    B. Provide for associated highway improvements, including their locations, balancing (1) the need to improve the highway system with (2) the need to protect affected neighborhoods from the identified adverse impacts.

4. Identify adverse noise impacts and identify measures to reduce noise impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by affected local governments during the permitting process.

5. Identify affected landslide areas, areas of severe erosion potential, areas subject to earthquake damage and lands within the 100-year floodplain. Demonstrate that adverse impacts to persons or property can be reduced or mitigated through design or construction techniques which could be imposed during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

6. Identify adverse impacts on significant fish and wildlife, scenic and open space, riparian, wetland and park and recreational areas, including the Willamette River Greenway, that are protected in acknowledged local comprehensive plans. Where adverse impacts cannot practicably be avoided, encourage the conservation of natural resources by demonstrating that there are measures to reduce or mitigate impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

7. Identify adverse impacts associated with stormwater runoff. Demonstrate that there are measures to provide adequate stormwater drainage retention or removal and protect water quality which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

8. Identify adverse impacts on significant historic and cultural resources protected in acknowledged comprehensive plans. Where adverse impacts cannot practicably be avoided, identify local, state or federal review processes that are available to address and to reduce adverse impacts to the affected resources.

3.3 Alignment-Specific Criteria

9. Consider a light rail route connecting the Clackamas Town Center area with the City of Milwaukie's Downtown. Consider an extension of the light rail route connecting the City of Oregon City and the City of Gladstone with the City of Milwaukie via the Interstate 205 corridor and/or the McLoughlin Boulevard corridor.

10. Consider a light rail route connecting Portland's Central City with the City of Milwaukie's Downtown via inner southeast Portland neighborhoods and, in the City of Milwaukie, the McLoughlin Boulevard corridor, and further connecting the Central City with north and inner northeast Portland neighborhoods via the Interstate 5/Interstate Avenue corridor.

Compliance with Criteria 1 and 2 is demonstrated in Section 5 of these findings. Compliance with Criteria 3 through 8 is demonstrated in Section 6 (long-term impacts) and Section 7 (short term construction impacts) of these findings. Criterion 9 is addressed in the I-205 Segment and Milwaukie Segment, below and does not affect the Downtown PortlandSegment. Compliance with Criterion 10 is demonstrated in the Milwaukie Segment. For all of the reasons set out in

these findings, the Council finds and concludes that this LUFO amendment complies with the applicable LCDC criteria.

4. Implementation of a Land Use Final Order

4.1 Overview of Process for Selecting Mitigation Measures

LCDC Criteria 3 through 8 require the Council to identify (1) specified adverse impacts (*e.g.*, impacts to neighborhoods and natural resources) that would result as a consequence of its decisions, and (2) "measures" to reduce those impacts which potentially could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the local jurisdiction permitting processes. Consideration of appropriate measures is consistent with local comprehensive plan policies and land use regulations which recognize that development can have adverse impacts on persons and property and which seek to reduce those impacts to the extent reasonable and permitted by law.[4]

The Council's decisions selecting the light rail route, stations, lots and maintenance facilities, and the highway improvements for the Project, including their locations, are not the final steps in the process culminating with completion of construction of the South/North Project. Subsequent to or concurrent with Council actions, Final Environmental Impact Statements (FEIS) are submitted to the Federal Transit Administration (FTA), and, in the case of the I-205 LRT Segment, also to the Federal Highway Administration. As part of the FEIS process, mitigation plans are developed addressing mitigation of adverse impacts associated with the selected rail and highway improvements for the Project. In each case, following federal approval of the FEIS, issuance of a Record of Decision by FTA and the signing of a Full Funding Grant Agreement with FTA, the Final Design phase will begin. During Final Design, all necessary federal and state permits for project construction are obtained.

Also during Final Design, the siting of light rail and highway improvements is subject to local permitting processes. Section 8(1)(b) of House Bill 3478 directs all affected local governments and agencies to "issue the appropriate development approvals, permits, licenses and certificates necessary for the construction of the project or project extension consistent with a land use final order." Section 8(1)(b) further allows these affected local governments to attach approval conditions to their development approvals permits, licenses and certificates. However, any such conditions must be "reasonable and necessary" and "may not, by themselves or cumulatively, prevent implementation of a land use final order." Under Section 8(3) of

[4]Section 1(17) of HB 3478 defines "measures" to include "any mitigation measures, design features, or other amenities or improvements associated with the project or project extension."

HB 3478, unreasonable or unnecessary conditions would include 1) measures for which there are insufficient funds within the project budget to pay for those measures; 2) measures that would significantly delay the completion or otherwise prevent the timely implementation of the project; and 3) measures that would significantly negatively impact project operations. See also *TriMet v. City of Beaverton*, 132 Or App 253 (1995). A condition prevents implementation of a LUFO if its imposition would require TriMet to finance construction of the condition at the expense of improvements funded under the Full Funding Grant Agreement or to go beyond the available federal funds and local matching funds for the Project. The Council finds that these funds constitute the envelope of available funds for the Project.

In summary, Criterion 3 through 8 require the Council to identify measures which potentially "could be imposed" later on in the process as part of an approved mitigation plan under NEPA or through local permitting (if reasonable and necessary). However, the actual determination and imposition of appropriate measures occurs only through these latter federal or local processes, not through this Council action. The Council finds this approach to be reasonable and appropriate, particularly given that the LUFO is not based on final design plans. Through final design, many identified adverse impacts may be avoided, and appropriate mitigation can be better determined.

4.2 Effect of Land Use Final Order on Local Comprehensive Plans and Land Use Regulations

Section 8(1)(a) of HB 3478 requires the affected cities and counties and Metro to amend their comprehensive or functional plans, including their public facility and transportation system plans and land use regulations, to the extent necessary to make them consistent with a land use final order. Section 8(2) further provides that a LUFO "shall be fully effective upon adoption."

The legal effect of these provisions are (1) to immediately authorize, as permitted uses, the light rail route, stations, lots and maintenance facilities and the highway improvements, including their locations, as identified and approved in a land use final order, and (2) to require appropriate plan and land use regulation amendments so that local land use requirements are consistent with a land use final order.[5] However, as noted above, the uses approved in a land use final order remain subject to local imposition of reasonable and necessary approval conditions under Section 8(1)(b).

While approval of a LUFO identifies where rail and highway improvements may go and authorizes their development at these locations subject to reasonable and necessary conditions, it does not concurrently prevent other uses allowed by existing zoning. Stated another way, a LUFO is not a right-of-way preservation tool. It does not prevent development of economically feasible uses currently permitted under acknowledged plans and land use regulations. It merely

[5]This may require amendments to authorize the ancillary facilities and improvements for the South/North Project.

adds to the list of uses permitted on the properties affected by the LUFO without eliminating other uses from that list.

Similarly, a LUFO does not require local zoning amendments to allow more intense scales of development. Instead, it requires amendments only as necessary to authorize the approved project elements and ancillary facilities or improvements that may be required to ensure the safe and proper functioning and operation of the light rail system, provide project access, improve traffic flow, circulation or safety in the project vicinity, or to mitigate adverse impacts resulting from the Project.

In summary, Metro Council adoption of a LUFO has the immediate effect of permitting, on the affected properties, the light rail and highway facilities and improvements approved in the LUFO. It also identifies the affected locations for future public acquisition for rail or highway purposes. However, LUFO adoption in no way prevents or limits currently allowed uses on these properties during the interim period pending ultimate public acquisition, nor does it mandate the rezoning of areas nearby light rail stations to achieve regional growth management objectives.

5. Compliance with Procedural Criteria (1-2)

5.1 Criterion 1: Agency Coordination

> **"Coordinate with and provide an opportunity for Clackamas and Multnomah Counties, the cities of Gladstone, Milwaukie, Oregon City and Portland, the Tri-County Metropolitan Transportation District of Oregon and the Oregon Department of Transportation to submit testimony on the light rail route, light rail stations, park-and-ride lots and vehicle maintenance facilities, and the highway improvements, including their locations."**

Criterion 1 ensures Metro coordination with the Tri-County Metropolitan Transportation District of Oregon (TriMet), the Oregon Department of Transportation (ODOT), and the six cities and counties that are directly affected by the Project or Project Extension. Criterion 1 further requires Metro to provide these jurisdictions and agencies an opportunity to submit testimony on the light rail and highway facilities and improvements for the Project or Project Extension, including their locations.

The light rail route, station and lot decisions that are the subject of this LUFO amendment fall within the jurisdictional boundaries of Clackamas County, the City of Portland and the City of Milwaukie. The Council finds that Clackamas County, Portland and Milwaukie planning, engineering, and other technical staff, as well as staff from TriMet, have been actively involved in the process resulting in these proposed amendments.

For those jurisdictions and agencies not directly affected by this amendment, the Council finds that coordination has occurred consistent with Criterion 1 through their participation on the LUFO Steering Committee and/or through notice and opportunity to provide comments and

concerns to TriMet through the LUFO Steering Committee as part of its process for making recommendations to TriMet on a land use final order or a land use final order amendment. More specifically, the Council finds that Metro mailed Project materials (*Draft 2004 South/North Land Use Final Order Amendment*, dated November 18, 2003) describing all aspects of the proposed project to ODOT and to elected officials of the cities of Portland, Milwaukie, Oregon City and Gladstone and the counties of Multnomah and Clackamas, providing them with information regarding the proposed 2004 LUFO amendments to the original LUFO and advising them of their opportunity to submit comments to the LUFO Steering Committee on the proposed amendments. The Council further finds that the LUFO Steering Committee, which includes members from Metro, TriMet, ODOT, Clackamas and Multnomah Counties, and the cities of Portland and Milwaukie, reviewed the proposed LUFO amendments and on November 24, 2003, made recommendations to TriMet on those amendments as documented in the 2004 LUFO and as provided for in House Bill 3478.

In addition, the Council finds that notice of the Metro Council's January 8, 2004 public hearing to consider this LUFO amendment was mailed directly to each of the local governments and agencies identified in Criterion 1, thus providing those local governments and agencies with the opportunity to submit testimony to the Council on the proposed LUFO amendments at that hearing.

In adopting these 2004 LUFO amendments, the Council carefully considered the recommendations of the Steering Committee and the comments of the affected jurisdictions and agencies. The Council's decision in this 2004 LUFO amendment proceeding is fully consistent with TriMet's application, which in turn is consistent with the recommendation of the LUFO Steering Committee and ODOT recommendations.

For all of these reasons, the Council finds that Criterion 1 is satisfied.

5.2 Criterion 2: Citizen Participation

> **"Hold a public hearing to provide an opportunity for the public to submit testimony on the light rail route, light rail stations, park-and-ride lots and vehicle maintenance facilities, and the highway improvements, including their locations."**

Criterion 2 ensures that the public has an opportunity to submit testimony and be heard in the process leading to the Council's selection of the light rail route, stations, lots and maintenance facilities, and the highway improvements for the Project, including their locations.

On January 8, 2004, consistent with Criterion 2, the Council held a public hearing and accepted public testimony on the proposed amendments to the original LUFO. This followed public notice, which Metro published in *The Oregonian* on December 12, 2003, which is more than 14 days prior to its hearing. The Council finds that *The Oregonian* is a newspaper of general circulation and that this publication of notice in *The Oregonian* meets all requirements for notice set out in HB 3478.

In addition to the published notice, a postcard mailing announcing the hearing was mailed to people on Metro's South/North mailing list for the South Corridor amendments. This list includes owners of property within 100 feet of the I-205 light rail alignment.

Further, announcements of the 2004 LUFO public hearing were included on Metro's and TriMet's websites and on Metro's transportation hotline.

Further, the Council finds that there has been substantial community participation in the process leading to the selection of the proposed amendments. The Metro Council takes notice of, and incorporates by reference herein, the description of the community participation process for these 2004 LUFO amendments as set out in Chapter 6 of the *South Corridor Project Supplemental Draft Environmental Impact Statement* (December 2002) and Chapter 6 of the *Downtown Amendment to the South Corridor Supplemental Draft Environmental Impact Statement* (October, 2003).

In summary, the Council finds that the holding of the public hearing on January 8, 2004 satisfies the requirement of Criterion 2. It further determines and concludes that the notices provided through publication, mailings, recorded announcements and by other means were reasonably calculated to give notice to people who may be substantially affected by the Council's decision on TriMet's application.

6. Compliance with Substantive Criteria (3-8) Long Term Impacts

6.1 Introduction

The South/North Project, as revised and amended, will provide an approximately 20.3 total mile, double-tracked light rail route extending approximately 6.7 miles from Gateway Regional Center to Clackamas Regional Center (I-205 LRT Segment), 1.3 miles along the downtown Portland Transit Mall, 6.5 miles from downtown Portland to Milwaukie and 5.8 miles from the Rose Quarter to Expo Center.

For the purpose of these findings, the area affected by the South/North Project is divided into four segments:

- I-205 (from Gateway Regional Center to Clackamas Regional Center along I-205)
- Downtown Portland Transit Mall (along Fifth and Sixth avenues from the Steel Bridge to Lincoln Street)
- Milwaukie LRT (from downtown Portland to Milwaukie and the Lake Road terminus)
- Interstate MAX (from the Rose Quarter to Expo Center generally along Interstate Avenue)

6.2 Supporting Documentation

In addition to the findings of fact addressing the selected light rail route, stations, lots, maintenance facilities and highway improvements for the Project, including their locations, the Metro Council believes, adopts and incorporates by reference herein the facts set forth in the following documents:

- South Corridor Supplemental Draft Environmental Impact Statement
- Downtown Amendment to the South Corridor Project Supplemental Draft Environmental Impact Statement
- Public Comment Report to the Downtown Amendment to the South Corridor Project Supplemental Draft Environmental Impact Statement
- Public Comment Report to the South Corridor Project Supplemental Draft Environmental Impact Statement
- Downtown Portland Mall Segment Locally Preferred Alternative
- South Corridor LRT Project Locally Preferred Alternative
- North Corridor Interstate MAX Light Rail Project (1999)
- South/North Land Use Final Order, Volumes 1 and 2 (1998)

South Corridor Results Reports

- Air Quality Analysis Results Report
- Capital Costs Analysis Results Report
- Community Impact Assessment Analysis Results Report
- Ecosystems Analysis Results Report
- Energy Analysis Results Report
- Financial Analysis Results Report
- Geology, Soils and Seismic Impacts Results Report
- Hazardous Materials Impacts Results Report
- Historic, Archaeological and Cultural Impacts Results Report
- Land Use and Economic Activity Results Report
- Local Traffic Impacts Results Report
- Noise and Vibration Results Report
- Parklands, Recreation Areas, Wildlife and Waterfowl Refuges (Section 4(f)) ResultsReport
- Travel Forecasting and Transit Analysis Results Report
- Visual Quality and Aesthetics Results Report
- Water Quality and Hydrology Results Report
- Wetlands Determination Results Report

South Corridor Methods Reports

- Evaluation and Financial Methods Report
- Transportation Analysis Methods Report
- Social, Economic and Environmental Methods Report
- Historic, Archaeological and Cultural Impact Analysis Methods Report
- Capital Cost Methods Report

- Operating and Maintenance Cost Methods Report
- Approach to Threatened and Endangered Species

South Corridor Detailed Definition of Alternatives

- Light Rail Plan and Profile Drawings
- BRT and Busway Plan and Profile Drawings
- Detailed Definition of Alternatives Report

South Corridor Transportation Alternatives Study

- Capital Cost Report Refinement Study
- Public Comments Report
- Evaluation Report
- Wide Range of Alternatives Report
- Background Report

South Corridor Public Involvement Documents

- South Corridor Transportation Alternatives Study Draft Coordinated Outreach Strategy June 1999 June 2000 (taken to MCCI for review and recommendations)
- Appendix A: Project Public Involvement Plan (PPIP) Form

- South Corridor Transportation Alternatives Study March, 2000 (taken to MCCI for review and recommendations)
  - South Corridor Transportation Alternatives Study February 2001 (two page information sheet made available at public meetings and on the web)
  - Public Involvement Plan, August 2001-Fall 2002 (taken to MCCI for review)
  - I-205 Light Rail Preliminary Concepts August 2001 (two page information sheet distributed at public meetings and on Metro's web site)
  - South Corridor Update Fall 2001 (two page information sheet - distributed at meetings and on the web)
  - Imagine your community with better transit… Spring 2002 (color brochure - mailed to about 6,000 interested parties and about 2,000 printed for handing out at public meetings)
  - Executive Summary December 2002 (SDEIS - mailed to 6,000 interested persons and on the Metro website)
  - Imagine December 2002 - Transportation Options in your neighborhood (color brochure mailed to all property owners along alignments and interested parties, (a total of 8,000) with another 1,000 printed for distribution at public meetings)
  - Community Impact Assessment Results Report December 2002
  - Public Comments Report February 2003 (provided to review committees and upon request)
  - Excel spreadsheet briefly documenting 176 public meetings, March 2003
  - Imagine two new light rail lines April 2003 (color brochure - mailed to 6,000 interested parties and on the website)
  - Powerpoint presentations to Metro Council, RTC, JPACT, TPAC 2002-2003

Other Documents

- Metro Regional Framework Plan and appendices, including the 2040 Growth Concept and 2040 Growth Concept Map
- Urban Growth Management Functional Plan (codified in Metro code)
- 2000 Regional Transportation Plan and Appendices
- Air Quality Conformity Determination for the Regional Transportation Plan (conforming the I-205 LRT Project as a part of the RTP)
- Draft 2004 Regional Transportation Plan and Appendices and draft Air Quality Conformity Determination
- 2004-2007 Metropolitan Transportation Improvement Plan
- Exhibit E to Ordinance No. 00-869A, Findings of Fact, Conclusions of Law for 2000 RTP
- Resolution 03-3299, Compliance with Urban Growth Management Functional Plan
- The Portland Region*: How are we doing?* (color brochure summarizing Performance Measures), March, 2003.
- Clackamas Regional Center TMA

6.3 General Impacts and Mitigation Measures Applicable to All Segments ("General Findings")

Section 6.3 of the findings in the original LUFO addresses a broad range of impacts relevant to LCDC Criteria 3-8 that are expected to occur throughout the South/North Corridor as opposed to one or a few discrete properties or places. The Metro Council finds that the impacts addressed in Section 6.3 of the original LUFO findings are also likely to occur in the areas affected by this 2004 LUFO amendment, and that the analysis in Section 6.3 of the original LUFO findings applies to the light rail route, station and lot amendments identified herein as it did to the originally approved route and stations. Accordingly, the Metro Council expressly adopts and incorporates herein by this reference those original findings.

Of course, the changes to the Project, particularly in its alignment, will render some of these earlier general findings no longer accurate or relevant. For example, potential impacts relating to LRT from Milwaukie to Clackamas Regional Center identified in Section 6.3 of the original LUFO findings are no longer a concern because, with this 2004 LUFO amendment, the light rail alignment no longer passes through that location. To the extent those earlier findings are now incorrect or irrelevant or conflict with the more specific findings set out below, the Council disregards them.

The general findings include discussion of measures potentially available to mitigate the broad range of identified adverse impacts. The Council finds that it is just as appropriate to consider these measures with respect to impacts resulting from the amended light rail route, stations and lots as it was for the impacts from the originally approved alignment and stations.

6.4 Segment-Specific Findings and Mitigation Measures

As noted above, the light rail route, station and park-and-ride lot modifications resulting from this 2004 LUFO amendment change only that portion of the Project as has been described, leaving large portions of the Project unchanged from that approved in the original LUFO and the IMAX LUFO amendment.

Accordingly, the findings contained in this section supplement or replace the findings in Section 6.4 as noted in the text below.

6.4.1 I-205 SEGMENT

As the I-205 Segment is a new LRT route, this portion of the findings is supplemental to the original LUFO findings.

6.4.1.1 Description of Light Rail and Highway Improvements

The I-205 Segment includes the following LRT-related facilities:

- An alignment that parallels the I-205 freeway from the Gateway Transit Center in Portland to the Clackamas Regional Center[6] (CRC) and relocated transit center in northern Clackamas County.

- Eight light rail stations generally located at major east-west street crossings of I-205. One station is located east of I-205 and the other seven stations are located west of I-205.

- Up to five park-and-ride lots: Main Street Park-and-Ride (up to 550 spaces), Powell Park-and-Ride (up to 400 spaces), Holgate Park-and- Ride (up to 400 spaces), Foster Park-and-Ride (up to 150 spaces), and Fuller Park-and-Ride (up to 1,000 spaces). Additionally, a park-and-ride structure is proposed for the Clackamas Regional Center (up to 500 spaces), but it will not be built as part of this Project.

See Map A for a generalized depiction of the I-205 Segment and Figures #1-1 through 1- 9 for the adopted LUFO boundaries.

Light Rail Alignment

The approximately 6.7-mile, double-tracked light rail line (the Green Line) would generally extend along I-205 from the existing Gateway Regional Center, located on the existing Blue and Red Lines, south to the Clackamas Regional Center. At the Gateway Regional Center, the three light rail lines would share common passenger boarding platforms.

[6] The Metro 2040 Growth Concept has established regional centers within the metropolitan area as special places for high levels of transportation accessibility. The general area in the vicinity of I-205 and Sunnyside Road is designated in the 2040 Growth Concept as a regional center. This designation was made in large part because of the presence of a regional shopping mall - known as the Clackamas Town Center. In order to avoid confusion and be consistent with adopted regional policy, these findings generally refer to the area as the Clackamas Regional Center, or CRC. References to the shopping mall itself are made as the Clackamas Mall or the CRC Mall.

North of SE Foster Road, the light rail alignment would generally be located within right-of-way that was reserved for a transit-way when the I-205 right-of-way was initially designed and acquired, and will include use of several existing underpass structures. The design of the light rail alignment would not preclude future expansion of the I-205 freeway.

The I-205 light rail alignment would extend south from the existing Blue Line at a branch just south of the existing Gateway Regional Center at approximately NE Glisan Street, just east of I-205. The generally at-grade light rail alignment would cross under several east-west arterials (E. Burnside, SE Stark, SE Washington and SE Market Streets) before crossing under I-205 south of SE Market Street, using an existing box tunnel. The light rail alignment would continue south, generally directly west of and parallel to I-205.

Continuing south, the light rail alignment would cross under the existing SE Division Street overpass, and then cross over SE Powell Boulevard on a new bridge. The alignment would cross under the existing SE Holgate Street overpass and a new LRT overpass would be built over SE Harold Street. A new structure would be built over the SE Foster Road and SE Woodstock Boulevard couplet. The LRT alignment would cross the Springwater Corridor Trail with a separated grade crossing. A new LRT bridge would be built over Johnson Creek, and another would be built over SE 92nd Avenue and SE Crystal Springs Boulevard. An LRT overpass would extend over SE Johnson Creek Boulevard.

Continuing south, the LRT alignment would cross under SE William Otty Road and under the existing SE Monterey Avenue overpass to the terminus east of Clackamas Town Center at a relocated CRC Transit Center.

Light Rail Stations

Eight light rail stations are provided in the I-205 Segment, in addition to the existing station at the Gateway Transit Center.

SE Main Street Station. This at-grade LRT station will be located on the east side of I-205 in the vicinity of SE Main Street. Because the alignment parallels I-205 and SE 96th Avenue, it will not have any at-grade crossings of roadways in the area. A drop-off zone is proposed on the east side of the transit station along SE 96th Avenue. Pedestrian and bicycle access is provided via existing and new on-street and off-street facilities with the addition of a proposed new pedestrian signal at the intersection of SE 96th Avenue and SE Main Street. Standard light rail analysis has found that ½ mile is the maximum distance that should be assumed for people to walk to a LRT station. In the year 2000, within a ½ mile radius of the station, there are an estimated 3,237 people and 6,566 jobs. More specifically, the station will serve Mall 205 (a 400,000 square foot mall including a two level Target and 24 Hour Fitness as anchor tenants with other shops and restaurants) and Plaza 205 (Office Max, restaurants, US Post Office, State Police offices). In addition, the station serves the Portland Adventist Medical Center (2,000 employees); the East Portland Community Center (swimming pool, gymnasium, exercise and community rooms); the East Portland Police Precinct; and nearby residential areas. An existing pedestrian bridge over I-

205 provides pedestrian and bicycle access to the LRT station from neighborhoods located west of I-205.

Division Street Station. This at-grade LRT station will be located west of I-205, in the vicinity of SE Division Street. In the year 2000, there were an estimated 2,931 people and 2,621 jobs with ½ mile of the station. In addition to the surrounding residential area, the station is within one mile of Portland Community College, Southeast Campus, which offers college transfer, adult basic education, high school completion and job training programs. SE Division Street is a key transit street, and the existing Division Street overpass provides auto, bus, bicycle and pedestrian access to the Division Street Station from neighborhoods to the east and west of I-205. A new pedestrian signal is proposed to provide access across SE Division Street to the transit station.

Powell Boulevard Station. The Powell Boulevard Station will be located above-grade on a new bridge over SE Powell Boulevard. The station will be located south of SE Powell Boulevard, adjacent to the west side of I-205. In the year 2000, there were an estimated 2,430 people and 1,833 jobs within ½ mile of the station. In addition to the surrounding neighborhoods, this station will serve a nearby bowling alley, several churches, a TriMet bus garage facility , State of Oregon offices, and Marshall High School. SE Powell Boulevard is also a major transit street, and provides connectivity to neighborhoods east and west of I-205.

Holgate Boulevard Station. This at-grade station will be located west of I-205 in the vicinity of SE Holgate Boulevard. The station will serve residential neighborhoods east and west of I-205 via the existing Holgate Boulevard overpass. In the year 2000, it is estimated that there were 4,345 people and 1,226 jobs within ½ mile of the station. In addition, the Eastport Plaza (WalMart, G.I. Joes, other stores and banks and restaurants), is within ¾ mile of the station. Pedestrian and bicycle access is proposed via existing and new on-street and off-street facilities.

Foster Road Station. This above-grade station will serve the Lents neighborhood via a new structure over the SE Foster Road/Woodstock Boulevard couplet. In 2000, there were an estimated 3,521 people and 1,072 jobs within ½ mile of the station. More specifically, the station will serve the Lents Town Center area, nearby residential neighborhoods and the nearby Wattle's Boys & Girls Club. The Foster Road Station will serve neighborhood areas to the east and west of I-205 via the existing SE Foster/Woodstock underpass. These surface streets also serve as transit streets and provide auto, bus, bicycle and pedestrian access to portions of the Lents neighborhood to the east of I-205.

Flavel Street Station. This at-grade station will be located west of I-205 in the vicinity of SE Flavel Street. In 2000, there were an estimated 2,472 people and 612 jobs within ½ mile of the station. The station will serve nearby residential areas, including a large multifamily development located to the east side of I-205. SE Flavel Street provides connectivity across I-205 and also accommodates transit. The station does not include any off-street parking or pick-up/drop-off areas, and the LRT crossing of SE Flavel Street would be at-grade.

Fuller Road Station. This above-grade station will be located west of I-205 and south of the SE Johnson Creek Boulevard interchange to I-205. In 2000, there were an estimated 4,141 people and 1,923 jobs within ½ mile of the station. The station will serve nearby residential areas and

commercial uses such as Fred Meyer. The existing SE Johnson Creek overpass provides access to a rapidly growing residential area to the east of I-205.

Clackamas Regional Center Station. This at-grade terminus station will be located west of I-205 on the east side of the CRC mall, just south of Clackamas Crossing. The LRT station has a quick drop area on the west side with a bus layover area separating the quick drop area and the LRT platform. The station will be integrated with a relocated CRC Transit Center. In 2000, there were an estimated 2,846 people and 10,731 jobs within ½ mile of the station. The station will serve the 1.2 million square foot Clackamas Mall (with 185 stores), Sunnyside Kaiser Hospital (and several other health clinics), Oregon Institute of Technology, high-density residential neighborhoods to the north of SE Monterey Avenue, the large New Hope Church to the east of I-205, and other employment and commercial uses in the vicinity, such as Clackamas County offices, and a branch library.

Park-and-Ride Lots

Five park-and-ride lots or structures will be provided as part of the project in the I-205 Segment. An additional, sixth park-and-ride facility is proposed at the Clackamas Transit Center terminus, but it will not be built as part of the project and is not addressed in these findings. Additionally, a shared-use agreement will allow LRT riders to use up to 300 existing parking spaces at the New Hope Church located east of I-205 near the Monterey overpass. This too is not a part of this project and is not addressed in these findings.

Main Street Park-and-Ride. This park-and-ride would accommodate about 550 parking spaces in an area to the south of SE Washington Street and north of SE Market Street, west of SE 96th Avenue. The exact location has not yet been determined as discussions with the Citizens Advisory Committee are still underway. This park-and-ride would generate about 220 PM peak hour vehicle trips. Access to the park-and-ride facility is proposed at SE 96th Avenue. Depending on the final design, this park and ride lot could require a signal and gates at SE 96th and SE Main Street.

Powell Boulevard Park-and-Ride. This park-and-ride would accommodate about 400 parking spaces in an area to the south of the Powell LRT station. This park-and-ride could generate up to 280 PM peak hour vehicle trips. Access to the park-and-ride facility is proposed at one (new) signalized location on SE 92nd Avenue, approximately 500 feet south of SE Powell Boulevard. This access point would allow for full access to the park-and-ride.

Holgate Park-and-Ride. This park-and-ride would accommodate about 400 parking spaces in a three level parking structure located to the west of the Holgate station. However, the final design has not been determined and options include a smaller 125 space surface parking lot or even no park and ride. The park-and-ride could generate up to 280 PM peak hour vehicle trips. Access to the park-and-ride facility is proposed at one (new) signalized location on SE Holgate Boulevard, about 470 feet west of SE 96th Avenue and about 380 feet east of SE 92nd Avenue. This access point would allow for full access to the park-and-ride.

Foster Park-and-Ride. This park-and-ride would accommodate about 150 parking spaces in a surface lot located beneath the I-205 overpass between SE 94th Avenue and SE 96th Avenue. The park-and-ride would generate about 105 PM peak hour vehicle trips.

Fuller Road Park-and-Ride. This park-and-ride would accommodate about 1,000 parking spaces in a structure located east of SE Fuller Road and about 600 feet south of SE Johnson Creek Boulevard. The park-and-ride would generate up to 700 PM peak hour vehicle trips. The interchange area along SE Johnson Creek Boulevard near the Fuller Road Park-and-Ride is assumed improved under No Build conditions with a partial cloverleaf interchange. There would be access off SE Fuller Road to the park-and-ride as well as possible access from SE William Otty Road. This park and ride could include signalization of the intersection at SE Fuller/SE William Otty Road.

Clackamas Regional Center Park-and-Ride. This park-and-ride structure would accommodate about 500 parking spaces in the southeast corner of the CRC Mall. The park-and-ride would use existing entry/exit points that are currently in place for CRC. The park-and-ride would generate about 350 PM peak hour vehicle trips. One access to the structure would be located opposite the shopping center's north/south circulation aisle. A second access would be needed to provide adequate access capacity given the overall structure size. By relocating the CRC transit center to the east side of the shopping center parking lot, internal shopping center parking circulation on the north side of CRC would be improved.

Operations and Maintenance Facilities

TriMet's fleet of light rail vehicles will increase by 21 with I-205 LRT, from a total fleet size of 127 to 148. The operations and maintenance facility needs for the additional light rail cars for the I-205 Segment would be met through a future expansion of TriMet's Ruby Junction Operations and Maintenance Facility in Gresham, which is not part of this 2004 LUFO amendment. Accordingly, for purposes of this amendment, there are no operations and maintenance facilities located in the I-205 Segment.

Highway Improvements

There are no highway improvements in the I-205 Segment. The LRT alignment will not preclude future improvements to the I-205 freeway because the design has been created such that space for an additional highway travel lane could be added within the current public right-of-way without significant changes to the LRT facilities or the need to add additional land.

6.4.1.2 Criterion 3: Neighborhood Impacts

"Identify adverse economic, social and traffic impacts on affected residential, commercial and industrial neighborhoods and mixed use centers. Identify measures to reduce those impacts which could be imposed as conditions of approval during the National Environmental Policy Act (NEPA) process, or, if reasonable and necessary, by affected local governments during the local permitting process."

"A. Provide for a light rail route and light rail stations, park-and-ride lots and vehicle maintenance facilities, including their locations, balancing (1) the need for light rail proximity and service to present or planned residential, employment and recreational areas that are capable of enhancing transit ridership; (2) the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and (3) the need to protect affected neighborhoods from the identified adverse impacts."

"B. Provide for associated highway improvements, including their locations, balancing (1) the need to improve the highway system with (2) the need to protect affected neighborhoods from the identified adverse impacts."

Description of Affected Neighborhoods in the I-205 Segment.

The I-205 Segment extends north-south along I-205 from the Gateway commercial center on the north to the Clackamas Regional Center on the south. I-205 functions as the boundary for several neighborhoods along the corridor. Extending from north to south, this segment includes portions of the following City of Portland neighborhoods: Montavilla, Hazelwood, Powellhurst-Gilbert and Lents. Further south, this segment includes portions of the following Clackamas County neighborhoods: Southgate, West Mt. Scott and Sunnyside.

The Montavilla Neighborhood is located south of I-84 and west of I-205 and the Hazelwood Neighborhood is located east of I-205, south of Halsey, with I-205 the boundary between the two. Both neighborhoods include a mix of land uses including single-family neighborhoods, auto-oriented commercial development and traditional commercial storefronts. The Montavilla neighborhood is made up predominantly of single-dwelling housing. There are some industrial uses and multi-dwelling development in the northeast portion of the neighborhood. The Montavilla neighborhood also has several commercial areas oriented to SE 82nd Avenue, SE Division Street, and the SE Washington and SE Stark Street couplet. Institutional uses in the neighborhood include Montavilla Park and community center and the Multnomah School of the Bible.

The major features of the Hazelwood neighborhood are transportation oriented. There are four major east-west and four north-south arterials, including I-205, within the neighborhood. Additionally, TriMet's MAX light rail line bisects Hazelwood, providing convenient transit access to Portland, Gresham and the Airport. In addition to residential areas, major land uses include the Gateway Shopping Center, Mall 205 Shopping Center, Portland Adventist Medical Center, and the Midland Regional Library.

The Montavilla neighborhood had a population of 16,193 and an employment base of 5,825 jobs in 2000. Hazelwood had a population of 20,021 and an employment base of 2,441 jobs in 2000. Relative to the Tri-County area, both the Montavilla and Hazelwood neighborhoods have larger proportions of minority residents, a higher proportion of renter occupied housing units, and higher poverty rates. With many senior and retirement facilities in the neighborhood, Hazelwood also has the highest percentage of elderly residents (more than 16 percent) of all neighborhoods in the I-205 Segment.

Continuing south, the Lents and Powellhurst-Gilbert Neighborhoods are both divided by I-205, with Lents located to the west of Powellhurst-Gilbert. Both neighborhoods were dramatically impacted by the construction of I-205 in the late 1970s, as the need for over 300 feet of right-of-way resulted in the loss of many houses. In addition, the completion of I-205 freeway changed transportation routes due to closed streets at the freeway right-of-way. Finally, the freeway generates noise and increased air pollution. Both neighborhoods include a mix of land uses including single and multi-family housing, auto-oriented retail and some industrial uses. Lents Park, the Wattle's Boys & Girls Club, and schools are key facilities in the neighborhoods. Johnson Creek and the Springwater Corridor recreational trail traverse the Lents neighborhood and provide both constraints and amenities for development.

The Powellhurst-Gilbert neighborhood had a population of 17,973 and an employment base of 3,956 jobs in 2000. Lents had a population of 18,358 and a job base of 4,900 in 2000. Relative to the Tri-County area, both the Powellhurst-Gilbert and Lents neighborhoods have larger proportions of minority residents, a higher proportion of renter occupied housing units, and higher poverty rates. Of all neighborhoods in the I-205 Segment, median home values are the lowest and poverty rates the highest in the Lents neighborhood.

In Clackamas County, the Southgate neighborhood borders the west side of I-205. Southgate is a large neighborhood with diverse land uses including a regional mall (the "Clackamas Mall" or "CRC Mall"), single and multi-family housing and auto-oriented retail along SE 82nd Avenue. County offices and other employment areas are concentrated in the southern part of the neighborhood. Southgate is home to a relatively large proportion of residents who are Hispanic compared to the Tri-County average. Renters occupy nearly 60 percent of the housing units in the neighborhood. A slightly higher percentage of residents are elderly in the Southgate neighborhood than the Tri-County area, partially due to the concentration of senior housing north of the Clackamas Mall. The Southgate neighborhood had a population of 14,599 and a job base of 15,425 in 2000. The concentration of jobs in the Southgate neighborhood is much higher than in any other neighborhood in the I-205 Segment.

The West Mt. Scott and Sunnyside neighborhoods border the east side of I-205. West Mt. Scott and the northern portion of the Sunnyside neighborhood are primarily residential neighborhoods comprised of single-family homes with some apartments and town homes located near major arterials. SE Sunnyside Road is lined with auto-oriented commercial development. The Kaiser Sunnyside Medical complex is also located in the Sunnyside neighborhood. West Mt. Scott is the smallest neighborhood in the I-205 Segment, with a population of 2,761 and a job base of 321 in 2000. West Mt. Scott also has the highest median home values and the lowest poverty rates of all neighborhoods in the segment. Sunnyside had a population of 7,203 and a job base of 3,763 in 2000. At more than 64 percent, Sunnyside has the highest percentage of renters of all neighborhoods in the I-205 Segment.

Identify adverse economic, social and traffic impacts on affected neighborhoods. Identify measures to reduce those impacts.

Economic, social and traffic impacts specific to the I-205 Segment are addressed in the following section. Economic, social and traffic impacts applicable to neighborhoods throughout the South Corridor, including the I-205 Segment, are addressed above under the heading "General Impacts and Mitigation Measures Applicable to All Segments" (hereafter "General Findings"). Economic, social and traffic impacts are also described, along with corresponding mitigation measures, in the *Land Use and Economic Activity Results Report (Land Use Report),* the *Community Impact Assessment Results Report (Community Impact Report),* and the *Local Traffic Impacts Results Report (Traffic Report),* all dated December 2002.

Economic Impacts

The Council finds that overall, the South Corridor Project will result in positive economic impacts in the I-205 Segment, particularly because improved transit capacity will be available to support existing and planned intensive development at the Gateway and Clackamas regional centers. However, the long-term benefit must be balanced by the short-term adverse economic impacts associated with the displacement of one home-based retail business north of SE Johnson Creek Boulevard in the Southgate neighborhood.

Displacements. In the I-205 Segment, the LRT alignment will displace one home-based retail business north of SE Johnson Creek Boulevard next to the west side of I-205. Adverse economic impacts associated with this displacement include the loss of employment and payroll, loss of retail services, and loss of assessed value and tax base associated with the business. The LRT alignment, stations and park-and-ride lots will be in public ownership and off the tax roll.

Wherever the South Corridor Project displaces an existing commercial or industrial use, that represents an adverse economic impact. Displacement has an effect on employment, incomes, services and taxes. Even though the adverse impacts associated with displacement may not be significant on a region-wide or citywide level, the Metro Council recognizes and is sympathetic to the significance of each displacement at the individual business and community level. Metro understands and acknowledges that relocations can cause significant anxiety and trauma not only to the company being displaced, but also to the employees who work for the company.

In terms of mitigation, as described in the General Findings, displaced commercial uses will be acquired at fair market value, and/or relocation benefits will be provided to business owners and tenants. During the preliminary and final engineering processes, staff will try to minimize displacement impacts to the extent practicable through design refinements. In addition, the increased accessibility provided to people and places by the LRT will likely result in increased sales and property values to those remaining businesses which could mitigate or even reverse any overall business losses directly due to completion of the light rail system.

Loss of Parking/Access. The loss of parking, and the loss or change of access, can have adverse economic impacts on businesses. If the project must remove an existing access, and if that access cannot be safely and adequately relocated or reconfigured, then the entire business is assumed to be displaced.

Off-street parking in the I-205 Segment is generally privately owned and typically serves adjacent commercial activity. South Corridor project improvements will affect off-street parking at the Clackamas Regional Center (CRC). The Clackamas Mall is surrounded by large surface parking lots (6,280 spaces) that access the regional street system in several locations. The LRT alignment and Transit Center/Station will likely be located at the eastern edge of the CRC parking lot. The *Traffic Report* notes that the LRT improvements will displace approximately 680 off-street parking spaces to the east of the CRC mall. By relocating the transit center from its current location north of the mall to the east, some parking could be reestablished that is actually closer to the mall.

Additionally, a shared-use park & ride structure may be constructed immediately south of the relocated transit center, although it is not included in the base project cost. The conceptual plans identify the potential development of a structure with up to 500 park & ride spaces. During the final design, coordination will be needed to determine appropriate mitigation for impacted parking. Potential mitigation measures include shared use of park-and-ride spaces.

The Council notes that Paul DeMarco, Manager of the Clackamas Mall, testified that both Clackamas mall and its owner, General Growth Properties, are very supportive of the South Corridor Project and I-205 LRT improvements in particular.

Tax Base. The LRT improvements in the I-205 Segment will displace one home-based retail business. Additionally, the stations and park-and-ride lots will displace other properties from the tax rolls. The Council finds that the tax base impacts will be minimized in the I-205 Segment because the LRT alignment and stations are generally located within a right-of-way that was reserved for transit when I-205 was constructed. Table 3.1-4 of the SDEIS notes that the I-205 LRT Alternative would displace land with an estimated assessed value of less than $2 million, far lower than the estimated assessed value of land displaced by other considered alternatives. As a consequence, the I-205 LRT alternative also has much lower impacts on the local tax base. The Council also finds that properties near light rail stations in the I-205 Segment will likely experience an increase in value when the project is completed, thereby increasing property tax revenue in the long term.

Freight Movement. Efficient movement of freight and goods throughout the South Corridor Project area is critical to the economic vitality of the region. Details about truck activity in the various subareas of the I-205 Segment can be found in the *Traffic Report.* While peak-periods of truck activity typically occur during the midday, when total traffic levels are lower, the pm peak-hour was selected for the traffic analysis because it tends to be the most congested period of the day. Intersections in the vicinity of I-205 were found to have freight truck activity ranging from 1 to 5 percent. Because the LRT alignment will largely be separated from the surface street system, and will not cross major streets at grade, the Council finds that the project should not have an adverse impact on freight movement in the segment. Further, the LRT improvements in the I-205 Segment will have no impact on water freight movement or rail freight movement.

Social Impacts

The Council finds that the social impacts of the South Corridor Project are generally positive in the I-205 Segment. Light rail provides improved transit access to major destinations and activity centers within the community, and also provides connections to employment centers, services and recreational destinations in the larger region. Light rail will provide an alternative mode to automobile travel on often-congested roadways within this segment. Many neighborhoods in the I-205 Segment have poverty levels that are higher than typical in the tri-county region, and the Council finds that these neighborhoods will benefit from improved availability of public transit. By benefiting these neighborhoods through the provision of LRT, the South Corridor Project will help achieve an aim of Statewide Planning Goal 12, Transportation, to serve the needs of the transportation disadvantaged. Because the LRT improvements are generally located adjacent to the I-205 freeway, which currently serves as a boundary of many neighborhoods, community fragmentation impacts are minimized.

Residential Displacements. As with business displacements, the Council recognizes that in every instance where the South Corridor Project displaces an existing household, that represents an adverse social impact, and the Council is sympathetic to the significance of each residential displacement. It understands and acknowledges that relocations can cause significant anxiety and trauma to families, uprooting them from neighborhoods, schools and friends and imposing change on them.

In the I-205 Segment, the LRT improvements would displace a total of thirteen single-family homes and one unit of a multifamily complex. Three single-family homes and the apartment unit would be displaced by the LRT alignment in the Lents neighborhood. Four single-family homes would be displaced by the LRT alignment in the Southgate neighborhood, with an additional six single-family homes displaced by the Fuller Road park-and-ride in the same neighborhood.

It may be possible in some instances to reduce some residential displacements by taking only a portion of a property and/or structure and by modifying the remaining property and/or structure to allow continued occupancy. Where displacements are unavoidable, the project will provide compensation for real property and/or relocation benefits to property owners and tenants based on fair market value and a comprehensive relocation program, as explained in the General Findings.

Access to Community Facilities. The Council finds that the South Corridor Project will provide improved transit access to community and employment centers for neighborhoods in the I-205 Segment. Table S-4 of the *Neighborhoods Report* shows that the I-205 LRT improvements will increase the number of residents within 45-minutes (transit time) of key corridor destinations, including Downtown Portland, Lloyd District, Central Eastside Industrial District, the Gateway Regional Center and the Clackamas Regional Center. In particular, the CRC transit center and station will improve transit access to the substantial base of jobs and services located at the Clackamas Mall. The mall employs from 1,500 to 5,000 people, depending upon the season. The mall has 16 million visitors a year, including shoppers, customers and employees. Adequate transit access to the CRC is a vital concern. Representatives of the CRC Mall are very supportive of the I-205 LRT improvements.

LRT improvements in the I-205 Segment will also provide improved transit accessibility to Portland Adventist Medical Center, Marshall High School, the Wattle's Boys & Girls Club, and commercial/employment centers in the Gateway and Mall 205 areas. Additionally, the South Corridor Project will improve transit connections for affected neighborhoods to other local and regional employment centers, community facilities and recreation destinations such as downtown Portland, the Convention Center, Lloyd Center, the Rose Quarter, the Expo Center and the Airport via connections to the East-West MAX light rail route, Interstate MAX and Airport MAX. The Council finds that improved transit accessibility to community facilities and employment centers is especially important to the higher than average percentage of minority and elderly residents, and households in poverty, residing within ¼ mile of stations in the I-205 Segment.

Barriers to Neighborhood Interaction. The Council finds that the LRT alignment in the I-205 Segment will not result in barriers to neighborhood interaction, primarily because the alignment parallels I-205. The freeway currently functions as the boundary for five of the seven neighborhoods in the segment and the LRT alignment will reinforce this existing boundary. Major grade-separated east/west streets and a pedestrian/bicycle overpass at Main Street and the Springwater Trail bike path currently provide the main motor vehicle and non-vehicle links for neighborhoods that are separated by the freeway. Because the LRT alignment will generally be grade-separated from major east/west streets, LRT will not introduce a new barrier to neighborhood interaction. The east/west streets and the north/south I-205 bike path will continue to provide the major opportunity for vehicle, bicycle and pedestrian circulation along and across I-205.

Powellhurst-Gilbert and Lents are the only neighborhoods that extend to both sides of I-205. The *Neighborhoods Report* concludes that the LRT improvements will not impact the cohesion and livability of the Powellhurst-Gilbert neighborhood. The *Neighborhoods Report* concludes that neighborhood cohesion and livability will be improved in Lents because the Foster Road Station will be designed to increase connectivity between areas of the neighborhood east and west of I-205. The station at Foster Road will also provide improved pedestrian facilities under the freeway and across SE Foster Road and SE Woodstock Boulevard. Additionally, the LRT stations and park-and-rides will be linked with the I-205 bike/pedestrian path at several locations. This facility provides important links between neighborhoods.

The Council recognizes that the Fuller Road park-and-ride structure will change the character of the Southgate neighborhood between SE Fuller Road and I-205, south of SE Johnson Creek Boulevard. However, because the park-and-ride structure will be located at the edge of the neighborhood, the Council finds that it will not result in a barrier to neighborhood interaction. Impacts of the park-and-ride structure are addressed under the heading of Visual/Aesthetics below.

Safety and Security. Members of the community have expressed concerns about the safety and security of the TriMet system and the effect of LRT on neighborhoods in the I-205 Segment. Neighborhood concerns have focused on personal safety at transit stations, theft from vehicles at park-and-ride lots and increased property crimes in neighborhoods adjacent to transit stations. TriMet has developed strategies for addressing crime at transit stations and park-and-rides over

the course of more than 15 years of operating light rail in the region. The Council finds that the lessons learned can and will be applied in the I-205 Segment.

The Council recognizes that crime is likely to be found at higher rates in areas where people congregate such as transit stations, shopping malls, the transit mall and parks. The Council acknowledges and supports TriMet's continuing efforts to improve passenger and community safety through their service area.

To create a safe transit environment, TriMet's Transit Security Division patrols trains, buses and park-and-ride lots. TriMet will coordinate with local jurisdictions to effectively patrol new facilities constructed in the South Corridor. In addition to sworn law enforcement officers in the Transit Security Division, TriMet contracts with a private security firm to provide additional patrols. Further, TriMet contracts with Multnomah County for a full-time Deputy District Attorney to prosecute transit-related crimes.

TriMet has developed and adopted a system-wide *Transit Security Plan* that calls for the application of community policing goals and techniques to transit security. Elements of the plan will be incorporated into the design and operation of I-205 LRT. These would likely include:

- In-house training of transit district employees to increase awareness of and prevent criminal activities;
- Coordination with local law enforcement agencies and personnel;
- Improved facility design and operations standards that would improve visibility at transit stations and increase enforcement levels; and
- Investment in new tracking and surveillance technology.

Additional transit service can help to create a safe environment in neighborhoods. TriMet provide extra eyes-on-the-street every day through its drivers and other employees. TriMet operators are able to request medical or police assistance for passengers and the general public. TriMet is also training employees to recognize and evaluate suspicious activity, people or objects.

The Council is sensitive to the importance of safety and security in the neighborhoods affected by I-205 LRT, particularly for station and park-and-ride locations that may be perceived as isolated. Security lighting and telephones will be provided at station platforms, and landscape design (i.e., low shrubbery and good visibility) will ensure consideration of safety and security. The Council expects that safety and security issues will be addressed in more detail as the project moves into preliminary engineering and final design. This process will include additional input from affected neighborhoods and local law enforcement personnel. The Council finds that with appropriate final design and implementation of system-wide transit security and other mitigation measures as described in the General Findings, safety and security will not be adversely affected by the LRT improvements in the I-205 Segment.

Visual/Aesthetic. The I-205 Segment follows the I-205 corridor in outer southeast Portland and into the rapidly developing Clackamas Regional Center area of northern Clackamas County. The interstate, completed in 1978, cut a wide swath out of the developing suburban

neighborhoods. The highway environment is typical of the interstate system nationwide. Some of the neighborhoods are screened from the highway by sound walls or tall landscaped berms. A bicycle and pedestrian path runs the length of the right-of-way, connecting the adjacent neighborhoods and the major cross-streets.

The regional landscape slopes gently down to the south and includes several significant geographic resources. Rocky Butte is near the north end of the segment. Other formations within proximity of the corridor are Mt. Table, Kelly Butte, Mt. Scott, and Mt. Talbert. Mt. St. Helens, the Tualatin Mountains, and Mt. Hood and its foothills are visible in the distance from some points in the corridor.

Potential visual/aesthetic impacts associated with I-205 LRT are summarized in Table 3.7-5 of the SDEIS. In general, the Council finds that visual impacts related to the introduction of LRT to the I-205 Segment would be low to moderate because I-205 is already a major existing transportation corridor. Visual impacts would result from the addition of large, over-crossing structures at SE Powell Boulevard, SE Foster Road, and SE Johnson Creek Boulevard; the introduction of LRT stations and park-and-ride structures; changes in traffic circulation; and changes in development patterns and the removal of selected structures.

The one location where the visual impacts are expected to be high is the area between SE Clatsop Street and SE William Otty Road, where an LRT structure will cross over the SE Johnson Creek Boulevard interchange to I-205. The LRT station would sit on fill about 20 feet higher than area structures. The associated approximately 1000 space park-and-ride would remove several houses and be of a different scale than the surrounding neighborhood. The LRT improvements would involve vegetation removal, and change neighborhood circulation patterns.

Based on the findings in the *Visual Impacts Report* and the *SDEIS*, the Council finds that representative mitigation measures that could be used to mitigate for long-term visual impacts include:

- Refining the design of ramps and overhead structures to match the scale and character of the surrounding environment as practicable.
- Developing the pedestrian circulation to provide safe and identifiable connections.
- Using landscaping, berms or fencing to provide a buffer between the project improvements and neighborhoods where appropriate.
- Implementing neighborhood plan recommendations with respect to visual elements.
- Infilling adjacent land.

In each affected neighborhood, potential mitigation measures will vary to fit neighborhood scale and character. Visual impact mitigation measures will be specifically defined in the FEIS. In some areas, LRT project elements will be prominent visual features even with mitigation.

Traffic Impacts

Many of the region's freeways and highways serve at least a portion of the South Corridor. The regional facilities include I-205, Highway 224, and SE McLoughlin Boulevard (Highway 99E).

Regional and local transportation plans identify a number of highway and street improvements (as well as non-motorized improvements) that could affect the South Corridor Project area. These improvements are described in Table 4.1-1 of the *SDEIS* and key projects in the I-205 Segment are highlighted below:

- I-205 auxiliary lane improvements
- Johnson Creek Boulevard interchange improvements
- SE Monterey Road improvements
- SE Causey Avenue improvements
- SE Fuller Road improvements

The major roadway facilities in the I-205 Segment include I-205, SE Powell Boulevard, SE Foster Road, SE Woodstock Boulevard, and SE Johnson Creek Boulevard. A summary of existing p.m. peak-period traffic operations in the I-205 Segment follows:

- The intersection of SE Johnson Creek Boulevard at the I-205 southbound ramps operates at Level of Service (LOS) F.
- The intersection of SE Johnson Creek Boulevard at SE 82nd Avenue operates at LOS E.
- All other signalized intersections in this segment operate at LOS D or better.
- The unsignalized intersections studied in this segment operate at LOS D or better.

Year 2020 traffic forecasts prepared for the South Corridor Project indicate that substantial traffic volume increases over existing conditions are expected with both the No-Build and the I-205 LRT Alternatives in the I-205 Segment. However, I-205 LRT will help to reduce congestion and vehicle miles traveled, compared to the No Build Alternative.

In the Gateway to Flavel section of the segment, as shown in Table 4.3-8 of the *SDEIS,* shows expected 2020 P.M. peak hour level of service for the intersections of SE 92nd Avenue and SE Powell Boulevard and SE 92nd Avenue and SE Holgate Boulevard to be at levels of service E or F. These impacts will result primarily from the introduction of the Powell Boulevard and Holgate Boulevard park-and-ride lots. As noted in the SDEIS, potential mitigation for the intersection of SE 92nd Avenue/SE Powell Boulevard would consist of optimizing the signal cycle and timing to allow for additional green time for critical movements, and modifications to lane geometry in the northbound direction to change the northbound through/right-lane to a right-only lane. In addition, overlapping all of the right-turn lanes at this intersection would help reduce the additional delay caused by the trips associated with the park-and-ride lots.

In the SE Johnson Creek Boulevard to SE William Otty Road section of the segment, as shown in Table 4.3-9 of the *SDEIS*, only the intersection of SE Johnson Creek Boulevard with SE Fuller Road and the I-205 southbound off-ramp would operate at LOS F as a result of increased intersection delays and increased demand-to-capacity ratios, compared to LOS D under the No Build Alternative. The project related impacts at this intersection are related to additional trips from the Fuller Road park-and-ride. It is important to note that the 2020 traffic analysis in this vicinity included improvements to the SE Johnson Creek Boulevard interchange such as a new

northbound on ramp to I-205 from westbound SE Johnson Creek Boulevard, and a new southbound off ramp from SE Johnson Creek Boulevard westbound to I-205.

Potential mitigation for the poor level-of-service at the intersection of SE Johnson Creek Boulevard at SE Fuller Road and the I-205 southbound off-ramp could include optimizing the signal timing to allow for additional green time for critical movements, or modifying lane geometry in the southbound direction to add an additional southbound left-turn lane.

ODOT and Clackamas County have determined that a redesigned interchange may be required at SE Johnson Creek Boulevard at I-205. The Council expects that TriMet will work with ODOT and the county to develop an optimal interchange design that would minimize traffic impacts associated with a park-and-ride structure in this vicinity.

In the Clackamas Regional Center area of this segment, as shown in Table 4.3-10 of the *SDEIS*, two intersections, SE 82nd Avenue at SE Harmony Road and SE Sunnyside Road and SE 82nd Avenue at SE Monterey Avenue are projected to have level of service E or F. The intersection of SE 82nd Avenue at SE Harmony Road and SE Sunnyside Road would be adversely affected by additional vehicle trips associated with the Clackamas Regional Center park-and-ride lot – which would lead to LOS E at the intersection, compared to LOS C under the No Build Alternative. The impacts could be mitigated by optimizing signal timing and phasing.

The intersection of SE 82nd Avenue and SE Monterey Avenue would be adversely affected by additional trips generated by the New Hope Church shared use park-and-ride lot – which would increase delay at the intersection by more than 10 seconds compared to the No Build Alternative. Adding a northbound right-turn lane to access SE Monterey Avenue could mitigate this impact. In addition, the intersection's signal timing and phasing could be optimized to improve operating conditions.

Potential mitigation for impacts related to park-and-ride lot impacts is briefly summarized below and described more extensively in the *Traffic Report* and the *SDEIS.*

Main Street Park and Ride Lot. This park-and-ride, which could range from 450 to 550 spaces, could result in significant increases to LRT ridership (between 1,125 to 1,375 riders/day). While still under review for size and location within the 2004 LUFO amendment boundary, there appears to be some support from the Citizen Advisory Committee for some type of public park-and-ride rather than no public park-and-ride lot. The neighborhood concern is that if no park-and-ride is provided, the result could be **a substantial increase of non-resident** parking on private property and/or on public streets within the neighborhood. This could, in turn, cause increases to local traffic and deny on-street parking to residents. Mitigation could include a signal and gates at 96th/Main Street intersection and some other, low cost off-site improvements.

Powell Boulevard Park-and-Ride Lot. The signalized access to this park-and-ride could be relocated to align with SE 91st Place.

Holgate Boulevard Park-and-Ride Lot. Further study of the width of the supplemental pathway between the parking structure and the light rail trackway should be conducted to address the pedestrian and bicycle needs for through movement, station access, and waiting.

Foster Road Park-and-Ride Lot. The Federal Highway Administration (FHWA) will only approve an access control break for a park-and-ride lot consistent with its access management rules. Mitigation strategies could include consideration of alternative design and locations within that area shown on the 2004 LUFO amendment. Refinements to the bus access and operations plan at this station should be considered to eliminate weaving conflicts in this interchange area.

Fuller Road Park-and-Ride Lot. The garage access to SE Fuller Road could be relocated to provide equal spacing between the north and south access points. This mitigation measure could require coordination of access with the site to the west (formerly Home Base) in order to properly align driveways. Options to the configuration of SE Fuller Road opposite the I-205 southbound off-ramp at SE Johnson Creek Boulevard should be evaluated to better meet ODOT's access spacing policy. Alternative park-and-ride sites between SE Johnson Creek Boulevard and SE William Otty Road within the 2004 LUFO amendment boundary could be considered that could reduce the park-and-ride traffic demand in the vicinity of the SE Johnson Creek Boulevard interchange. TriMet, Clackamas County and ODOT should work cooperatively to develop an interchange design and grade separation plan to address each agency's needs while providing for the existing I-205 multi-use path.

Clackamas Regional Center East Park-and-Ride Lot. Due to the large variation in traffic at the shopping mall, a circulation management plan should be developed for mall access, bus circulation, and the park-and-ride lot. The design and width of the realigned I-205 pathway in the vicinity of the LRT station will need to be adequate to accommodate all users and provide for the safe flow of pedestrian and bicycle traffic.

The Council finds that the improvements and options described above can mitigate the adverse transportation impacts of the I-205 LRT in the I-205 Segment. More detailed traffic improvements and mitigation will be defined in the FEIS and during preliminary and final engineering.

Provide for a light rail route and associated facilities, balancing the need for light rail proximity and service to areas that are capable of enhancing transit ridership; the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and the need to protect affected neighborhoods from the identified adverse impacts.

The light rail route and associated facilities in the I-205 Segment will provide transit service to key activity centers that are capable of enhancing transit ridership, including the Clackamas Regional Center, the Portland Adventist Medical Center, and the Gateway Regional Center. I-205 LRT will support the design type designations in the *2040 Growth Concept.* Light rail will connect the Gateway and Clackamas Regional Centers, and leverage existing light rail lines to

provide additional connections to the Portland Central City and other regional centers to the east and west (Gresham, Beaverton and Hillsboro).

I-205 LRT includes new stations to serve key activity centers such as Portland Adventist Hospital and Clackamas Mall. Expanded transit service and stations would be provided in three designated urban renewal areas (Gateway Regional Center, Lents Town Center and Clackamas Regional Center). Plans for all three urban renewal areas include goals for public investments in infrastructure and amenities to attract and support private investment and more intensive development.

Through the adoption of the *Outer Southeast Community Plan (Portland),* the *Clackamas Regional Center Plan (Clackamas County),* and implementing regulations, local jurisdictions have already implemented higher density along transit corridors and near planned LRT stations. The service, permanence, and amenities of the I-205 LRT stations could attract higher-density, transit-oriented development at locations such as the SE Main Street Station (near Portland Adventist), the Foster Road Station (serving Lents Town Center), and the Clackamas Terminus Station (serving the regional mall and nearby office and residential development). Existing development patterns around many of the LRT stations are relatively low density and auto-oriented.

The Council believes that the LRT route and stations in the I-205 Segment provide a tremendous opportunity to support and leverage the development of an efficient and compact urban form as outlined in the *Regional 2040 Growth Concept,* thereby saving energy, reducing congestion and improving air quality. Because I-205 LRT will parallel the freeway and will be grade-separated from major east-west streets, it will operate at relatively high transit speeds, fit the character of this major transportation corridor and minimize new impacts on neighborhoods. Further, much of the LRT route is located within a transit right-of-way that was reserved when I-205 was constructed, which reduces displacement and neighborhood impacts.

Provide for associated highway improvements, balancing the need to improve the highway system with the need to protect affected neighborhoods from the identified adverse impacts.

No highway improvements are proposed in the I-205 Segment that have utility separate from the South Corridor Project. Modest roadway improvements are proposed as mitigation for traffic impacts associated with the LRT facilities in this segment. These improvements are described in the discussion of traffic impacts for the I-205 Segment.

6.4.1.3 Criterion 4: Noise Impacts

"Identify adverse noise impacts and identify measures to reduce noise impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by affected local governments during the permitting process."

Noise and vibration impacts specific to the I-205 Segment are addressed in the following section. Noise and vibration impacts common to neighborhoods throughout the South Corridor, including

the I-205 Segment, are addressed in the General Findings. The General Findings include an overview of noise and vibration, descriptions of different types of noise, and identification of potential noise mitigation by noise type. Noise and vibration impacts also are identified, along with corresponding mitigation measures, in the *Noise and Vibration Results Report, December 2002 (Noise Report).*

Identification of Noise and Vibration Impacts in the I-205 Segment

The I-205 Segment connects Outer Southeast Portland neighborhoods and business districts with North Clackamas County neighborhoods and the Clackamas Regional Center. The segment includes a mix of residential, commercial, and industrial land uses. The north and south ends of the I-205 Segment are anchored by large commercial developments. The noise environment in this segment is dominated by automobile and truck traffic on I-205 and on arterial streets such as SE Division Street, SE Powell Boulevard, SE Holgate Boulevard, SE Foster Road, SE Johnson Creek Boulevard and SE Sunnyside Road.

As shown in Figure 3.1-1 of the *Noise Report*, eighteen short-term and two long-term noise measurements were taken in the I-205 Segment. The ambient noise levels (Ldn) at the noise monitoring locations ranged from 57 dBA to 69 dBA. Traffic using I-205 is the primary noise source in the segment. Residences with a direct view of I-205 experience the higher noise levels, while residences partially or completely shielded from I-205 (by existing berms, soundwalls or terrain) experience lower noise levels. For example, the noise level at a monitoring site near SE Woodstock Boulevard, which has an unobstructed view of southbound I-205 traffic, was 67 dBA. The measured noise level at a monitoring site near SE Holgate Boulevard, which has an existing berm blocking the view of I-205 from the residences, was 61 dBA.

Sound walls or berms generally exist along both sides of I-205 between I-84 and SE Foster Road. ODOT plans to add noise walls on the west side of I-205 between SE Johnson Creek Boulevard and SE Monterey Avenue as part of a planned roadway expansion plan. Noise walls were recently constructed on the east side of I-205 between SE Johnson Creek Boulevard and SE Monterey Avenue as part of a local frontage road constructed by Clackamas County.

Existing sources of ground-borne vibration in the I-205 Segment include the existing Blue Line LRT and the I-205 freeway. Vibration levels measured at four locations in this segment ranged from 35 to 64 VdB. At a monitoring site near NE Glisan Street, vibration levels of several Blue Line LRT passbys ranged from 58 VdB to 64 VdB. With no LRT passbys, vibration levels ranged from 51 to 54 VdB due to the traffic on I-205. The existing ground-borne vibration in the I-205 Segment is below the human perception threshold of 65 VdB and ground-borne vibration was not perceived while taking the measurements.

Potential noise and vibration impacts are listed in Table 5.1-1 and displayed on Figures 5.4-1 through 5.4-5 of the *Noise Report.* The I-205 Light Rail Alternative would potentially result in 38 noise impacts and 6 vibration impacts. Four of the noise impacts are related to traffic (auto/bus) and 34 are related to LRT. All of the LRT noise and vibration impacts associated with the I-205 LRT Alternative would occur south of SE Foster Road where reserved transit

right-of-way does not exist. Some of the homes subject to noise or vibration are scheduled for acquisition and therefore are not included in the following noise and vibration analyses.

Twenty-four of the LRT noise impacts are considered adverse (defined as impacts that exceed federally-adopted standards). Five of these adversely noise impacted homes are located on the east side of SE Fuller Road north of SE Hinkley and south of SE Cornwell streets. The balance of the adversely noise impacted homes are located within an apartment complex on the northwest side of the intersection of SE Crystal Springs Boulevard and SE 92nd Avenue, just west of I-205.

With regard to LRT generated vibration, it is estimated that six dwelling units will be subjected to adverse levels of vibration. Two of the six dwelling units adversely affected by LRT vibrations are located between SE 98th Avenue and I-205, just north of SE Clatsop Street near the proposed location of special LRT switching trackwork that generates more vibration. The remaining four homes are located along SE 94th Avenue, three just north and south of SE Glenwood Street, the other just north of SE Henry Street.

Mitigation Options for Noise and Vibration Impacts in the I-205 Segment

Mitigation options for the various types of noise and vibration impacts are discussed in the General Findings. There are a number of ways to reduce LRT noise. These include moving the alignment, constructing a barrier between the receiver and the noise source, and reducing the number of transit vehicles and/or speeds. However, because the South Corridor project alternatives generally impact more urban environments, these options are more limited than they would be were the project being constructed in sparsely developed or undeveloped areas. For example, the physical separation required to produce a substantial noise reduction is not generally available in a built-up environment where setbacks from the noise source may be minimal.

Mitigation options for noise impacts in the I-205 Segment would be designed to effectively mitigate LRT noise and would not necessarily mitigate traffic noise from I-205. LRT sound barriers would generally be closer to the tracks and would be lower in height than sound walls designed for highway noise. The I-205 LRT alignment may conflict with noise barriers that ODOT plans to construct along I-205 from Johnson Creek Boulevard to Sunnyside Road in association with a roadway expansion project. The Light Rail Project would be responsible for developing replacement noise mitigation in areas where the project would impact existing or planned highway noise mitigation.

A preliminary analysis indicates that an approximately 6-foot-high sound absorptive barrier adjacent to the tracks near the affected dwelling units would sufficiently abate the LRT noise for the 24 dwelling units adversely impacted by LRT noise. Alternatively, a landscaped berm could provide noise mitigation where permitted by available space and site geometry.

LRT vibration mitigation could include relocating track crossovers or using direct fixation track, special “frogs,” vibration mats on top of a concrete pad, or resiliently supported track ties (tie

boots) near these receptors. All of the potential vibration impacts could be mitigated through the use of these measures.

Based on the information in the *Noise Report*, the Council finds that options are available to mitigate adverse noise and vibration impacts associated with LRT in the I-205 Segment. Choices regarding the location and type of mitigation will be determined during the Final Environmental Impact Statement process and will utilize the higher level of design detail associated with the Preliminary Engineering designs. Determinations regarding the location and type of noise and vibration mitigation will include public input from the affected property owners, neighborhood associations and local jurisdictions.

6.4.1.4 Criterion 5: Natural Hazards

"Identify affected landslide areas, areas of severe erosion potential, areas subject to earthquake damage and lands within the 100-year floodplain. Demonstrate that adverse impacts to persons or property can be reduced or mitigated through design or construction techniques which could be imposed during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Natural hazard impacts specific to the I-205 Segment are addressed in the following section. Natural hazard impacts applicable to neighborhoods throughout the South Corridor, including the I-205 Segment, are addressed in the General Findings. Natural hazard impacts, and associated mitigation measures, also are described in the *South Corridor Project Geology, Solis, and Seismic Impacts Result Report, November 2002 (Soils Report),* and the *Water Quality and Hydrology Results Report, December 2002 (Hydrology Report).*

Identification of Natural Hazard Areas in the I-205 Segment

The *Soils Report* does not identify specific *landslide areas* or *areas of severe erosion potential* in the I-205 Segment. The potential for major landslides within the South Corridor is very limited because the topography within the corridor is relatively gentle. Areas of severe erosion potential are generally associated with steep slopes and creek crossings.

The LRT improvements within the I-205 Segment would have moderate impacts on geology and soils. The improvements primarily involve the development of the LRT alignment along the existing I-205 freeway. Several LRT overpasses would be constructed, including structures over SE Powell Boulevard, SE Harold Street, SE Foster Road, SE Woodstock Boulevard, SE Crystal Springs Boulevard, and SE Johnson Creek Boulevard. Although soils in the Clackamas to Gateway Segment are not particularly susceptible to settlement, site-specific geotechnical investigations should be completed prior to further design of these overpasses.

As described in the General Findings, the Northwest is a seismically active area and is subject to *earthquake damage.* Figure 3.13-1 of the *SDEIS* illustrates the relative earthquake hazards in the South Corridor Project area. Most of the LRT improvements within the I-205 Segment would not be within mapped high seismic hazard areas. The two exceptions are an area of moderate to high ground motion amplification hazard south of the SE Main Street Station and the southern

terminus area. The south end of the alignment is mapped as being within a high liquefaction and ground motion amplification hazard area.

The surface trace of the East Bank Fault has been inferred to cross the alignment just north of the Flavel Street Station. Although the potential for surface rupture along this fault is not well understood, the potential for surface rupture and strong ground shaking motions should be addressed during preliminary engineering of this station and its associated overpass. Additionally, two four-story parking structures are planned in this segment: one at the Fuller Road Station and a second east of the Clackamas Regional Center terminus. These structures each will require a site-specific seismic hazard analysis during preliminary engineering.

The LRT alignment in the I-205 Segment crosses the *100-year floodplain* of Upper Johnson Creek near the LRT station at SE Flavel Street and I-205. Johnson Creek flows west from central Multnomah and Clackamas Counties before discharging to the Willamette River in Milwaukie. Existing bridge crossings restrict creek flow and localized flooding is common, particularly in the low-gradient reach upstream of SE 82nd Avenue. Portions of Johnson Creek were channelized in the 1930s, reducing the hydraulic connection between the creek and the floodplain. In many areas, the channelized section has not been maintained, and sediment and vegetation have reduced the capacity of the creek to convey floodwaters.

The Johnson Creek floodplain is approximately 1,146 feet wide at the proposed stream crossing near the Flavel Station. The water surface elevation during the 100-year flood event was calculated to be 198.78 feet (NGVD) or 200.155 feet (City of Portland datum) at the LRT crossing of Johnson Creek. Maximum flow in Johnson Creek usually occurs in December or January. Minimum flow usually occurs in August or September. Flood stage is reached at a flow of 800 cfs, and it occurs with an average frequency of 1.8 times each year.

Beginning approximately 1,150 feet north of the Johnson Creek crossing, the LRT alignment would be constructed in an area that FEMA designates the 100-year floodplain of Johnson Creek. A new bridge would be constructed over Johnson Creek. Construction of this bridge and the track north of the bridge would result in the placement of up to 231 cubic yards of fill in the floodplain. The fill in the floodplain could result in potentially adverse impacts if not properly mitigated with a balanced cut in the floodplain to maintain adequate capacity for storage and movement of large flood flows.

Mitigation Options for Natural Hazard Impacts in the I-205 Segment

Based on the information contained in the *Soils Report* and the *Hydrology Report,* the Council finds that no *landslide areas* or *areas of severe erosion potential* have been identified in the I-205 Segment. Additionally, although the Council recognizes that the Northwest is a seismically active area, the majority of the I-205 Segment is not mapped as a *high seismic hazard area*

The Council finds that options are available to mitigate landslide, erosion and seismic hazard conditions in the I-205 Segment. Designing slopes to minimize the effect of surface runoff could control erosion in cut and fill areas. Collecting and routing surface water away from cut-and-fill slopes could limit erosion damaged. Exposed soil can be seeded to control erosion and prevent

sediment-laden runoff from reaching streams. Stream banks at bridges can be reinforced to prevent erosion and undercutting. Additional precautions should be taken when working near stream crossings.

In areas where slop instabilities may exist or be identified during preliminary engineering, the slopes could be regarded or mechanically stabilized and properly drained to minimize slope failure potential. The southern portion of the I-205 LRT alignment is one area that will require further investigation.

Seismic hazards within the South Corridor include liquefaction, amplification of ground motions and earth rupture. All three could lead to significant structural damage due to settlement, shaking or earth displacement. Liquefaction can be mitigated by stabilizing the soils or supporting the structures. Ground motion amplification can be reduced through foundation design and proper structural design. The potential for earth rupture along the alignment is limited but may impact the Flavel Street Station. Consideration of specific mitigation for this potential risk will be addressed during the preliminary engineering phase and in the Final Environmental Impact Statement.

The Council recognizes that approximately 200 cubic yards of fill will be placed in the Johnson Creek *100-year floodplain*. Although this is a minor amount of fill, Johnson Creek has experienced flooding on a regular basis and local jurisdictions, volunteers, and the Johnson Creek Watershed has expended significant effort and funds to reduce flooding occurrences.

The Johnson Creek crossing is within the jurisdiction of the City of Portland and requires mitigation because it would include placement of fill within the Johnson Creek floodplain. The City of Portland requires balanced cut and fill and prohibits encroachments into floodways (of 15 foot width or greater) by development and other structures unless technical analysis shows that the development would not result in an increase in the base flood elevation. Complying with these regulations will require finding a location nearby to remove material from the floodplain to offset the fill and comply with the no net rise regulations. Based on information in the *Hydrology* Report, the Council finds that there are potential locations for a balanced cut in the floodplain just downstream of the crossing.

Once locations have been chosen for balanced cut and fill to take place, hydraulic modeling will be performed to ensure no net rise in floodplain elevations. Hydraulic modeling in the vicinity of constrictions such as bridges and culverts will be performed to ensure that their functioning would not be compromised. The Council concludes, therefore, that options are available to mitigate for the placement of approximately 200 cubic yards of fill within the Johnson Creek 100-year floodplain. City of Portland regulations require balanced cut and fill and no net rise in the floodplain elevation. Wherever possible, the Council supports incorporating balanced cut and fill requirements with projects that improve water quality, such as revegetating riparian areas of Johnson Creek that are currently in a degraded state.

6.4.1.5 Criterion 6: Natural Resource Impacts

"Identify adverse impacts on significant fish and wildlife, scenic and open space, riparian, wetland and park and recreational areas, including the Willamette River Greenway, that are protected in acknowledged local comprehensive plans. Where adverse impacts cannot practicably be avoided, encourage the conservation of natural resources by demonstrating that there are measures to reduce or mitigate impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Natural resource impacts specific to the I-205 Segment are addressed in the following section. Natural resource impacts applicable to neighborhoods throughout the South Corridor, including the I-205 Segment, are addressed in the General Findings. Natural resource impacts, along with associated mitigation measures, also are described in the *Ecosystems Impacts Results Report (Ecosystems Report),* and the *Parklands, Recreation Areas, Wildlife and Waterfowl Refuges Results Report (4f Report),* both dated December 2002.

Identification of Impacts to Significant, Protected Natural Resources in the I-205 Segment

As required by Statewide Planning Goal 5, the City of Portland and Clackamas County have inventoried and evaluated natural resources for the purpose of identifying and protecting significant natural resources, including high quality wetlands and streams. Protection of these areas includes minimizing erosion, maintaining and enhancing water quality and fish and wildlife habitat, and preserving scenic quality and recreation potential. The City of Portland and Clackamas County Comprehensive Plans and implementing regulations provide guidelines and standards for protecting significant natural resource areas, including required minimum development setbacks from waterways and wetlands, development standards, and vegetation protection requirements.

Fish and Wildlife Habitat. Johnson Creek is the only waterway that is crossed or affected by LRT improvements in the I-205 Segment. Johnson Creek is 25 miles long, originating near the community of Cotrell. The western portion of the creek flows primarily through urbanized habitat, whereas the eastern portion of the creek flows through undeveloped open space and agricultural land. In the 1930s, the Federal Works Progress Administration cleared and lined about 90 percent of Johnson Creek between its mouth and SE 158th Avenue. The channel was excavated to a depth of 6 to 10 feet with a bottom width of 25 to 50 feet. The channel has not been maintained; in many reaches sediment has been deposited, and shrubs and trees grow in the sediment.

No major barriers to fish passage are present. A number of resident as well as Threatened, Endangered and Sensitive (TES) fish species have been documented throughout Johnson Creek, including Coho salmon, Fall chinook and Winter steelhead. These species migrate, spawn, and rear in streams throughout the Project area.

Johnson Creek is an inventoried significant natural resource in the City of Portland comprehensive plan. That portion of Johnson Creek that traverses the I-205 right-of-way is designated by the City of Portland with either conservation or preservation overlay zoning. Preservation overlay zoning provides the highest level of natural resource protection in Portland.

The City of Portland applies this overlay zone to natural resource sites that contain the most important resources and functional values. Conservation overlay zoning also protects natural resource sites, but to a lesser degree than preservation overlay zoning.

Along the Johnson Creek water course, and through the I-205 right-of-way, the City of Portland has designated an approximately 300 foot wide Environmental Preservation zone. On both sides of this Preservation zone there is an approximately 50-60 foot Conservation zone. In addition, the whole watershed in the vicinity of Johnson Creek and I-205 is subject to the City of Portland's Johnson Creek Basin Plan District. These requirements are intended to prohibit new development or significant additions to existing developments within the floodway. However, the zoning does explicitly permit "public bridges", subject to standards of the Bureau of Environmental Services.

The I-205 LRT design in this area calls for an on-grade track with a 125 foot long bridge over Johnson Creek.

Table 3.11-8 of the South Corridor *SDEIS* summarizes potential impacts to streams and fish habitat by Alternative. As shown in the table, about 88 lineal feet of streams would be permanently impacted by the I-205 Project and 34 lineal feet would be temporarily impacted. Impacts could include removal, disturbance, or destruction of biological resources from the construction of new stream crossings or new impervious surfaces with the riparian zone.

Short-Term impacts may include the removal or disturbance of riparian vegetation in construction staging, storage, and access areas, impacts to water quality form soil erosion and spills of toxic materials (e.g. construction equipment fuel) and increased noise, lighting, and human activity during project construction. Long-term impacts may include irreversible removal, disturbance, or destruction of biological resources from the construction of new stream crossing or new impervious surfaces within the riparian zone.

Scenic and Open Space Areas.
The I-205 Segment is partially within the City of Portland and partially within unincorporated Clackamas County. The City of Portland has a scenic overlay designation, but it has not applied the scenic protection overlay within the vicinity of the I-205 Segment. Clackamas County designates scenic roads and has land use policies and regulations that pertain to lands along these scenic roads. However, there are no designated scenic roads in the vicinity of the Clackamas County portion of the I-205 Segment. Potential visual/aesthetic impacts associated with I-205 LRT are summarized in Table 3.7-5 of the SDEIS. Visual impacts related to the introduction of LRT to the I-205 Segment would be low to moderate because I-205 is already a major existing transportation corridor. Accordingly, it is concluded that no scenic resources are have been identified and protected in acknowledged local comprehensive plans and that no scenic resources are likely to be adversely impacted.

The City of Portland has designated the I-205 right-of-way as Open Space. Chapter 33, section 100 of the City of Portland Zoning Ordinance states:

"The Open Space zone is intended to preserve and enhance public and private

open, natural, and improved park and recreational areas identified in the Comprehensive Plan.
These areas serve many functions including:

- Providing opportunities for outdoor recreation;
- Providing contrasts to the built environment;
- Preserving scenic qualities;
- Protecting sensitive or fragile environmental areas;
- Preserving the capacity and water quality of the stormwater drainage system; and
- Providing pedestrian and bicycle transportation connections.

Further, the bicycle/pedestrian path along the I-205 freeway alignment is noted as "Recreation Trail" on the zoning maps.

The ordinance goes on to say that "The Open Space zone is applied to all land designated as 'Open Space' on the Comprehensive Plan map." I-205 freeway does provide for pedestrian and bicycle transportation connections with the I-205 bike/ped path. The I-205 LRT Project design incorporates the bike/ped path, including making ADA improvements and ensuring access to and through the I-205 Segment. As noted above, there are no scenic protection overlay designations in the vicinity of the I-205 Segment. Accordingly, it is concluded that the I-205 LRT Project, in the context of the City of Portland regulations concerning scenic and open space resources, does not have an adverse impact on these kinds of resources, so long as the existing bike/ped path is sustained and incorporated into the I-205 LRT Project design.

Riparian Areas.
See fish and wildlife habitat, above.

Wetland Areas.
Section 3.11.2.1 of the South Corridor SDEIS inventories and compares the impacts to wetlands from the transportation alternatives. For the I-205 LRT Segment, about 1,300 square feet of wetlands would be filled and about 3,000 square feet would be spanned.

Affected wetlands include wetlands in the vicinity of Johnson Creek. The City of Portland preservation and conservation overlay zones, described in the fish and wildlife habitat section above, are employed along Johnson Creek to protect wetland areas as well as other fish and wildlife habitats. In addition, there is a small area of about 100 by 400 feet in a conservation overlay zone located on the east side of the I-205 right-of-way, just south of SE Taggart Street. However, the I-205 LRT alignment is on the other side of the freeway and will not disturb this wetland.

Short-term wetland impacts may include soil compaction, impacts to water quality from soil erosion and spills of toxic materials and loss of vegetation as a result of heavy equipment use during construction.

Long-term impacts may include loss of wetlands due to filling and spanning (by bridge or other similar facility that would shade the wetland increasing shade and inhibiting vegetation growth.

Park and Recreational Areas and Willamette River Greenway.
Table 3.10-2 and Figure 3.10-1 of the South Corridor SDEIS inventory all parkland, recreational areas, wildlife and waterfowl refuges within 150 feet of South Corridor Project Alternatives. For the I-205 Segment, Wattle's Boys and Girls Club, Lent's Little League Fields and the Springwater Trail are identified as one of these resources, though only the Springwater Trail is protected by the local regulations. The Boys and Girls Club and the Little League Field, though in close proximity to the LRT alignment, will not be displaced or acquired and will be able to continue operations as currently in use.

The Springwater Trail and the I-205 Bicycle and Pedestrian Path are trails/paths that provide recreational opportunity as well as alternative transportation modes. The I-205 bike/ped path, which is located on the western edge of the I-205 freeway right-of-way and runs in a north/south direction, is noted on the City of Portland zoning maps as a "Recreational Trail". The Springwater Trail intersects the I-205 alignment south of Foster Road in a southwest to northeast diagonal direction. Each of these paths will be connected to the I-205 LRT project to ensure bicycle and pedestrian access to the LRT facility from these paths. In addition, the I-205 LRT Project will be constructed to ensure continuing bicycle/pedestrian connections along and across the I-205 right-of-way, including a bridge-like structure to separate bike and pedestrian trips along the Springwater Trail from LRT vehicles.

Short term impacts to these facilities could include reduced access, dust, noise and visual changes. None of the potential short-term impacts would be expected to be great enough to trigger federal standards included in Section 4(f) regulations. Long-term affects of the LRT are likely beneficial, increasing accessibility to these recreational facilities. Accordingly, it is concluded that no adverse impacts to park and recreational resources will be incurred.

The I-205 LRT Segment and its improvements are several miles distant from the Willamette River Greenway, and LRT operations would not be seen or heard from the Greenway. Therefore the I-205 LRT Project will not adversely impact the Willamette River Greenway.

Mitigation Options for Natural Resource Impacts in the I-205 Segment

The project designs will continue to be revised to avoid or minimize impacts to the natural environment. However, total avoidance of impacts to affected significant natural resources is not practicable because an alignment totally avoiding the resources would result in the need to acquire and demolish many residential homes and commercial businesses. Mitigation options for significant fish and wildlife resources could include using best management practices during construction and operation; avoiding removal of native vegetation where practicable; and where native vegetation removal is unavoidable, leaving cut trees and large shrubs onsite to provide cover for animals and retaining snags and downed woody materials. Replanting with approved native vegetation could also be done where removal of native vegetation is unavoidable.

Wetland mitigation could include restoration of remaining wetlands, creation of new wetlands and enhancing wetlands along with avoiding soil erosion.

For parkland and recreational areas, the Project staff could re-examine all potential impacts to Section 4(f) resources. If avoidance of impacts is not practicable, the a Draft Section 4(f) Statement, including the analysis of prudent and feasible alternatives, could be prepared.

Where appropriate, impacts to scenic resources could be mitigated through mitigation measures such as:

- Refining the design of ramps and overhead structures to match the scale and character of the surrounding environment as practicable.
- Developing the pedestrian circulation to provide safe and identifiable connections.
- Using landscaping, berms or fencing to provide a buffer between the project improvements and neighborhoods where appropriate.
- Implementing neighborhood plan recommendations with respect to visual elements.
- Infilling adjacent land.

6.4.1.6 Criterion 7: Stormwater Runoff

"Identify adverse impacts associated with stormwater runoff. Demonstrate that there are measures to provide adequate stormwater drainage retention or removal and protect water quality which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Stormwater runoff impacts specific to the I-205 Segment are addressed in the following section. Stormwater runoff impacts and mitigation common to segments throughout the South Corridor, including the I-205 Segment, are addressed in the General Findings. Stormwater impacts and mitigation measures are also described in the *Water Quality and Hydrology Results Report, December 2002 (Hydrology Report).*

Identification of Stormwater Impacts in the I-205 Segment

Development can change the amount and timing of runoff that leaves a site during a storm. The peak runoff rate and volume of stormwater discharges increase when construction removes vegetation, compacts soils, and/or covers significant portions of a site with buildings or pavement. Such changes: (1) reduce the precipitation intercepted by vegetation and infiltrated into the ground, thereby increasing runoff volume; and (2) reduce the effective time of concentration of runoff from a site by collecting rain and runoff more efficiently with pavement and storm sewers. Without mitigation of hydrologic impacts from the development of new impervious surface, peak discharge rates rise, increasing the possibility of flooding if the capacities of downstream storm drainage system components (pipes, streams, or bridges) are constrained.

The LRT alignment in the I-205 Segment would pass through the Willamette River and Johnson Creek basins and cross Upper Johnson Creek at Flavel Street and I-205. The Willamette River flows north through Portland to its confluence with the Columbia River. The Willamette River has been listed under Section 303(d) of the Clean Water Act and is classified as a major source of pollutants to the Lower Columbia River due to its suspended sediment and total phosphorus

and bacterial concentrations. Pollutant sources include municipal and industrial wastewater and stormwater discharges. The Willamette River is regulated by reservoirs on tributaries and upper reaches of the river. These reservoirs are operated by the Corps to prevent flooding; however, flooding within the corridor can occur as a result of backwater effects on the Columbia River or localized flooding along tributaries.

Johnson Creek is one of the region's last free flowing urban streams and has received federal listing for native fish. Johnson Creek is also listed under section 303(d) of the Clean Water Act for violation of water quality standards for bacteria, temperature, and toxics. Metro data indicates that impervious surface covers approximately 39 percent of the basin in the project area. Existing bridge crossings restrict creek flow and localized flooding is common, particularly in the low-gradient reach upstream of SE 82nd Avenue.

The light rail improvements in the I-205 Segment would add about 5.3 acres of net impervious surface in the Willamette River basin and about 8.1 acres of net impervious surface in the Johnson Creek basin. The new impervious surface created in the Willamette River basin could result in an increase of peak runoff for the 2-year, 24-hour design storm of up to 3.3 cubic feet per second (cfs). This increase would amount to about 0.01% of the average annual flow in the Willamette River of 32,000 cfs. This increase in peak runoff is not expected to adversely impact the hydrology of the Willamette River.

The new impervious surface created in the Johnson Creek basin as a result of the LRT improvements in this segment could result in an increase of peak runoff for the 2-year, 24-hour design storm of up to 3.0 cfs. This increase would amount to approximately 5.5% of the average annual flow in upper Johnson Creek of 54 cfs. This increase in peak runoff has the potential to adversely impact the hydrology of Johnson Creek if not properly mitigated through stormwater detention or retention.

Impacts to water quality from the LRT track will be low because the train bed (rock ballast) is capable of infiltration, and the trains are expected to have low to no emissions. The Flavel Station will not have a park-and-ride lot associated with it nor a car or bus drop-off area, so the increase in impervious surface and associated pollutant concentrations would be relatively small.

In addition, motor vehicle travel contributes to water quality problems by adding petroleum products, heavy metals and other pollutants to roads and streets that in turn drain into streams and rivers. Some of the LRT ridership will come from people driving motor vehicles to LRT park-and-ride sites. However, for these riders, total vehicle miles travelled by car will be reduced, with concurrent reductions in water pollutants that would otherwise be generated if they did not use LRT. Others will walk or bike to LRT instead of driving, resulting in no water pollutants generated. LRT service provides an alternative to motor vehicle travel and is considered one method of reducing water pollution.

Mitigation Options for Stormwater Impacts in the I-205 Segment

Based on the information contained in the *Hydrology Report*, the Council concludes that, with mitigation, no significant stormwater runoff or water quality impacts are expected in the I-205

Segment. The affected jurisdictions in this segment, the City of Portland and Clackamas County, require Best Management Practices (BMPs) to mitigate project impacts on water quality, stormwater volume, and floodplain function. The jurisdictions require that the quantity and quality of stormwater runoff from new impervious surfaces and, in some cases, redeveloped impervious surfaces, be managed to protect streams. The specific mitigation details for each project segment will be worked out with the affected jurisdictions in compliance with their permitting procedures. General mitigation options are summarized in the following discussion.

Mitigation for hydrologic and water quality impacts resulting from the creation of new impervious surfaces would require a two-fold approach. First, the effective amount of imperviousness in the project area would need to be reduced to the maximum extent practicable. This could be done by reducing the footprint of impervious surface areas, by using BMPs designed to infiltrate runoff (e.g., stormwater planters), or by using innovative design practices such as pervious pavement or eco-roofs. Second, once the amount of imperviousness is reduced as much as possible, stormwater generated from remaining impervious surfaces would need to be treated for water quality and detained for release at a lower peak flow rate for hydrologic control.

Treatment of stormwater would require use of BMPs that remove pollutants. Typical BMPs include swales, constructed wetlands, detention facilities with suitable capacity, or devices that absorb, filter, or float pollutants. In locations where the project would encroach on stream corridors, compliance with local and regional stream setbacks or buffer requirements would help protect riparian vegetation that provides water quality and habitat functions.

Construction of surface impoundments or subsurface vaults could provide stormwater detention for water quality improvement or hydrologic control. Subsurface vaults could be empty chambers that simply hold water to let pollutants settle out, or they could be designed to include filtration systems that provide additional pollutant removal beyond settling. Surface detention would likely be designed for pollutant settling only, with restricted exists that reduce discharge volumes.

Mitigation for floodplain fill requires balanced cut and fill to maintain the conveyance and storage capacity of the 100-year floodplain. The placement of about 200 cubic yards of fill in the Johnson Creek floodplain could be mitigated through excavation of a linear swale of proper dimensions. The swale could be used for stormwater quality treatment and conveyance on a daily basis, and for floodwater conveyance and holding capacity during large storm events.

The Council recognizes that the construction of a bridge at Johnson Creek and the placement of fill in the Johnson Creek floodplain for the LRT track and the Flavel Station would have the highest potential for locally significant stormwater impacts in the I-205 Segment. However, the Council finds that a range of measures are available to reduce stormwater impacts to acceptable levels. Site-specific mitigation for stormwater quantity and quality impacts will be refined and selected during the FEIS design and local permitting process.

6.4.1.7 Criterion 8: Historic and Cultural Resources

"Identify adverse impacts on significant historic and cultural resources protected in acknowledged comprehensive plans. Where adverse impacts cannot practicably be avoided, identify local, state or federal review processes that are available to address and to reduce adverse impacts to the affected resources."

Historic and cultural resource impacts specific to the I-205 Segment are addressed in the following section. Historic and cultural resource impacts and mitigation common to segments throughout the South Corridor, including the I-205 Segment, are addressed in the General Findings. Historic and cultural resource impacts and mitigation measures are also described in the *Historic, Archaeological and Cultural Impacts Results Report, December 2002 (Historic Report).*

Identified Significant and Protected Historic and Cultural Resources in the I-205 Segment

The *Historic Report* identifies one residence (Orren Battin House) in the I-205 Segment that is considered potentially eligible for listing on the National Register. However, the Battin House is not identified as a significant and protected historic resource in the Clackamas County Comprehensive Plan. The Battin House is located west of I-205 and north of the Fuller Road Station and park-and-ride facility. It is currently used as a rectory for a nearby church. The *Historic Report* also identifies one high-probability location for American Indian archaeological resources in the I-205 Segment.

Construction of a revised design for the Fuller Road station and park-and-ride facility, as indicated in the 2004 LUFO amendment boundary for the park-and-ride facility, would not alter the Orren Battin House or property. The structure and property are adjacent to the I-205 right-of-way and the LRT alignment will be near the Orren Battin property. Given the current proximity of the Orren Battin house and property to the I-205 freeway, LRT construction and operation would not substantially change the setting of the Orren Battin House.

Mitigation Options for Identified Historic and Cultural Resource Impacts in the I-205 Segment

The Council finds that the LRT improvements in the I-205 Segment may have an adverse effect on the Orren Battin House, a period dwelling that is potentially eligible for the National Register of Historic Places. During the Final Environmental Impact Statement process and Preliminary Engineering, project staff will initiate a review of the project design in the area of the affected resource, to determine whether the project could avoid or reduce the impact to the potentially eligible historic resource. If the impacts cannot be avoided, then staff would consult with the State Historic Preservation Office (SHPO) regarding potential mitigation, consistent with NEPA standards and procedures.

Mitigation for historic resource impacts could include design treatments and minimization of construction impacts such as noise and vibration, dust, visual and access impacts. Mitigation for long-term impacts such as visual effects could include use of complementary materials or landscape architectural design to minimize impacts. Where adverse effects cannot be mitigated through design treatments, it may be appropriate to document buildings or structures prior to any

actions that would affect the resource. Recording and salvage of building elements may be used to mitigate for buildings that may be demolished.

The Council understands that the I-205 Segment includes one high-probability archaeological site. Accordingly, and consistent with NEPA standards and procedures, a professional archaeologist will monitor construction activities near this high-probability site. The archaeological monitoring will be undertaken within the framework of a Monitoring Protocol to be prepared in consultation with the federal agencies, the SHPO, Metro, TriMet and appropriate interested Tribes.

6.4.1.8 Alignment Specific Criteria

"Consider a light rail route connecting the Clackamas Town Center area with the City of Milwaukie's Downtown. Consider an extension of the light rail route connecting the City of Oregon City and the City of Gladstone with the City of Milwaukie via the Interstate 205 corridor and/or the McLoughlin Boulevard corridor."

This criterion contains two considerations. The first concerns a light rail route connecting Clackamas Regional (town) Center with Milwaukie. The second concerns the future extension of LRT from Milwaukie to Oregon City and Gladstone.

Regarding the first criterion, the original LUFO included an LRT route that would have directly connected the Clackamas Regional Center with the City of Milwaukie's downtown. However, because of the lack of existing public right-of-way in this CRC to Milwaukie connection and the resulting impact to businesses and homes if this connection were constructed and operated, there was very substantial citizen and local government opposition to that alignment. Alternatively, given that a substantial portion of the extension of LRT from the Gateway Regional Center to the CRC could be accommodated by existing right-of-way along I-205 already purchased and planned for a future high capacity transit facility, including possible LRT, the impacts to businesses and homes as well as project cost could be substantially reduced. Detailed consideration of the trade-offs between routes is documented in the *South Corridor Project Supplemental Draft Environmental Impact Statement*, the accompanying *Public Comment Report* and the South Corridor LPA.

Further, the South Corridor LRT Project Locally Preferred Alternative (LPA), which was ratified by all directly affected local governments and for which there was coordination with other local governments such as Oregon City and Gladstone, provided for two LRT phases. The first phase was the I-205 LRT segment. The second phase was a downtown Portland to Milwaukie segment.

Accordingly, the South Corridor first phase (I-205 LRT alignment) still provides LRT service to Clackamas Regional Center. The second phase of the South Corridor LPA provided for LRT service to Milwaukie.

The second consideration of this criterion concerns a future LRT connection to Oregon City and Gladstone. Given that there is still very much work to be done to achieve LRT service in the I-

205 and Milwaukie segments, and given further that the cities of Gladstone and Oregon City are more distant from existing LRT facilities, LRT service to Gladstone and Oregon City have not yet been addressed. However, in developing alternative designs for both the Milwaukie and I-205 termini, consideration continues to be given to designs that would allow LRT to be extended south to Gladstone and Oregon City.

Further, the South Corridor Locally Preferred Alternative recommends that:

> "Concurrent with Phase 1, implement an incremental approach for select BRT (bus rapid transit) and park-and-ride improvements between Milwaukie and Oregon City with transit service continuing to the Clackamas Community College. TriMet should include improved transit service concepts for SE McLoughlin Boulevard in their Transit Investment Plan process."

The Metro Council finds that given the extensive consideration of LRT service to Clackamas Regional Center and Milwaukie, this criterion has been met. Further, the Metro Council finds that provision of LRT service to Gladstone and Oregon City is yet to be addressed, that the design of the I-205 and Milwaukie LRT terminii should not preclude future extension south to Gladstone and Oregon City, and that the South Corridor LPA recommendation concerning developing an incremental BRT-type improvements from Milwaukie to Oregon City should be pursued.

6.4.2 DOWNTOWN SEGMENT

6.4.2.2 Criterion 3: Neighborhood Impacts

"Identify adverse economic, social and traffic impacts on affected residential, commercial and industrial neighborhoods and mixed use centers. Identify measures to reduce those impacts which could be imposed as conditions of approval during the National Environmental Policy Act (NEPA) process, or, if reasonable and necessary, by affected local governments during the local permitting process."

"A. Provide for a light rail route and light rail stations, park-and-ride lots and vehicle maintenance facilities, including their locations, balancing (1) the need for light rail proximity and service to present or planned residential, employment and recreational areas that are capable of enhancing transit ridership; (2) the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and (3) the need to protect affected neighborhoods from the identified adverse impacts."

"B. Provide for associated highway improvements, including their locations, balancing (1) the need to improve the highway system with (2) the need to protect affected neighborhoods from the identified adverse impacts."

Description of Affected Neighborhoods in the Downtown Segment.

The Downtown Segment extends west from the Steel Bridge to Fifth and Sixth Avenues where it extends south to a terminus/turnaround at SW Lincoln Street. The Downtown Segment alignment would include new light rail tracks between the Steel Bridge and Portland State University. This alignment traverses the Old Town/China Town and Downtown neighborhoods. However, as Broadway serves as the neighborhood boundary line and Sixth Avenue is only one block to the east, the Pearl Neighborhood also will likely be affected by the Downtown LRT Segment, as it is only one block to the west of the alignment north of Burnside. These neighborhoods (Downtown, Old Town, and the Pearl), in 2000, totaled 13,999 people and 123,270 jobs. To provide a geographic scale to these numbers, within ½ mile of the stations proposed for the Downtown Segment there were 11,200 people and 124,500 jobs in the year 2000. By the year 2020, the area is expected to grow to accommodate 36,300 people and 171,400 jobs.

In 2000, the Old Town/China Town neighborhood included 2,657 people and 5,329 jobs. The neighborhood includes a variety of industrial, commercial and residential uses. There are several bridges over the Willamette River in the neighborhood including the Broadway, Burnside and Steel bridges. The roadway system is a mix of one and two-way streets, and includes the northern portions of the Portland Mall along NW Fifth and NW Sixth avenues. The entire neighborhood is a significant employment center, including government offices, utility providers, wholesale distributors, supply stores and other retail businesses. The neighborhood also has a large homeless population, social service providers for the homeless community and single room occupancy hotels. Significant community facilities include the Portland Saturday Market, the Classical Chinese Garden and the northern end of Tom McCall Waterfront Park that connects to the Eastside Esplanade via the Steel Bridge pedestrian and bike bridge. Chinatown was recently designated as a historic district.

The poverty rate in Old Town/Chinatown is nearly 50 percent, much higher than the Tri-County average. Renters occupy nearly all housing units. Twenty-three percent of residents are members of a minority group, more than the Tri-County average of 17 percent. There are fewer Hispanic residents and fewer elderly residents in the Old Town/Chinatown Neighborhood than the Tri-County average.

The Downtown Neighborhood had a 2000 population of 10,225 people and 106,639 jobs. This area includes the governmental, legal, advertising and cultural centers for the region as well as a substantial amount of retail, commercial, educational institutions and places of worship. In 1999, an estimated 2.5 million people from outside the region visited Portland's downtown.

Included in the Downtown Neighborhood are14 million square feet of private office space; 1.9 million square feet of retail space, providing locations for over 975 retail establishments (including such stores as Nordstroms, Niketown, Meier and Frank and Saks with 2001 total estimated annual downtown retail volume of $550 million and providing over 11,000 jobs); and many federal, state, county and city government buildings (including federal and county courthouses, federal, state, county and city office buildings, the Multnomah County Central Library, and Portland City Hall). Cultural attractions include: Pioneer Courthouse Square, which is a central plaza used for civic celebrations, concerts, etc.; the 2,770 seat Arlene Schnitzer Concert Hall, which is home to the Oregon Symphony Orchestra and the Portland Youth

Philharmonic; the New Theatre Building with 290 and 880 seat theatres; the 3,000 seat Keller Auditorium, which is home to the Portland Opera; the Oregon History Center; and the Portland Art Museum, which is also home to the Northwest Film Center.

Portland State University's 36 acre campus is located near the south end of the Downtown Neighborhood. In 2002, PSU had an enrollment of over 18,000 students. The campus includes over 3.8 million square feet of facilities including classrooms, library and dormitories. Downtown Portland is also the primary focus of public transit service in the region, with the light rail system and bus fleets radiating out in all directions. Because there is an emphasis on transit service in the downtown, about 41 percent (61,000) of the total 149,000 daily work trips to and from downtown Portland are made via transit. The public transit system serving the downtown also provides connections to other important transportation facilities and services within or near the downtown, including the Amtrak Union Station and Greyhound Bus Terminal in the Pearl Neighborhood; C-TRAN service to Clark County and southwest Washington; the Portland streetcar (connecting the Downtown neighborhood with the Pearl Neighborhood and Northwest Portland); and Portland International Airport (via light rail).

The 2000 Downtown poverty rate was 32 percent, substantially higher than the Tri-County average of 8.7 percent. Twenty-four percent of the residents are members of a minority group. Fifteen percent of Downtown residents are elderly, compared with a Tri-County average of ten percent. A smaller percentage of Downtown residents are Hispanic than the Tri-County average.

The Pearl Neighborhood ("the Pearl") had a 2000 population of 1,117 people and 11,302 jobs, according to the 2000 Census. The Pearl is comprised of retail, office, industrial, commercial and residential uses. The Pearl houses an arts community with galleries and studios. Over the past decade, many warehouse and industrial buildings in the Pearl have been redeveloped and converted to mixed-use buildings with commercial or retail uses on the ground floor and apartments or condominiums above. The roadway system is a mix of one and two-way streets and includes streetcar service. A number of public buildings are located in the Pearl including the main Post Office, the Federal customs and immigration building and the city's train and bus depot. The north park blocks extend six blocks between SW Ankeny and NW Glisan streets in the Pearl.

The Pearl Neighborhood's poverty rate (19.6 percent) is the lowest of the downtown Portland neighborhoods, but it is still twice the Tri-County average. There are fewer Hispanic, elderly and minority residents in the Pearl than the Tri-County average. Owners occupy more than half of housing units in the Pearl and the median home value is higher than in Multnomah County.

Identify adverse economic, social and traffic impacts on affected neighborhoods. Identify measures to reduce those impacts.

Economic, social and traffic impacts specific to the Downtown Segment are addressed in the following section. Economic, social and traffic impacts applicable to neighborhoods throughout the South Corridor, including the Downtown Segment, are addressed above under the heading "General Impacts and Mitigation Measures Applicable to All Segments" ("General Findings"). Economic, social and traffic impacts are also described, along with corresponding mitigation

measures, in the *Downtown Amendment to the South Corridor SDEIS,* especially Chapter 3.

Economic Impacts

The project is expected to have both positive and negative economic impacts on neighborhoods in and near downtown Portland. The improved transit accessibility could result in increased land values in proximity to light rail stations, which in turn could stimulate new economic development in the area. No homes or businesses will be displaced as a result of the completion or operation of the Downtown Segment. However, one business would lose direct vehicular access, which will likely be replaced by a side street access. Downtown businesses also could suffer short term adverse impacts during the construction phase of the project.

Displacements. The LRT alignment will not displace any downtown businesses. However, one business will have its vehicular access moved to a side street. No permanent, large economic impact is expected with this access change.

Loss of Parking/Access. Besides displacements, the loss of parking, and the loss or change of access, can have adverse economic impacts on businesses. For the downtown area, no loss of access is anticipated, although one vehicular access to a business will be relocated to a side street access point.

Off-street parking in the Downtown Segment will be reduced by 64 spaces. In addition, 130 on-street parking spaces would be removed. While operation of LRT along the Transit Mall, combined with light rail access to Milwaukie and along the I-205 Corridor, will have the effect of accommodating greater access to the downtown without need for a car, demand for auto parking spaces will remain. Mitigation could include replacement of some or all of the removed spaces, parking management strategies and parking restrictions. On balance, the Metro Council finds that the value of extending LRT service to the area outweighs the loss of some parking spaces in the area .

Tax Base.
Construction of the light rail project in the Downtown Segment will have almost no effect on local property tax bases because the LRT improvements will not displace any downtown businesses. Because the amount of privately owned land potentially required for use as right-of-way is very small**,** while the tax base of the CBD is quite large, the overall adverse impact of removing this acreage from the tax base should be negligible and insignificant.

Freight Movement. Efficient movement of freight and goods throughout the South Corridor Project area is critical to the economic vitality of the region. Details about truck activity in the various subareas of the Downtown Segment can be found in Chapter 4, section 4.3.6 of the *Downtown Amendment to the South Corridor SDEIS.*

The proposed Downtown LRT alignment would have only minor impacts on freight movement. Several freight loadings zones that are currently located adjacent to LRT tracks would need to be removed or relocated. Truck loading would not be permitted in sections of SW 5th and SW 6th avenues that have a single, general-purpose travel lane.

The north section of the LRT alignment adjacent to NW Irving Street may encroach within the railroad clearance zone. However, this encroachment may be acceptable since the existing railroad trackway is not regularly active.

During construction, local deliveries could require some out-of-direction travel to access businesses. Some access onto and across 5th and 6th avenues would be blocked periodically due to construction. To mitigate these impacts, TriMet can work with the City of Portland and businesses to develop strategies and programs that minimize this disruption to local freight deliveries. Also, truck loading zones along SW 5th and 6th avenues could be relocated to adjacent side streets. Overall, the cumulative impact to freight movement is expected to be minimal.

Social Impacts

The project is expected to have both positive and negative social impacts on neighborhoods in downtown Portland. Improved transit accessibility could result in increased land values in proximity to the stations. This, in turn, can have positive neighborhood impacts in the form of increased transit access; increased numbers of customers for retail businesses and other types of commercial activities; and an improved "look" to 5th and 6th avenues through repair of sidewalks and provision of street furniture.

While light rail improvements could increase local property values along and near the alignment and make locations there more attractive to merchants, resulting higher land values could also lead to “gentrification” of existing neighborhoods as lower value improvements are replaced by higher value improvements. If this happens, lower income residents could have a more difficult time finding affordable housing.

On the other hand, project construction would help achieve projected development densities in the Central City, accommodating more housing and job growth within the downtown area. That could result in less pressure to expand the regional urban growth boundary to provide additional land for development.

To reduce the impacts of gentrification of downtown neighborhoods, the project could work closely with the Portland Development Commission and the Housing Authority of Portland to ensure that the existing low income housing stock (including single room occupancy housing units) is not reduced in the area.

Residential Displacements. In the Downtown Segment, the LRT improvements would not displace any homes or other land uses.

Access to Community Facilities. The Council finds that the South Corridor Project will provide improved transit access to community and employment centers for neighborhoods in the Downtown Segment. The extension of light rail along the transit mall will improve access to government buildings (such as City offices, City Hall and the Multnomah County Courthouse); cultural buildings (including the Arlene Schnitzer Concert Hall and the Keller Auditorium); and educational facilities (Portland State University).

Barriers to Neighborhood Interaction. The Council finds that the LRT alignment in the Downtown Segment will not result in barriers to neighborhood interaction. LRT has operated in the Downtown area along the cross-mall on SW Morrison and SW Yamhill streets since 1986. During that time, there has been no substantial evidence demonstrating that the existing LRT alignment has acted as a barrier to neighborhood interaction along the cross-mall. The Council believes and concludes that the result will be no different for light rail transit along the downtown transit mall. Light rail simply adds a new form of transit service along an existing major transitway.

Safety and Security. Members of the region have, from time to time, expressed concerns about the safety and security of the TriMet system and the effect of LRT on neighborhoods in the Downtown Segment. Neighborhood concerns have focused on personal safety at transit stations and increased property crimes in areas adjacent to transit stations. TriMet has developed strategies for addressing crime at transit stations and park-and-rides over the course of more than 15 years of operating light rail in the region, and these have been applied in the current downtown cross mall and could be applied to the Downtown Segment.

The Council recognizes that crime is likely to be found at higher rates in areas where people congregate, such as transit stations, shopping malls, the transit mall and parks. The Council supports TriMet's continuing efforts to improve passenger and community safety throughout its service area.

To create a safe transit environment, TriMet's Transit Security Division patrols trains, buses and park-and-ride lots. TriMet will coordinate with local jurisdictions to effectively patrol new facilities constructed in the South Corridor, including downtown Portland. In addition to sworn law enforcement officers in the Transit Security Division, TriMet contracts with a private security firm to provide additional patrols. Further, TriMet contracts with Multnomah County for a full-time Deputy District Attorney to prosecute transit-related crimes.

TriMet has developed and adopted a system-wide *Transit Security Plan* that calls for the application of community policing goals and techniques to transit security. Elements of the plan will be incorporated into the design and operation of Downtown LRT. These would likely include:

- In-house training of transit district employees to increase awareness of and prevent criminal activities;
- Coordination with local law enforcement agencies and personnel;
- Improved facility design and operations standards that would improve visibility at transit stations and increase enforcement levels; and
- Investment in new tracking and surveillance technology.

Additional transit service can help to create a safe environment in neighborhoods. TriMet provides extra eyes-on-the-street every day through its drivers and other employees. TriMet operators are able to request medical or police assistance for passengers and the general public. TriMet is also training employees to recognize and evaluate suspicious activity, people or

objects.

The Council is sensitive to the importance of safety and security in the neighborhoods affected by Downtown LRT, particularly for station and park-and-ride locations that may be perceived as isolated. Security lighting and telephones will be provided at station platforms, and landscape design (i.e., low shrubbery and good visibility) will ensure consideration of safety and security. The Council expects that safety and security issues will be addressed in more detail as the project moves into preliminary engineering and final design. This process will include additional input from affected neighborhoods and local law enforcement personnel. The Council finds that with appropriate final design and implementation of system-wide transit security and other mitigation measures as described in the General Findings, safety and security will not be adversely affected by the LRT improvements in the Downtown Segment.

Visual/Aesthetic. The Downtown Portland Segment is divided into the North Mall, Central Mall and South Mall areas and includes the Downtown, Old Town/Chinatown, Pearl District and University District neighborhoods. LRT systems elements (i.e., catenary poles, overhead wires, and a platform) will alter the existing visual environment of the Downtown Portland Segment. However, the new visual landscape would be consistent with the existing LRT environment on SW Yamhill and SW Morrison streets and SW First Avenue.

The North Mall includes areas of the Old Town/Chinatown and Pearl District neighborhoods. A low flat skyline with one to four story structures, some with historic cast-iron or Chinese-inspired detailing, characterizes the North Mall Area. The area is also defined by large, bold structures on its edge, including historic Union Station, and by the Willamette River and the historic Steel Bridge. New five and six story buildings with storefront retail and residential units above have recently been constructed along NW 5th and 6th Avenues.

In the North Mall area a moderate degree of visual impact would result from the removal of structures and the addition of the rail alignment. Overhead wires and poles would clutter the view of Union Station, but would have little effect on the visual scale of the North Mall area. The trackway would be located within the current roadway. Few changes would occur to the existing brick sidewalks with the exception of the addition of new shelters.

The alteration of the NW Glisan Street ramp to the Steel Bridge could create a visual impact by introducing a significant new structure. However, the location of this structure next to an existing ramp structure and adjacent to the Union Pacific Railroad should decrease the viewer sensitivity to this impact. Designing this structure in a style compatible with the existing structure could further minimize the impact

The Central Mall is in the core area of downtown Portland and contains the Government Center and the retail core. This is a pedestrian-oriented area that connects several blocks of large-scale multi-story buildings, public plazas and historic and civic structures such as the Portland City Hall, the University Club, Pioneer Courthouse and Pioneer Courthouse Square. It is an area that creates a sense of history and continuity with Portland's past. The area is a visually rich environment, with street trees, plantings, street furniture, fountains and public art. Street trees lining the Portland Mall on SW 5th and 6th Avenues create a massive tree canopy and add to the

sense of place and historic qualities of this part of downtown.

In the Central Mall area a moderate degree of visual impacts is expected to occur. Some street trees and other furniture could be trimmed, removed or relocated as overhead wires would be added to the streetscape. New light rail stations could alter some views of historic resources in downtown Portland. Light rail stations could obscure entrances and street-level facades at City Hall and the University Club (which is located next to the SW Madison/Jefferson Station on SW 6th Avenue). Should the Island Station Design Option be selected, it would create greater visual disruption due to the introduction of new platforms in the streetscape. Sidewalk widths would be reduced in comparison to the Side Platform Design Options. To mitigate such impacts, modifications to the streets and sidewalks as part of this or other projects would be done in a manner consistent with the current urban design treatments on the Portland Mall.

The existing trees along the Central Mall are being examined and could be trimmed or potentially replaced. Replacement of these large trees would result in a visual impact. A determination to modify existing street trees would be made following consultations with the City Forester, arborists and the public during the next phase of Preliminary Engineering.

The South Mall includes sections of the Downtown Neighborhood and the University District that houses PSU. The University District contains instructional and residential buildings. The PSU Urban Plaza incorporates rail tracks for the Portland Streetcar through the plaza with a Streetcar station located between two buildings. The structures and activities that occur on the PSU Campus are a major contributor to the character of this area, which continues to change as PSU constructs new buildings. Several multi-story office and residential buildings border SW 5th and 6th Avenues.

In the South Mall area, a moderate degree of visual impacts would occur due to removal of parking, the addition of tracks, overhead wires and catenary poles, the addition of stations, and the potential modification of sidewalks. The PSU Terminus at SW Jackson Street would include two sets of tracks in an area currently used as a parking lot adjacent to I-405. The current Portland Mall treatment, including brick sidewalks, crosswalks and intersection circles, does not exist south of SW Jefferson Street. The potential addition of these urban design features would help visually link this transit street to the remainder of the Portland Mall.

The Council finds that mitigation of visual impacts in the Downtown Segment could include the following:

- Enhancing design of project elements to better fit into the existing Portland Mall pattern and scale.
- Improving the visual character of areas along alignment This could include adding new trees, street furniture and art within the public right of way.
- Buffering or reducing the loss of visual resources This could include replacing existing trees and landscaping.
- Preventing or reducing obstructions to designated views, view corridors, or viewpoints and important neighborhood features.
- Refining the design of ramps and overhead structures to better match the scale and character

of the existing surrounding environment as practicable.
- Continuing to work with Downtown Portland residents, businesses and urban design professionals to ensure the design of the Portland Mall is visually rich.

Visual Impact mitigation measures will be specifically defined in the FEIS.

On balance, the Council finds that the overall social impacts of the South Corridor Project are favorable in the Downtown Segment. Light rail along the downtown transit mall will provide a large portion of the metropolitan population with improved transit access to major destinations and activity centers located along the transit mall. Light rail will provide an alternative mode to automobile travel on often-congested roadways within this segment.

In addition, residents of many neighborhoods in the Downtown Segment have poverty levels that are higher than typical in the Tri-County region. The Council finds that these residents will benefit from improved availability of public transit. By providing these residents with LRT service, the South Corridor Project will help achieve an aim of Statewide Planning Goal 12, Transportation, to serve the needs of the transportation disadvantaged.

Traffic Impacts

In 2000, the transportation facilities in the South Corridor accommodated a total of 2,186,200 person trips (both automobile and transit) on an average weekday. Of these, approximately 96,600 were on the transit system. Of the corridor's average weekday transit work trips in 2000, 13 percent (63,100) occurred between locations within in the South Corridor and the Portland Central City, which includes downtown Portland, the Lloyd District, and the Central Eastside Industrial District (CEID) (see Figures 1.2-1 and 1.2-2 of the Downtown Amendment of the SDEIS).

Transit is a significant mode for work trips to downtown Portland. In 2000, there were 149,000 total daily work trips to downtown Portland. Of those, 61,000 trips were made via the transit system (41 percent). In the South Corridor, there were 38,060 daily work trips to downtown Portland; of those, 15,300 (40 percent) were on transit.

Between 1980 and 2000, the amount of office space in downtown Portland increased by approximately 174%. During that same time, employment grew by approximately 36 percent. Over the next two decades, within the Downtown Segment, households are projected to more than double in number and employment is expected to increase by approximately 38 percent.

These high rates of office space growth, population and employment growth in the Downtown Segment will increase pressures on the existing transportation system; create demand for new and improved transit service; and create opportunities for high-density, mixed-use activity centers that can be well served by high-capacity transit alternatives. Downtown LRT along the mall will be an important component of the overall transportation network serving these uses and the Portland central business district.

Traffic Congestion and Vehicle Delay. High levels of population and employment growth in

the Downtown Segment will cause the local transportation system to further deteriorate. Traffic volumes to, from and within the Downtown Segment have grown over the past two decades. Average weekday traffic volumes across the bridges have increased by 13.7 percent to 64.0 percent over the past two decades.

Downtown Portland is served by a freeway loop system (I-5 and I-405) that provides the boundary for what is traditionally considered to comprise "downtown" Portland. The freeway loop provides access to the downtown Portland street network at numerous interchanges.

The downtown Portland street network is generally comprised of a dense network of relatively narrow (two-to-three lane) one-way streets. Peak-period traffic patterns within downtown are generally balanced between east-west and north-south. The traffic signals within the core of downtown are operated as a coordinated grid, with the signals operating at a one-quarter cycle off-set. This operating plan allows both east-west traffic and north-south traffic to travel at approximately 12 miles per hour through the downtown grid. Significant queuing at traffic signals is usually limited to a few locations associated with freeway or bridge access.

Existing a.m. and p.m. peak hour counts were conducted at all study area intersections. Study area intersections were selected by the City of Portland staff based on expected impacts from the conceptual LRT alignment. The following summarizes the transportation operating conditions for the Portland Mall within the South Corridor study area. Table 4.1-2 of the *Downtown Amendment to the South Corridor SDEIS* summarizes the a.m. and p.m. peak period traffic operations at study area intersections within these sub-areas.

The proposed light rail alignment would not significantly alter the traffic patterns in the north and central section of the Portland Mall. In the south section of the Portland Mall (south of SW Madison Street) the introduction of light rail would require the removal of auto lanes and modification to bus lanes along SW 5th and 6th Avenues as well as turn prohibitions at certain signalized and unsignalized intersections. In the vicinity of PSU, as many as two auto travel lanes would be removed.

With the Downtown Segment, there would be six existing and/or planned signalized intersections that would result in possible operational conflicts between bus and light rail transit vehicles. These six locations would have approaches that would require buses and LRT to use the same lane, creating operational conflicts that could result in delay to buses, light rail trains or both. These locations were included in travel time analysis for transit on the mall. These locations include:

- SW 6th Avenue/SW College Street
- SW 6th Avenue/SW Montgomery Street
- SW 6th Avenue/SW Mill Street
- SW 5th Avenue/SW Hall Street
- SW 5th Avenue/SW Montgomery Street
- SW 5th Avenue/SW Mill Street

Due to the difference in cycle lengths between the Portland Mall traffic signals (56-second A.M.

cycle and 60-second P.M. cycle) and the W Burnside Street traffic signals (85-second A.M. cycle and 90-second P.M. cycle) green bands (referring to the amount of time a signal is green for a particular movement) do not allow for good northbound and southbound light rail progression across W Burnside Street. Southbound light rail trains on NW 5th Avenue would need to be held at the Davis/Couch Station until the light rail train would be allowed to cross W Burnside Street and progress through subsequent signals to the Stark/Washington Station. This would result in an average delay of 10 to 20 seconds for light rail trains. The same light rail operation would be required for northbound LRT at the SW Stark Street station.

The analysis of traffic queuing used traffic operational simulation analysis to determine traffic progression impacts. Based on this analysis, vehicle queues at most of the study intersections would clear within one traffic signal cycle during the evening peak hour with the LRT along the Downtown Segment. However, traffic would progress as a platoon of vehicles with limited ability to maneuver between lanes in both No-Build and the I-205 alternatives. There are two locations where queuing conditions of the build scenario would be significantly greater than the no-build scenario (NW 5th Avenue at W Burnside Street and SW 6th Avenue at SW College Street).

During the evening peak period, the southbound queue on NW 5th Avenue at W Burnside Street would extend past NW Couch Street. With the Downtown Segment vehicles and buses would share one lane when light rail vehicles are present. This queue would sometimes require more than one traffic signal cycle for vehicles to clear past NW Couch Street.

During the morning peak period, the northbound approach on SW 6th Avenue at SW College Street would extend through SW Jackson Street toward the I-405 ramp junction. The estimated 95th percentile queue would not block the merge area for the ramp. Even with diversion, the LOS does not change at any of the weaving areas on I-405 along the south project area. Both the northbound I-405 off-ramps at SW 4th Avenue and SW 6th Avenue are posted for reduced speeds (30 to 35 miles per hour). Each ramp has adequate stopping sight distance for the posted speeds. The northbound queue on SW 6th Avenue at SW Market Street would occasionally extend past SW Mill Street, requiring more than one traffic signal cycle length to clear. Truck loading zones would be relocated to side streets so that queuing is not increased beyond that generated from the estimated traffic volumes and the intersection geometric capacities.

Due to the circulation impacts to St. Mary's Academy, SW Mill Street could be converted to two-way operations between SW 4th Avenue and SW 5th Avenue to provide additional circulation for school loading/unloading. A staging area could be provided along the north and/or south curb of SW Mill Street. This mitigation would provide connectivity to the general vicinity of the school for southbound traffic on SW 5th Avenue.

SW Jackson Street could be closed west of SW 6th Avenue in order to eliminate potential vehicle turn conflicts for eastbound to northbound and northbound to westbound movements. Access to this portion of SW Jackson Street would be maintained via SW Broadway.

Traffic would be diverted from SW 6th Avenue to SW 4th Avenue in the AM peak period. The added traffic on SW 4th Avenue at SW Market Street would result in degraded intersection level-

of-service and extended northbound queues. Potential mitigation for this intersection could include removing or restricting on-street parking and providing a northbound right-turn lane.

Traffic signal modifications should be analyzed for NW 5th Avenue at W Burnside to determine if varying the traffic signal cycle could minimize delay to light rail trains and buses, yet maintain an acceptable level of service for autos.

Special signal operations (possibly including light rail pre-emption) coupled with additional bus staging areas should be considered at the following six locations in order to mitigate bus/light rail conflicts.

- SW 6th Avenue/SW College Street
- SW 6th Avenue/SW Montgomery Street
- SW 6th Avenue/SW Mill Street
- SW 5th Avenue/SW Hall Street
- SW 5th Avenue/SW Montgomery Street
- SW 5th Avenue/SW Mill Street

Traffic signal system enhancements to optimize performance for motor vehicles and transit would be necessary to minimize impacts to both modes (improved timing and limited transit signal priority). Traffic signals would be needed for the light rail operations at the following unsignalized intersections:

- SW 6th Avenue/College Street
- NW 6th Avenue/Couch Street
- NW 6th Avenue/Davis Street
- NW 6th Avenue/Flanders Street
- NW 6th Avenue/Hoyt Street
- NW 6th Avenue/Irving Street
- SW 5th Avenue/Jackson Street
- SW 5th Avenue/Hall Street
- SW 5th Avenue/Mill Street
- NW 5th Avenue/Couch Street
- NW 5th Avenue/Davis Street
- NW 5th Avenue/Flanders Street
- NW 5th Avenue/Hoyt Street
- NW 5th Avenue/Irving Street

Transit System Conditions. The Portland Mall opened in March 1978 to provide transit priority right-of-way, to clarify service patterns and to improve bus travel times and reliability through downtown Portland. The Portland Mall originally extended from SW Madison Street to W Burnside Street on SW 5th and SW 6th Avenues. In June 1994, the Mall was extended north to NW Irving Street. The Portland Mall and the Cross Mall alignments generally provide buses and light rail vehicles, respectively, with a relatively reliable operating environment by providing a high level of exclusive operating right-of-way for transit vehicles. However, both the Portland

Mall and the Cross Mall alignments have theoretical and practical capacity limitations that, if exceeded, can result in a deterioration of speed and reliability for the transit vehicles and patrons utilizing the facilities. Without an additional light rail alignment within the Downtown Portland Segment, the system's light rail travel times and reliability would tend to degrade over the next two decades, resulting in increasing operating costs and decreasing transit ridership.

Construction of a light rail alignment along the Portland Mall would provide opportunities for expanding light rail coverage, improving light rail and bus operations and enhancing connectivity between the bus and light rail system. Both light rail and buses would operate on NW and SW 5th and 6th avenues. The transit operations plan for light rail and buses is described below.

The Downtown Segment would place light rail on the Portland Transit Mall (5th and 6th avenues), generally in the center lane with stations approximately every four blocks. In the Central Mall and North Mall, light rail would operate in a lane shared with buses. The Green Line (I-205 LRT from Gateway to Clackamas regional center) and the Yellow Line (Expo Center to Central City) would operate along the Portland Mall light rail alignment (as would the planned Milwaukie LRT line, the second phase of the South Corridor Project). The Yellow Line is currently planned to open in 2004 and would initially utilize the existing light rail alignment along NW/SW 1st Avenue and SW Morrison and Yamhill Streets. Routing both lines on the Portland Mall would improve light rail service coverage within downtown and balance trains between the two downtown alignments.

Long-range plans envision through routing Yellow Line trains to Milwaukie (Phase II of the South Corridor). Both the Red (Airport/Central City/ Beaverton) and Blue Lines (Gresham to Hillsboro) would continue to operate on the Cross-Mall alignment. Most, if not all, bus routes would continue to operate on the Mall as they do today. However, it is possible that some bus routes could be moved to other streets to provide additional service coverage within downtown, to improve efficiency, or to reduce capacity constraints on future bus service on the Mall. Operational modeling indicates that with the planned level of 2020 light rail service on the mall there would be adequate capacity to accommodate the number of buses forecast on the Portland Mall for 2020.

Light rail operations in the Central Mall would require changes to bus stop locations. Bus stops would be removed from the block faces that would contain light rail stations and buses would be limited to a single through transit lane when light rail trains dwell at stations. In addition, the half-blocks immediately before and after each light rail station could create the potential for conflicts between light rail vehicles and buses. TriMet bus operators and trainers field-tested the bus maneuvers necessary for various configurations of bus and light rail operations on the Portland Mall. Bus stops immediately nearside of light rail stations are not included in the design because of the clearance required between stopped buses and light rail trains. The bus stop immediately before these nearside stops would be moved forward to allow more space in those stops without compromising operations or safety. This change in bus stop spacing could also provide more capacity at those stops. The planned bus stop placement for the Portland Mall alternatives would result in bus stop spacing changing from approximately every two blocks to approximately every four blocks in the Central Mall.

The bus stops in the North Mall would also change from their current configuration. Bus stops would be eliminated from light rail station blocks. In general, bus stops would remain on the nearside of each intersection. Bus stops could be added to the far side of some intersections to distribute bus activity.

Currently, many bus routes operate the full length of the Portland Mall to Union Station to reach the bus layover facility. The addition of light rail to Union Station would provide a new mode for passengers to this area, potentially reducing the number of buses required to travel the full length of the North Mall. This could change some bus routing and layover locations for certain bus routes.

With a reduction in the number of bus stops along the Portland Mall, bus loading and dwell times would increase. The average walk time and distance to reach a bus stop would increase for as many as half of bus riders by up to one or two blocks as compared to today. This is a relatively small change that would be offset by faster bus travel times on the Mall once riders board the bus. There are, however, potential impacts for mobility-challenged riders due to the extra one or two blocks travel required to reach the bus stop for some riders.

Bus stop locations would largely determine the interaction of light rail and bus operations. Standard operating procedures for both bus and light rail operators would further determine operations. Bus and light rail operations would be focused on two free-flowing transit-only lanes in the Central Mall and a large portion of the South Mall. In the North Mall and in portions of the far end of the South Mall, where bus volumes are and would be lower, buses would share lanes with automobiles.

In situations where light rail and buses would share the same operating environment, light rail trains would have the right-of-way. Signals and operations similar to the existing SW Morrison and SWYamhill Street alignments would govern light rail operations. Bus operations have more flexibility and therefore would rely on standard operating rules. The current “bus ballet”, where buses move in and out of bus stop locations using bus turn signals and clear rules about right-of-way, would not fully account for the presence of light rail trains and the challenges presented by the length of those trains. In addition, at station platform locations, the use of the second lane as the bus through lane would sometimes be impossible with trains blocking that lane while serving stations, depending upon individual station platform configurations (see Figure 4.2-1 of the *Downtown Amendment to the South Corridor SDEIS*).

A combination of today’s “bus ballet” and additional operating rules would result in safe and efficient operations. There would be no buses allowed in the LRT lane at a station when a train was present. A bus signal control system would be installed to give priority to trains and clear the shared bus/light rail lane of buses to allow trains to move forward. These “train clearance signals” would clear the track for trains that were traveling from one station to the next. Normal operating procedures would call for the entire path between stations to be clear for trains to move forward. Train-to-wayside communications, similar to those on the cross-mall alignment, could allow train operators to signal their intention to move forward at the next green signal. This would trigger a bus-directed signal system to indicate the impending movement of the train,

signaling buses to begin clearing the lane and not to enter the lane if they are currently at a bus stop. During train movement, the bus-directed signal would keep the lane clear until the train had passed that point, at which time buses could follow behind the train. Buses could also platoon forward while staying in the right lane until the train passed.

In the North Mall, currently, autos travel in the left lane, while the right lane is reserved for buses. Once light rail is added to the North Mall, this configuration would change. Buses would use the right lane both to serve bus stops and as a travel lane but buses would also be allowed to use the left lane for passing or through movement. Light rail, therefore would operate in the left lane. Because light rail and autos should not be mixed in regular traffic for safety and operational reasons, autos would be restricted to the right lane, shared with buses. Currently, autos may only turn left from the North Mall because they are restricted to the left lane (right turns are not allowed). With light rail service, autos would be restricted to the right lane and their turning movements would generally be limited to right turns.

Operations modeling of the Cross-Mall alignment using the VISSIM auto and transit simulation software, has demonstrated that as train volumes increase, especially above 24 trains per hour, running time and delays increase. These findings are documented in the *Downtown Light Rail Systems Analysis* (TriMet December 2002), which was published in conjunction with the *South Corridor SDEIS*.

The modeling has also shown that, while higher train volumes can be accommodated, operations at or above 26 trains per hour would tend to have a much higher risk of increases in delay. As frequencies on existing lines increase or as new lines are added to the system, the number of trains per hour would increase. The approximate maximum capacity of the Cross-Mall alignment is 30 trains per hour, although without substantial changes to traffic signals, operations would be unreliable at that frequency. The No-Build Alternative includes the Blue Line, Red Line and Yellow Line all operating on the Cross-Mall alignment. This configuration would result in approximately 26 trains per hour on the Cross-Mall alignment in 2020.

With light rail on the Portland Mall, buses would share one of two transit-only lanes with light rail vehicles – the second transit-only lane would be used exclusively by buses. The new mode mix and operating rules for the transit lanes would reduce the bus ceiling of capacity for buses on the Mall and would introduce some rail-priority related delay for bus operations in order to accommodate train movements. Countering this potential for increased bus delay and reduced bus schedule reliability, however, would be the reduction in the number of bus stops (and the reduction in the potential for bus stop delays) along the Portland Mall, and the resulting reduction in bus running times on the Portland Mall.

The net result would be a small increase in bus travel speeds through the Mall, between 6 percent and 7 percent over the No-Build Alternative. Light rail train volumes would be well below the capacity ceiling on both downtown alignments with 15 in each direction on the cross mall and 21 in each direction on the Portland Mall in 2020, which would result in sustainable LRT schedule reliability, while improving bus operations.

During construction, buses will be periodically diverted from NW/SW 5th and 6th avenues. These

diversions could add travel time for riders and be less convenient. Bus routing plans during construction have not been developed yet, but could include using NW/SW 4th Avenue, NW/SW Broadway or other cross streets such as NW Everett, NW Glisan, W Burnside, SW Washington, SW Alder, SW Clay or SW Market streets. The cumulative impacts to transit riders would be minimal.

Table 4.2-1 of the *Downtown Amendment to the South Corridor SDEIS* summarizes total 2020 average weekday transit ridership for all bus and light rail trips that would be produced in or attracted to the South Corridor. With the PSU Terminus, the I-205 Alternative would generate 15,400 more total weekday corridor transit trips than the No-Build Alternative, an 8 percent increase. Section 4.2.3.2 of the *Downtown Amendment to the South Corridor SDEIS* describes the boarding rides that would occur on the light rail system.

Table 4.2-2 of the *Downtown Amendment to the South Corridor SDEIS* summarizes projected average weekday 2020 systemwide light rail ridership and the peak load point ridership for all alternatives. Because the light rail lines would operate as an integrated element of TriMet's overall transit system, ridership on each line would be susceptible to changes in the configuration of transit service and facilities in the South Corridor. This inter-relationship of ridership between the lines is demonstrated throughout Table 4.2-2 of the Downtown Amendment to the South Corridor SDEIS. For example, ridership on the Blue Line and Red Line would be slightly different under each alternative.

With the PSU Terminus Option, the I-205 Light Rail Alternative would result in the greatest total light rail system ridership, with 197,500 average weekday boarding rides (2020). Total ridership on the I-205 Light Rail (Green Line) would increase by approximately 8,000 boardings per day with the PSU Terminus compared with the rejected Main Street Terminus, due to serving two additional stations on SW 5th and SW 6th avenues. Over 5,000 of the increased daily riders with the PSU Terminus would result from providing direct service from the existing light rail stations along the Banfield (Gateway to Lloyd Center) portion of the Blue Line to portions of downtown south of Main Street. In other words, with the Green Line, transit riders that would ride the Blue Line to downtown and transfer or walk to the PSU area under the No-Build Alternative, would choose to use the Green Line that would directly serve PSU.

Construction Impacts

Construction of the Downtown Segment would result in short-term regional income and employment benefits, including the creation of 873 direct jobs (jobs associated with new construction), 564 indirect jobs (jobs created in industries supplying goods and services to the construction firms) and 963 induced jobs (jobs resulting from additional purchases made by the households receiving the new direct and indirect income benefits). The cost of constructing the Downtown Segment is estimated to be $126 million (Year 2002 dollars).

Mitigation of impacts to businesses during construction could be accomplished through a number of activities. Examples of potential mitigation measures include:

- Managing the construction so that it does not disrupt any single area for extended periods of

time.
- Providing signage indicating access directions during construction.
- Providing signage indicating that businesses are open during construction.
- Providing temporary parking for businesses that lose parking due to construction.
- Providing business promotional information during the construction process.
- Utilizing area businesses and contractors for construction activities.
- Purchasing construction materials and services from local businesses.
- Minimizing construction noise and dust.
- Managing work hours to balance community disruption.

During construction portions of SW 5th and SW 6th Avenues and cross street intersections would be closed to auto traffic. These closures would cause delays and out-of-direction travel. Additionally, buses that operate on the Portland Mall would periodically be diverted to other streets, effectively reducing the auto-carrying capacity of these streets. Traffic and transit construction mitigation plans will be developed to reduce these potential impacts. The cumulative impacts to motor vehicles are expected to be minimal.

During the preliminary and final engineering processes, staff will try to minimize construction impacts to the extent practicable through design refinements. While project construction will have adverse impacts, the Council finds that over the long term, the increased accessibility that LRT will provide to people and places will likely result in remaining businesses having increased sales and property values. This will help to mitigate and reverse business losses resulting from completion of the light rail system through the Downtown Neighborhood.

"Provide for a light rail route and associated facilities, balancing the need for light rail proximity and service to areas that are capable of enhancing transit ridership; the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and the need to protect affected neighborhoods from the identified adverse impacts."

The Metro Council finds that the Downtown Segment provides a light rail route that is capable of enhancing transit ridership, as documented in the estimates of increased transit ridership cited above. Further, the Metro Council finds that the provision of LRT service to the Downtown Segment will encourage mixed uses in high density patterns accommodating jobs and housing along the Portland Transit Mall through the provision of LRT service, thereby providing for efficient land use and a compact urban form. Finally, the Metro Council finds that the resulting LRT service and land use patterns will protect neighborhoods outside the downtown by accommodating growth of jobs and housing without changing the density or design of single family neighborhoods in the region. It further finds that downtown LRT will enhance downtown area neighborhoods by improving transit service to the broad variety of commercial, governmental, cultural and residential uses and facilities in the downtown area. It finds that because existing right of way can be used, no homes or businesses will be displaced. Traffic patterns may be rearranged with light rail along the mall, but adverse impacts associated with those changes can be mitigated.

Regional Land Use Policies. In addition to the above findings, the Council finds that over the past 25 years, there has been a continuous progression of state, regional and local policy decisions and investments aimed at establishing growth in corridors and activity centers that are, or are planned to be, supported by high capacity transit. As a result, land use designations, zoning patterns and water, sewer and other infrastructure facilities within the region have been located and/or sized on the basis of a regional development forecast in current and planned high capacity transit corridors. In particular, on a regional level, Metro's *Region 2040 Growth Concept* is predicated on implementation of a south/north transit spine to link key activity centers in the corridor with downtown Portland. Without a high-capacity transit investment in the corridor and within the Downtown Portland Segment, the region's entire growth management strategy could be at risk. The larger risk is that the economic vision, livability and development goals and land use plans for the region may not be realized.

Accordingly, the Metro Council believes and concludes that the LRT route and stations in the Downtown Segment provide a tremendous opportunity to support and leverage the development of an efficient and compact urban form as outlined in the *Region 2040 Growth Concept.* With downtown LRT providing service to present and planned residential, employment and recreational uses, it finds and concludes that transit ridership will be enhanced, which in turn will save energy, reduce congestion and improve air quality. As the alignment is within current public right-of-way and mitigation measures have been identified and will be pursued to protect affected neighborhoods, the Metro Council also believes and concludes that affected neighborhoods will be substantially protected from the adverse impacts associated with the Downtown LRT Segment.

"Provide for associated highway improvements, balancing the need to improve the highway system with the need to protect affected neighborhoods from the identified adverse impacts. "

No highway improvements are proposed in the Downtown Segment that have utility separate from the South Corridor Project. Modest roadway improvements are proposed as mitigation for traffic impacts associated with the LRT facilities in this segment. These improvements are described in the discussion of traffic impacts for the Downtown Segment.

6.4.2.3 Criterion 4: Noise Impacts

"Identify adverse noise impacts and identify measures to reduce noise impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by affected local governments during the permitting process."

Noise and vibration impacts specific to the Downtown Segment are addressed in the following section. Noise and vibration impacts common to neighborhoods throughout the South Corridor, including the Downtown Segment, are addressed in the General Findings. The General Findings include an overview of noise and vibration, descriptions of different types of noise, and identification of potential noise mitigation by noise type. Noise and vibration impacts also are identified, along with corresponding mitigation measures, in the *Downtown Amendment of the South Corridor SDEIS.*

Identification of Noise and Vibration Impacts in the Downtown Segment

Land uses within the Downtown Portland Segment include high-density office buildings, retail, apartments, hotels, St. Mary's High School, Portland State University and Pioneer Square. Noise sensitive uses include the hotels, apartments and houses located on NW/SW 5th and 6th avenues. Vehicular traffic noise dominates the ambient noise environment in the Downtown Portland Segment. Existing noise levels on the Portland Mall are high (65 to 75 dBA ldn) due the amount of traffic and bus operations.

The existing vibration environment in downtown is typically characterized by low levels generated by city traffic. The types of buildings located in downtown Portland are less likely to be subject to vibration impacts. Existing ground-borne vibration sources in the Downtown Portland Segment are buses, trucks and existing MAX LRT service. Elevated vibration levels near SW 6th Avenue are from buses on the Portland Mall. Humans perceive vibration at approximately 65 velocity decibels (VdB).

Noise from LRT operations increases as the speed of the train operations increases. Noise also occurs where there are gaps in the tracks and at tight radius curves. Train speeds in downtown Portland are governed by the progression of the traffic signals on NW/SW 5th and 6th avenues and the ability of the trains to safely accelerate and de-accelerate. The comparatively lower speeds of light rail (11 mph) along with the high amount of existing noise along the Portland Mall would result in no noise impacts (*South/North Transit Corridor Noise and Vibration Mitigation Report* (Metro February 1998)).

Twelve housing units, however, would be impacted by wheel squeal emitted from the rail/wheel at the two 82-foot radii curves located south of SW Jackson Street.

A vibration impact could occur at a housing unit located at the corner of SW Jackson Street and SW 5th Avenue. This potential vibration impact would be caused by the track switch located at just south of SW Jackson Street. This track switch is needed to move trains from one track to another at the terminus.

In addition, there are likely to be short-term noise and vibration impacts. Increases in noise and vibration levels would result from the operation of heavy equipment needed to relocate utilities and construct the trackway, stations, and bridge ramp and to reconstruct the roadway and repair sidewalks. Local noise ordinances regulate noise in order to avoid impacts. Contractors would be required to adhere to all City of Portland noise and vibration standards and would need to apply for a variance if these standards would be exceeded. Contractors would be required to mitigate noise and vibration from construction machinery.

Noise produced by construction equipment used for this project would occur with varying intensity and duration during basic phases of construction. Typically, construction noise would occur between the hours of 7 a.m. and 6 p.m. Construction noise after these hours would likely require a local variance to noise regulations.

There are several locations that could experience elevated noise levels due to construction activities. Downtown LRT would result in some relocation of utilities along NW/SW 5th and 6th Avenues. This could require the use of concrete saws, jackhammers, backhoes, powered saws and dump trucks. Numerous existing residential units along NW/SW 5th and 6th avenues would be exposed to noise during construction.

The trackway, station and roadway construction would likely require heavy equipment to move rails, remove and pour concrete, move and haul dirt, equipment to demolish roadway and sidewalks, and cranes to lift poles. All of this equipment could create temporary noise impacts along NW/SW 5th and 6th avenues.

The modification to the Glisan Street Ramp off of the Steel Bridge could require the use of machines to either drive piling or drill shafts to support this ramp. Either pile drivers or drills could create temporary noise impacts to residential units north of NW Glisan Street.

Mitigation Options for Noise and Vibration Impacts in the Downtown Segment

Mitigation options for the various types of noise and vibration impacts are discussed in the General Findings. There are a number of ways to reduce LRT noise. These include moving the alignment, constructing a barrier between the receiver and the noise source, and reducing the number of transit vehicles and/or speeds. However, because the South Corridor project alternatives generally impact more urban environments, these options are more limited than they would be were the project being constructed in sparsely developed and undeveloped areas. For example, the physical separation or sound wall required to produce a substantial noise reduction is not generally available in a built-up environment where setbacks from the noise source may be minimal.

The LRT curved-track related noise impact could be mitigated through the use of wayside track lubricators. TriMet has installed these devices on the Blue and Yellow Lines and have been successful in reducing wheel squeal and eliminating noise impacts. TriMet would install these devices at SW Jackson Street to mitigate these wheel squeal impacts.

Potential mitigation for vibrations caused by switching track could include using a flange-bearing frog that would eliminate the gap in track caused by the switch.

Based on the information in the *Downtown Amendment to the South Corridor SDEIS*, the Council finds that options are available to mitigate adverse noise and vibration impacts associated with LRT in the Downtown Segment. Choices regarding the location and type of mitigation will be determined during the Final Environmental Impact Statement process and will utilize the higher level of design detail associated with the Preliminary Engineering designs. Determinations regarding the location and type of noise and vibration mitigation will include public input from the affected property owners, neighborhood associations and local jurisdictions.

Mitigation measures could include :

- restricting hours of construction, especially highly noisy operations;
- installing temporary or portable acoustic barriers around stationary construction noise sources;
- locating stationary construction equipment as far from nearby noise-sensitive properties as possible;
- shutting off idle equipment;
- rescheduling construction operations to avoid periods of noise annoyance identified in a complaint;
- notifying nearby residents whenever extremely noisy work will be occurring.

6.4.2.4 Criterion 5: Natural Hazards

"Identify affected landslide areas, areas of severe erosion potential, areas subject to earthquake damage and lands within the 100-year floodplain. Demonstrate that adverse impacts to persons or property can be reduced or mitigated through design or construction techniques which could be imposed during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Natural hazard impacts specific to the Downtown Segment are addressed in the following section. Natural hazard impacts applicable to neighborhoods throughout the South Corridor, including the Downtown Segment, are addressed in the General Findings. Natural hazard impacts, and associated mitigation measures, also are described in the *South Corridor Project Supplemental Draft Environmental Impact Statement* (Metro and FTA/FHWA, November 2002), the *South Corridor Project Geology, Soils, and Seismic Impacts Result Report* (Metro and URS, November 2002) and the *South/North Corridor Project Draft Environmental Impact Statement* (Metro and FTA, February 1998), which are all still up to date and valid.

There are no areas of severe erosion potential within the Downtown Segment. Further, the Downtown Segment is not within a floodplain, although parts of the alignment are the result of fill over the past century. Accordingly, the area has less than a 1 percent chance of flooding in any given year, the standard that is used to map 100 year floodplains.

As described in the General Findings, the Northwest is a seismically active area and is subject to earthquake damage. Soils at some locations have characteristics that could amplify seismic or earthquake events. Maps of likely earthquake damage show much of the corridor with relatively high potential for earthquake damage. However, the design and construction techniques contemplated for the Downtown Segment use a much less extensive construction method involving cutting a narrow section from the street, rather than large scale excavation, utility replacement, etc. This technique, in conjunction with the fact that the alignment grade is relatively flat and no spans or bridges are required, should lessen the extent of earthquake prone lands disturbed.

Consideration of specific mitigation for this potential earthquake risk will be addressed during the preliminary engineering phase and in the Final Environmental Impact Statement. Mitigation measures are included in the design specifications that respond to earthquake safety standards

and good engineering practice. Potential mitigation measures are provided in the Soils Report. During final design, a thorough geotechnical investigation of the selected alignment will provide the necessary information to anticipate and remediate less than ideal foundation conditions. If groundwater is encountered, it can be controlled with drains. Soft foundation conditions, delineated by the exploration program, can be mitigated with proper designs. In areas where settlement is anticipated, several options are available. If the extent of the unstable material is limited, that material can be removed and replaced with more stable fill. Settlement can be accelerated by surcharging and installing wick drains or mechanical supports can be built.

For possible earthquake hazards, prior to construction, site-specific geotechnical engineering studies can be conducted to determine appropriate construction techniques to avert potential geologic problems.

Based on the information summarized above, the Council finds that LRT is unlikely to contribute to landslides, flooding or severe soil erosion in the Downtown Segment. It further finds that the area is part of a seismically active area, but that construction techniques are available to reduce the potential for adverse impacts to persons or property.

6.4.2.5 Criterion 6: Natural Resource Impacts

"Identify adverse impacts on significant fish and wildlife, scenic and open space, riparian, wetland and park and recreational areas, including the Willamette River Greenway, that are protected in acknowledged local comprehensive plans. Where adverse impacts cannot practicably be avoided, encourage the conservation of natural resources by demonstrating that there are measures to reduce or mitigate impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Natural resource impacts specific to the Downtown Segment are addressed in the following section. Natural resource impacts applicable to neighborhoods throughout the South Corridor, including the Downtown Segment, are addressed in the General Findings. Natural resource impacts, along with associated mitigation measures, also are described in the *Downtown Amendment to the South Corridor SDEIS*.

Identification of Impacts to Significant, Protected Natural Resources in the Downtown Segment

Natural resource impacts specific to the Downtown Segment are addressed in the following segment. Applicable natural resource impacts are addressed in the *South Corridor Ecosystems Result Report,* (Metro, December, 1998 and 2002), *Wetland Determination and Delineation Report* (Metro, February 1998), U.S. Fish and Wildlife Service *National Wetland Inventory*, local wetland inventory maps (City of Portland) and Chapter 3 of the *Downtown Amendment to the South Corridor SDEIS*.

As required by Statewide Planning Goal 5, the City of Portland has inventoried and evaluated natural resources for the purpose of identifying and protecting significant natural resources,

including high quality wetlands and streams. Protection of these areas includes minimizing erosion, maintaining and enhancing water quality and fish and wildlife habitat, and preserving scenic quality and recreation potential. The City of Portland Comprehensive Plan and implementing regulations provide guidelines and standards for protecting significant natural resource areas, including required minimum development setbacks from waterways and wetlands, development standards, and vegetation protection requirements.

Because the Downtown Segment is highly urbanized, there are no natural resources present. More specifically, the Council finds that there are no protected fish and wildlife habitat areas, scenic or open space areas, riparian areas or wetland areas that would be adversely affected by the Downtown LRT alignment and its associated stations. The Downtown Segment LRT design construction technique will use a very narrow excavation profile. Accordingly, the Metro Council finds that the LRT improvements in this Segment will not impact significant, protected natural resources.

Some adjustments and additions to the Steel Bridge will occur in the vicinity of the Willamette River Greenway. However, because LRT serving the Downtown Segment would use the existing tracks over the Steel Bridge, the overall impacts in or near the Greenway area would be small. The Council finds that construction and operation will occur within the existing, improved public right-of-way.

From the above, the Council concludes that the light rail alignment and associated facilities will not adversely impact protected natural resources in the Downtown Segment.

6.4.2.6 Criterion 7: Stormwater Runoff

"Identify adverse impacts associated with stormwater runoff. Demonstrate that there are measures to provide adequate stormwater drainage retention or removal and protect water quality which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Stormwater runoff impacts specific to the Downtown Segment are addressed in the following section. Stormwater runoff impacts and mitigation common to segments throughout the South Corridor, including the Downtown Segment, are addressed in the General Findings. Stormwater impacts and mitigation measures are also described in the *Downtown Amendment to the South Corridor SDEIS.*

Identification of Stormwater Impacts in the Downtown Segment

Development can change the amount and timing of runoff that leaves a site during a storm. The peak runoff rate and volume of stormwater discharges increase when construction removes vegetation, compacts soils, and/or covers significant portions of a site with buildings or pavement. Such changes: (1) reduce the precipitation intercepted by vegetation and infiltrated into the ground, thereby increasing runoff volume; and (2) reduce the effective time of concentration of runoff from a site by collecting rain and runoff more efficiently with pavement and storm sewers. Without mitigation of hydrologic impacts from the development of new

impervious surface, peak discharge rates rise, increasing the possibility of flooding if the capacities of downstream storm drainage system components (pipes, streams, or bridges) are constrained.

The LRT alignment in the Downtown Segment traverses an area that drains directly to the adjacent Willamette River. The Willamette River flows north through Portland to its confluence with the Columbia River. The Willamette River has been listed under Section 303(d) of the Clean Water Act and is classified as a major source of pollutants to the Lower Columbia River due to its suspended sediment and total phosphorus and bacterial concentrations. Pollutant sources include municipal and industrial wastewater and stormwater discharges. The Willamette River is regulated by reservoirs on tributaries and upper reaches of the river. These reservoirs are operated by the U.S. Army Corps of Engineers to prevent flooding; however, flooding within the corridor can occur as a result of backwater effects on the Columbia River or localized flooding along tributaries.

The light rail improvements in the Downtown Segment would add no additional impervious surface to the Willamette River basin.

Motor vehicle travel contributes to water quality problems by adding petroleum products, heavy metals and other pollutants to roads and streets, which in turn, drain to streams and rivers. Some of the LRT ridership will come from people driving motor vehicles to LRT park-and-ride sites - though they will reduce the number of miles of motor vehicle travel and reduce water pollutants that would otherwise be generated. Others will walk or bike to LRT instead of driving, resulting in no water pollutants generated. LRT service provides an alternative to motor vehicle travel and is considered one method of reducing pollution of stormwater.

Mitigation Options for Stormwater Impacts in the Downtown Segment

Based on the information contained in the *Downtown Amendment to the South Corridor SDEIS*, the Council concludes that, with mitigation, no significant stormwater runoff or water quality impacts are expected in the Downtown Segment. The City of Portland requires Best Management Practices (BMPs) to mitigate for the project impacts on water quality, stormwater volume, and floodplain function. The City requires that the quantity and quality of stormwater runoff from new impervious surfaces and, in some cases, redeveloped impervious surfaces be managed to protect streams. The specific mitigation details for each project segment will be worked out with the affected jurisdictions in compliance with their permitting procedures. General mitigation options are summarized in the following discussion.

Treatment of stormwater would require use of BMPs that remove pollutants. Typical BMPs include swales, constructed wetlands, detention facilities with suitable capacity, or devices that absorb, filter, or float pollutants.

Construction of surface impoundments or subsurface vaults could provide stormwater detention for water quality improvement or hydrologic control. Subsurface vaults could be empty chambers that simply hold water to let pollutants settle out, or they could be designed to include filtration systems that provide additional pollutant removal beyond settling.

Accordingly, the Council finds that there is virtually no additional increase to stormwater as a result of the Downtown Segment, that a range of measures is available to reduce stormwater impacts to acceptable levels, and that site-specific mitigation for stormwater quantity and quality impacts will be refined and selected during the FEIS design and local permitting process.

6.4.2.7 Criterion 8: Historic and Cultural Resources

"Identify adverse impacts on significant historic and cultural resources protected in acknowledged comprehensive plans. Where adverse impacts cannot practicably be avoided, identify local, state or federal review processes that are available to address and to reduce adverse impacts to the affected resources."

Historic and cultural resource impacts specific to the Downtown Segment are addressed in the following section. Historic and cultural resource impacts and mitigation common to segments throughout the South Corridor, including the Downtown Segment, are addressed in the General Findings. Historic and cultural resource impacts and mitigation measures are also described in *Downtown Amendment to the South Corridor SDEIS.*

Identified Significant and Protected Historic and Cultural Resources in the Downtown Segment

The *Downtown Amendment to the South Corridor Project Supplemental Draft Environmental Impact Statement* identifies 65 historic resources within 100 feet of the light rail alignment within the Downtown Portland Segment. Of these, 34 are currently listed on the National Register of Historic Places (NRHP), 21 have been previously determined eligible for listing, and 10 have been identified as potentially eligible for listing in the NRHP. Table 3.9-1 of the *Downtown Amendment to the South Corridor Project Supplemental Draft Environmental Impact Statement* shows the number of identified historic resources associated with the Downtown Segment, including:

- Firehouse, 510 NW 3rd Avenue
- Signal Towner, 600-610 NW 3rd Avenue
- Warehouse, 320 NW Hoyt Street
- Steam Plant, 503 NW Irving Street
- Hotel Medford, 506-510 NW 5th Avenue
- J.K. Gill Building, 408 SW 5th Avenue
- Portland City Hall, 1220 SW 5th Avenue
- University Club, 1225 SW 6th Avenue
- Ambassador Apartments, 1209 SW 6th Avenue
- Equitable and Commonwealth buildings, 421 SW 6th Avenue
- Commercial, 121-127 NW 6th Avenue
- Butte Hotel, 129-137 NW 6th Avenue

There are no known archaeological sites, nor are there any identified high probability archaeological sites in the area of potential effect in downtown Portland. Table 3.9-2 lists the identified historic resources by name and address, and shows the National Register of Historic Places status of each identified resource. The general locations of the identified historic resources listed in Table 3.9-2 of the *Downtown Amendment to the South Corridor SDEIS* and are shown on Figure 3.9-1 of the document.

The preliminary evaluation of effects of the project alternatives on identified historic and archaeological resources was based on an assessment of the potential adverse effects as defined in 36 CFR Part 800.5. The criteria of effect states: *"an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association…"*

The *Downtown Amendment to the South Corridor SDEIS* finds that, consistent with Federal standards, construction of Downtown Segment would not cause any "adverse effects" to any identified historic or cultural resources in downtown Portland. There would be an effect, but not an "adverse effect" on 13 historic resources due to partial property takes, (where the historic structure would not be adversely affected), and due to the close proximity of station platforms to some identified historic resources**.**

Noise, dust, and temporary limitations to access could cause construction-related impacts to historic resources. However, because most of the LRT construction would occur within public right-of-way, these impacts would be limited and could likely be mitigated through careful construction management and coordination with the potentially affected properties. No construction related impacts are expected to constitute an "adverse effect" to any identified historic resources.

Project staff will continue to consult with the State Historic Preservation Office through Preliminary Engineering and Final Design to ensure that the project is developed in a manner that is sensitive to the adjacent historic resources.

Mitigation for long-term impacts such as visual effects could include use of complementary materials or design treatments to minimize those effects. Where adverse effects cannot be mitigated through design treatments, recordation of buildings or structures prior to any actions that would affect the resource may be appropriate. Recordation and salvage of building elements could be used to mitigate for buildings that would be demolished

If during construction there is a discovery of any archaeological resources, a professional archaeologist would be brought in to help determine identification of any significant resources. Response to any archaeological discoveries could be defined in advance with the State Historic Preservation Office and appropriate Tribes through a Memorandum of Agreement.

The Council understands that the Downtown Segment includes one high-probability archaeological site. A professional archaeologist will monitor construction activities near this

high-probability site. The archaeological monitoring will be undertaken within the framework of a Monitoring Protocol to be prepared in consultation with the Federal agencies, the State Historic Preservation Office, Metro, TriMet and appropriate interested Tribes.

For the reasons expressed above, the Metro Council finds that the LRT improvements in the Downtown Segment do not have an adverse effect on the historic properties identified in the *Downtown Amendment of the South Corridor SDEIS*. If cultural resources are adversely affected, the above-mentioned archaeological monitoring process is available to reduce adverse impacts.

6.4.2.8 Alignment Specific Criterion 10

"Consider a light rail route connecting Portland's Central City with the City of Milwaukie's Downtown via inner southeast Portland neighborhoods and, in the City of Milwaukie, the McLoughlin Boulevard corridor, and further connecting the Central City with north and inner northeast Portland neighborhoods via the Interstate 5/Interstate Avenue corridor. "

This criterion contains two separate requirements. It requires consideration of a light rail route connecting Portland's Central City with the City of Milwaukie's downtown via inner southeast neighborhoods and, in the City of Milwaukie, the McLoughlin Boulevard corridor. It also requires consideration of a light rail route connecting Portland's Central City with north and inner northeast neighborhoods via the Interstate 5/Interstate Avenue corridor.

The Council finds that it has met the first requirement of this criterion through its consideration of the Downtown Segment and the project segments extending LRT to Milwaukie. It finds that it previously approved a Downtown Segment in the original 1998 South/North LUFO, and that this 2004 amended LUFO provides for an extension of the downtown segment to PSU. At the same time, the overall South/North LUFO, as amended herein, continues to provide for future LRT service to Milwaukie via inner SE Portland neighborhoods and the McLoughlin Corridor.

The Council also finds that the amendments to the Downtown Segment have no impact on the provision of LRT to north and northeast Portland via Interstate Avenue. In 1999 the Council approved a LUFO amendment authorizing light rail transit along Interstate Avenue. Construction of that facility is now nearing completion. The amended Downtown Segment will provide even better connection of the Portland Central City to north and northeast Portland by providing direct connection to PSU.

6.4.3 MILWAUKIE SEGMENT

These findings replace that portion of the findings in Section 6.4.5 in the original LUFO that addressed that portion of the South Willamette River Crossing (SWRC) Segment south of SE Powell Boulevard to McLoughlin Boulevard However, these findings do not replace the findings in Section 6.4.5 addressing lands in the South Willamette River Crossing Segment that are located north of SE Powell Boulevard.

6.4.3.1 Description of Light Rail and Highway Improvements

The South Willamette River Crossing (SWRC) Segment is revised as follows:

- the light rail route and station locations from the intersection of SE Powell Boulevard south to McLoughlin Boulevard are revised, changing the alignment from east of SE 18th Avenue and west of the Brooklyn Yard to an alignment along SE 17th Avenue, south, to McLoughlin Boulevard.

See Map C for a generalized depiction of the South Willamette River Crossing Segment and Figures # 3-2 and 3-3 for the adopted LUFO boundaries, as revised.

Light Rail Alignment

As noted in the *South Corridor Project Locally Preferred Alternative Report*, several options were analyzed to address the best alignment south of Powell Boulevard to McLoughlin Boulevard. The Metro Council concluded that the 17th Avenue alignment, as depicted in LUFO figures #3-2 and 3-3, was better than the original LUFO alignment and station locations. They preferred the SE 17th Avenue alignment and station locations because:

- the 17th Avenue stations would be closer to the Brooklyn neighborhood and provide better station environments and pedestrian access than the west of Brooklyn Yard option;
- the 17th Avenue design would serve more transit supportive land uses located along SE 17th Avenue;
- the 17th Avenue design would avoid displacement to large employers in the vicinity;
- the 17th Avenue design would avoid railroad property, thus speeding the project implementation;
- the 17th Avenue design is strongly supported by the Brooklyn Neighborhood.

Light Rail Stations

Changes from the original LUFO, Figures 5.3.10 and 5.3.11, light rail stations, were as follows:

- **Rhine Station**. From a location east of 18th Avenue and west of the Union Pacific railroad line, north of SE Lafayette and south of SE Rhine, to a location along SE 17th Avenue south of SE Pershing Street and north of SE Lafayette Street.

- **Holgate Station**. From a location just south of SE Holgate and east of 18th Avenue and west of the Union Pacific railroad line, to a location on SE 17th Avenue approximately 300 feet north and south of SE Holgate Boulevard.

Park-and-Ride Lots

No park-and-rides will be provided as part of this portion of the SWRC Segment.

Operations and Maintenance Facilities

No operations or maintenance facilities are proposed as a part of this segment at this time.

Highway Improvements

There are no highway improvements in the SWRC Segment.

6.4.3.2 Criterion 3: Neighborhood Impacts

"Identify adverse economic, social and traffic impacts on affected residential, commercial and industrial neighborhoods and mixed use centers. Identify measures to reduce those impacts which could be imposed as conditions of approval during the National Environmental Policy Act (NEPA) process, or, if reasonable and necessary, by affected local governments during the local permitting process."

"A. Provide for a light rail route and light rail stations, park-and-ride lots and vehicle maintenance facilities, including their locations, balancing (1) the need for light rail proximity and service to present or planned residential, employment and recreational areas that are capable of enhancing transit ridership; (2) the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and (3) the need to protect affected neighborhoods from the identified adverse impacts."

"B. Provide for associated highway improvements, including their locations, balancing (1) the need to improve the highway system with (2) the need to protect affected neighborhoods from the identified adverse impacts."

Description of Affected Neighborhoods in the SWRC Segment.

The SWRC Segment extends through the middle of the Brooklyn Neighborhood. In 2000, the Brooklyn Neighborhood included 3,595 people and 9,282 jobs. About 15 percent of the population was considered minority status, slightly higher than the 14 percent average for the corridor, but lower than the 17 percent average for the Tri-county area. About 12 percent of the households were below the federally defined poverty level compared with a corridor average of 11 percent and a Tri-county average of 9 percent. Only 6 percent of the population was age 65 or greater, a smaller percentage than the corridor average of 13 percent and Tri-county average of 10 percent. About 6 percent of the population was Hispanic, the same as the corridor average and slightly below the 8 percent average for the Tri-county area.

"Identify adverse economic, social and traffic impacts on affected neighborhoods. Identify measures to reduce those impacts. "

Economic, social and traffic impacts specific to the SWRC Segment are addressed in the following section. Economic, social and traffic impacts applicable to neighborhoods throughout the South Corridor, including the SWRC Segment, are addressed above under the heading

"General Impacts and Mitigation Measures Applicable to All Segments" (hereafter "General Findings"). Economic, social and traffic impacts are also described, along with corresponding mitigation measures, in the South Corridor SDEIS.

Economic Impacts

Economic impacts include business displacements, loss of parking or access, impacts to the local tax base, and impacts to efficient freight movement.

Displacements. In the SE Powell to McLoughlin portion of the SWRC Segment, the LRT alignment will displace 9 commercial properties, in whole or part. Adverse economic impacts associated with these displacements include the loss of employment and payroll, loss of retail services, and loss of assessed value and tax base associated with the business. The LRT alignment, stations and park-and-ride lots will be in public ownership and off the tax roll.

Wherever the South Corridor Project displaces an existing commercial or industrial use, that represents an adverse economic impact. Displacement has an effect on employment, incomes, services and taxes. Even though the adverse impacts associated with displacement may not be significant on a region-wide or citywide level, the Metro Council recognizes and is sympathetic to the significance of each displacement at the individual business and community level. Metro understands and acknowledges that relocations can cause significant anxiety and trauma not only to the company being displaced, but also to the employees who work for the company.

In terms of mitigation, as described in the General Findings, displaced commercial uses will be acquired at fair market value, and/or relocation benefits will be provided to business owners and tenants. During the preliminary and final engineering processes, staff will try to minimize displacement impacts to the extent practicable through design refinements. Project engineers believe than many of the displacements along 17th Avenue could be mitigated to allow some businesses to continue operating without relocation. This would help reduce the overall adverse economic impact.

In addition, the increased accessibility that LRT provides to people and places is likely to result in increased commercial sales and higher property values for remaining businesses and for new businesses that choose to locate near the light rail alignment.

Loss of Parking/Access. The loss of parking, and the loss or change of access, can have adverse economic impacts on businesses. If the project must remove an existing access, and if that access cannot be safely and adequately relocated or reconfigured, then the entire business is assumed to be displaced.

Off-street parking in the Powell to McLoughlin portion of the SWRC Segment is present along SE 17th Avenue. By moving the light rail alignment to SE 17th Avenue from its previously approved location east of SE 18th Avenue, an estimated 148 parking spaces at the Center Street TriMet lot would be lost along SE 17th Avenue, as well as an additional 29 parking spaces located on side streets to SE 17th Avenue. Parking mitigation strategies that could be

implemented include replacement of off-street and on-street parking, such as by providing parking structures, parking management strategies, and parking restrictions.

Tax Base. The LRT improvements in the SWRC Segment will displace or affect 9 commercial properties. The Council finds that the tax base impacts will be minimized in the SWRC Segment because the LRT alignment and stations are located as much as possible within an existing right-of-way. It further finds that using the SE 17th Avenue rather than an alignment east of SE 18th Avenue avoids even greater business displacements because the building locations and LRT design result in fewer actual displacements than the original LUFO alignment.

Freight Movement. Efficient movement of freight and goods throughout the South Corridor Project area is critical to the economic vitality of the region. Details about truck activity in the various subareas of the SWRC Segment can be found in the South Corridor SDEIS.

The primary railroad facility within the study area is UPRR's Brooklyn Yard, located east of SE 17th Avenue between SE Powell Boulevard and SE Harold Street. The existing railroad lines within the project area are owned by UPRR, East Portland Traction Company, and Portland and Western Railroad Company.

While peak-periods of truck activity typically occur during the midday, when total traffic levels are lower, the p.m. peak-hour was selected for this analysis because it tends to be the most congested period of the day. Within the Brooklyn neighborhood (i.e., along SE 17th Avenue) truck trips make up 2 to 8 percent of all trips through the surveyed intersections during the p.m. peak period.

The intersection of SE 17th Avenue/SE Holgate Boulevard would be adversely impacted by the SWRC LRT Segment. The SWRC Segment would have a north/south center-running light rail alignment that would reduce the amount of green time available to serve the east/west movements on SE Holgate Boulevard and would result in project-related impacts. The SWRC Segment would not significantly impact any other intersections along SE 17th Avenue (or other surrounding intersections in the area). Some additional intersections on SE 17th Avenue will be signalized as part of the Project. All of the new traffic signal-controlled intersections would operate within acceptable roadway performance standards during the 2020 p.m. peak hour.

Potential mitigation for impacts to the intersection of SE 17th Avenue and SE Holgate Boulevard could include signal timing optimization coupled with a longer cycle length. The longer cycle length would allow for additional green time to serve the east/west volumes.

Conclusions. The Council finds that from an economic standpoint, LRT to Milwaukie has great potential to positively impact regional land use and development patterns by providing a fourth spoke in the region's LRT system (the first three spokes being east to Gresham, west to Hillsboro and north to the Expo Center). Milwaukie light rail would increase and expand high capacity transit connections between the Portland Central City and outlying regional and town centers.

Light rail stations would have the potential to serve as nodes to attract transit-oriented development. The Council finds that this too is an overall economic benefit, both to the local area served (here, the SWRC section) and to the community as a whole. It also finds that LRT to Milwaukie would result in short-term economic benefits, with the largest increase in short-term employment resulting from the construction of the I-205 LRT Segment and the downtown Portland to Milwaukie LRT segment (over 7,000 additional person-year jobs and approximately $287 million in additional personal income.)

The Council concludes that on balance, the South Corridor Project will result in positive economic impacts in the SWRC Segment, particularly because improved transit capacity will be available to support existing and planned intensive development around the station areas. It concludes that these benefits outweigh adverse economic impacts in the form of displacement of portions of 9 commercial buildings or properties along SE 17th Avenue, noting both that mitigation will help minimize those impacts and that the 17th Avenue design here selected avoids impacting Brooklyn Yard railroad property and also avoids displacement to large employers in the area. The Council also notes that the SE 17th Avenue alignment is strongly supported by the Brooklyn Neighborhood through which it would be located.

Social Impacts

For the reasons that follow, the Council finds that the overall social impacts of the South Corridor Project are generally positive within the SWRC Segment. The Union Pacific Railroad already constitutes a major barrier. LRT along SE 17th will not further decrease community cohesion or connections. In addition, within the SE Powell to McLoughlin section, no homes are displaced, although several businesses will be adversely affected. The Council also finds that light rail transit will provide improved transit access to major destinations and activity centers within the community, and also will provide connections to employment centers, services and recreational destinations in the larger region.

Light rail will provide an alternative mode to automobile travel on often-congested roadways within this segment. Residents of many neighborhoods in the SWRC Segment have poverty levels that are slightly higher than typical in the Tri-County region, and the Council finds that these residents will benefit from improved availability of public transit. By benefiting these residents through the provision of LRT, the South Corridor Project will help achieve an aim of Statewide Planning Goal 12, Transportation, to serve the needs of the transportation disadvantaged.

Residential Displacements. No residential displacements will occur as a result of this change of alignment and station location.

Access to Community Facilities. The Council finds that the South Corridor Project will provide improved transit access to community and employment centers for neighborhoods in the SWRC Segment, by providing an alternative transportation mode to all of the land uses in proximity to the light rail system throughout the region. More particularly, LRT facilities in the South Willamette River Crossing Segment will improve neighborhood accessibility to local and regional employment centers, community facilities and recreational destinations including the

Portland Central City, the Gresham, Beaverton, Hillsboro and Clackamas Regional Centers, Lloyd Center, the Convention Center, the Rose Quarter, the Expo Center and the Airport, via connections to the east-west MAX light rail route, Interstate MAX, Airport MAX and I-205 MAX.

Barriers to Neighborhood Interaction. The Council finds that the LRT alignment in the SWRC Segment will not result in barriers to neighborhood interaction, primarily because the alignment remains at street grade and does not include construction of facilities that would block streets. The LRT alignment parallels existing Union Pacific railroad, which already acts as a barrier to neighborhood interaction. The addition of LRT will not further reduce neighborhood interaction. Instead, station area land uses may increase neighborhood interaction by providing meeting places and activities for neighborhood use.

Safety and Security. Members of the community have expressed concerns about the safety and security of the TriMet system and the effect of LRT on neighborhoods in the SWRC Segment. Neighborhood concerns have focused on personal safety at transit stations, theft from vehicles at park-and-ride lots and increased property crimes in neighborhoods adjacent to transit stations. TriMet has developed strategies for addressing crime at transit stations and park-and-rides over the course of more than 15 years of operating light rail in the region. The Council finds that the lessons learned over the course of these years can and will be applied in the SWRC Segment to minimize threats to safety and security.

The Council recognizes that crime is likely to be found at higher rates in areas where people congregate such as transit stations, shopping malls, the transit mall and parks. The Council supports TriMet's continuing efforts to improve passenger and community safety through their service area.

To create a safe transit environment, TriMet's Transit Security Division patrols trains, buses and park-and-ride lots. TriMet will coordinate with local jurisdictions to effectively patrol new facilities constructed in the South Corridor. In addition to sworn law enforcement officers in the Transit Security Division, TriMet contracts with a private security firm to provide additional patrols. Further, TriMet contracts with Multnomah County for a full-time Deputy District Attorney to prosecute transit-related crimes.

TriMet has developed and adopted a system-wide *Transit Security Plan* that calls for the application of community policing goals and techniques to transit security. Elements of the plan will be incorporated into the design and operation of the SWRC LRT Segment. These would likely include:

- In-house training of transit district employees to increase awareness of and prevent criminal activities;
- Coordination with local law enforcement agencies and personnel;
- Improved facility design and operations standards that would improve visibility at transit stations and increase enforcement levels; and
- Investment in new tracking and surveillance technology.

Additional transit service can help to create a safe environment in neighborhoods. TriMet provide extra eyes-on-the-street every day through its drivers and other employees. TriMet operators are able to request medical or police assistance for passengers and the general public. TriMet is also training employees to recognize and evaluate suspicious activity, people or objects.

The Council is sensitive to the importance of safety and security in all neighborhoods affected by LRT, particularly for station and park-and-ride locations that may be perceived as isolated. Security lighting and telephones will be provided at station platforms, and landscape design (i.e., low shrubbery and good visibility) will ensure consideration of safety and security. The Council expects that safety and security issues will be addressed in more detail as the Project moves into preliminary engineering and final design. This process will include additional input from affected neighborhoods, including the Brooklyn neighborhood, and from local law enforcement personnel. The Council finds that with appropriate final design and implementation of system-wide transit security and other mitigation measures as described in the General Findings, safety and security will not be adversely affected by the LRT improvements in the SWRC Segment.

Visual/Aesthetic. Provision of LRT in the SE 17th Avenue area would result in the addition of two stations, widening and realigning of SE 17th Avenue, addition of street trees and the removal or alteration of several buildings, addition of landscaping or parking areas, additions of overhead wires and catenary and changes to circulation in the area, including closing railroad crossings and encouraging urban development patterns. is The South Corridor SDEIS estimated that these changes will have medium to low impacts on the visual environment once completed.

The Council finds that measures which could be used to mitigate long-term visual impacts might include:

- Developing the pedestrian circulation to provide safe and identifiable connections.
- Implementing neighborhood plan recommendations with respect to visual elements.
- Infilling adjacent land.

In each affected neighborhood, potential mitigation measures will vary to fit neighborhood scale and character. Visual impact mitigation measures will be specifically defined in the FEIS.

Conclusions. Overall, the Council concludes that the social benefits to the affected Brooklyn neighborhood outweigh the adverse impacts identified above. In particular, the Council finds that LRT along SE 17th Avenue provides opportunity for enhanced neighborhood interaction while improving mobility options for both the transportation disadvantaged and the larger community. Compared to the prior alignment east of SE 18th Avenue, the new alignment will be closer to the Brooklyn neighborhood and provide it with better station environments and pedestrian access.

Traffic Impacts. Adverse traffic impacts within the SE Powell to SE McLoughlin portion of the SWRC segment are limited to the intersection of SE 17th Avenue/SE Holgate Boulevard. The SWRC Segment would have a north/south center-running light rail alignment that would reduce the amount of green time available to serve the east/west movements on SE Holgate

Boulevard. The light rail alignment within the SWRC Segment would not significantly impact any other intersections along SE 17th Avenue (or other surrounding intersections in the area). Some additional intersections on SE 17th Avenue will be signalized as part of the Project. All of the new traffic signal-controlled intersections would operate in an acceptable manner during the 2020 p.m. peak hour.

Potential mitigation under the light rail alternatives for the intersection of SE 17th Avenue and SE Holgate Boulevard could consist of signal timing optimization coupled with a longer cycle length. The longer cycle length would allow for additional green time to serve the east/west volumes, which as noted are the movements directly affected by the north/south light rail alignment. More detailed traffic improvements and mitigation will be defined in the FEIS and during preliminary engineering and final design.

Overall, the Council finds that this traffic impact is not substantial and can be addressed through mitigation. It finds that the mobility benefits that LRT provides both within the SWRC section and along the entire LRT network far outweigh the impacts to the neighborhood associated with delays at the SE 17th Avenue/SE Holgate Boulevard intersection.

Provide for a light rail route and associated facilities, balancing the need for light rail proximity and service to areas that are capable of enhancing transit ridership; the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and the need to protect affected neighborhoods from the identified adverse impacts.

The revised SWRC Segment is very similar to the alignment and station placement approved in the original South/North LUFO. However, the Council finds that with the realignment of LRT westward onto SE 17th Avenue, and with the relocation of the Rhine and Holgate stations, light rail transit in this segment will provide for more complementary connections between land use and transportation, particularly because the new alignment and station placements are not so limited by the railroad yards.

The Council finds that the new light rail route serving the two stations at Powell and Holgate will provide light rail service to the Brooklyn Neighborhood, an established residential neighborhood that in 2000 included 3,595 people. The land use and density patterns of this neighborhood are transit supportive and capable of enhancing LRT riderership by providing LRT service from the Brooklyn Neighborhood to the jobs, shopping and cultural activities within the downtown, as well as LRT access to the east (Gresham), west (Hillsboro) and north (Portland International Airport and the Expo Center). Light rail will also provide transit accessibility to the 9,282 jobs located within this neighborhood (2000 Census), a part of the Central Eastside Industrial District. In addition, the Brooklyn Neighborhood has been very supportive of light rail, providing testimony in favor of LRT to and through the neighborhood.

The Metro Council believes that the LRT route and stations in the SWRC Segment will provide a tremendous opportunity to support and leverage the development of an efficient and compact urban form as outlined in the *Regional 2040 Growth Concept,* thereby saving energy, reducing congestion and improving air quality. Some of the industrial sites within the area are currently

underutilized. LRT service will help encourage more intensive use of these lands, which in turn would accommodate more jobs. Further, the Metro Council believes that the new alignment and stations will offer an excellent opportunity for residents and employees in the SWRC Segment to take light rail to work and recreational destinations, thereby saving energy, reducing congestion and improving air quality.

The Metro Council is aware that LRT within the SWRC Segment will have some adverse impacts, particularly in the form of business displacements, loss of parking, and safety and security concerns. However, these impacts can be minimized during preliminary engineering, and mitigation measures can and will be taken to reduce adverse community impacts. Overall, for the reasons stated above, the Council concludes that the identified benefits of LRT to the neighborhood outweigh the adverse impacts. From an economic, social and traffic standpoint, the neighborhood should benefit substantially from the presence of light rail transit.

Provide for associated highway improvements, balancing the need to improve the highway system with the need to protect affected neighborhoods from the identified adverse impacts.

No highway improvements are proposed in the SWRC Segment that have utility separate from the South Corridor Project. Modest roadway improvements are proposed as mitigation for traffic impacts associated with the LRT facilities in this segment. These improvements are described in the discussion of traffic impacts for the SWRC Segment.

6.4.3.3 Criterion 4: Noise Impacts

"Identify adverse noise impacts and identify measures to reduce noise impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by affected local governments during the permitting process."

Noise and vibration impacts common to neighborhoods throughout the South Corridor, including the SWRC Segment, are addressed in the General Findings. The General Findings include an overview of noise and vibration, descriptions of different types of noise, and identification of potential noise mitigation by noise type.

While noise and vibration impacts from the SWRC Segment LRT were identified in the South Corridor SDEIS, no noise or vibration impacts to homes or businesses were identified in the Powell to McLoughlin section.

6.4.3.4 Criterion 5: Natural Hazards

"Identify affected landslide areas, areas of severe erosion potential, areas subject to earthquake damage and lands within the 100-year floodplain. Demonstrate that adverse impacts to persons or property can be reduced or mitigated through design or construction techniques which could be imposed during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Natural hazard impacts specific to the SWRC Segment are addressed in the following section. Natural hazard impacts applicable to neighborhoods throughout the South Corridor, including the SWRC Segment, are addressed in the General Findings. Natural hazard impacts, and associated mitigation measures, also are described in the *South Corridor SDEIS*.

The SDEIS does not identify any specific landslide areas or areas of severe erosion potential within the SE Powell to SE McLoughlin section of the South Willamette River Crossing segment. The SE Powell to SE McLoughlin section is urbanized, with land primarily covered by buildings, streets or other impervious uses. The section is characterized by generally flat terrain. In contrast, landslide areas and areas of severe erosion potential are generally associated with steep slopes and creek crossings.

The Soils Report indicates that scour-channel deposits exist along this SWRC segment. Such deposits require minimal earthwork. No organic soils, which often have high erosion potential and landslide potential were found in soil borings.

Some soil erosion could occur during the construction phase. However, the use of best management practices (BMP), including use of soil fences and organic material filter bags placed at storm drain inlets, should minimize if not eliminate the potential for soil erosion during construction.

As described in the General Findings, the Northwest is a seismically active area and is subject to earthquake damage. There are several crustal Quaternary faults in the vicinity of the South Corridor area. In the SE 17th Avenue area, high susceptibility to liquefaction, shallow groundwater and soft soils all contribute to potential earthquake hazards. Accordingly, seismic hazards include liquefaction, amplification of ground motions and earth rupture. All three could lead to significant structural damage due to settlement, shaking or earth displacement.

Liquefaction can be mitigated by stabilizing the soils or supporting the structures. Ground motion amplification can be reduced through foundation design and proper structural design. Consideration of specific mitigation for this potential risk will be addressed during the preliminary engineering phase and in the Final Environmental Impact Statement.

The LRT alignment in the SWRC Segment does not include any lands designated as 100-year floodplain.

Based on the information contained in the *South Corridor SDEIS*, the Metro Council that finds there are no landslide areas or areas of severe soil erosion in this segment.

Additionally, although the Council recognizes that the Northwest is a seismically active area, the Metro Council finds that options are available to mitigate landslide, erosion and seismic hazard conditions in the SWRC Segment.

6.4.3.5 Criterion 6: Natural Resource Impacts

"Identify adverse impacts on significant fish and wildlife, scenic and open space, riparian, wetland and park and recreational areas, including the Willamette River Greenway, that are protected in acknowledged local comprehensive plans. Where adverse impacts cannot practicably be avoided, encourage the conservation of natural resources by demonstrating that there are measures to reduce or mitigate impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Natural resource impacts specific to the SWRC Segment are addressed in the following section. Natural resource impacts applicable to neighborhoods throughout the South Corridor, including the SWRC Segment, are addressed in the General Findings. Natural resource impacts, along with associated mitigation measures, also are described in the *South Corridor SDEIS*.

Identification of Impacts to Significant, Protected Natural Resources in the Milwaukie Segment

Criterion 6 applies to those natural resources protected by acknowledged comprehensive plans that are impacted by light rail transit. As required by Statewide Planning Goal 5, the City of Portland has inventoried and evaluated natural resources within its jurisdictional boundaries and developed a program to protect identified significant natural resources. The City of Portland Comprehensive Plan and implementing regulations provide guidelines and standards for protecting significant natural resource areas. Protection measures include minimizing erosion, maintaining and enhancing water quality and fish and wildlife habitat, and preserving scenic quality and recreation potential. Implementing techniques including requiring minimum development setbacks from waterways and wetlands, compliance with development standards, and vegetation protection requirements.

Fish and Wildlife Habitat. There are no inventoried fish and wildlife habitat along this portion of the SWRC Segment or within the designated new station locations.

Scenic and Open Space Areas. The City of Portland has not designated any lands in the vicinity of the SE 17th Avenue LRT section as scenic. Further, while the South Corridor SDEIS identified 21 parkland, recreation areas, wildlife and waterfowl refuges within 150 feet of the South Corridor Project, there are no such resources within the SE Powell to McLoughlin portion of the South Willamette River Crossing segment.

Riparian Areas. No riparian areas have been identified in this portion of the SWRC Segment section.

Wetland Areas. There are no wetlands within 100 feet of the proposed project. The project will not fill or impact any wetlands.

Park and Recreational Areas and Willamette River Greenway. There are no park or recreational resources within this portion of the SWRC Segment. This area also lies outside the boundaries of the Willamette River Greenway.

Mitigation Options for Natural Resource Impacts in the SWRC Segment

Although light rail transit in the section of the SWRC segment does not impact any significant natural resources identified for protection in acknowledged comprehensive plans, TriMet nonetheless will continue to revise the overall project design to minimize impacts to the natural environment. This will occur as preliminary engineering on the project is completed and the final environmental impact statement is written.. Potential mitigation options for significant fish and wildlife resources, where impacted, could include best management practices during construction and operation, avoiding removal of native vegetation, where native vegetation removal is unavoidable, leaving cut trees and large shrubs onsite to provide cover for animals, and retaining snags and downed woody materials. Where removal of native vegetation is unavoidable, replanting with approved native vegetation could be done.

6.4.3.6 Criterion 7: Stormwater Runoff

"Identify adverse impacts associated with stormwater runoff. Demonstrate that there are measures to provide adequate stormwater drainage retention or removal and protect water quality which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process."

Stormwater runoff impacts and mitigation common to segments throughout the South Corridor, including the SWRC Segment, are addressed in the General Findings. Stormwater impacts and mitigation measures are also described in the *South Corridor SDEIS*.

Identification of Stormwater Impacts in the SWRC Segment

Development can change the amount and timing of runoff that leaves a site during a storm. The peak runoff rate and volume of stormwater discharges increase when construction removes vegetation, compacts soils, and/or covers significant portions of a site with buildings or pavement. Such changes: (1) reduce the precipitation intercepted by vegetation and infiltrated into the ground, thereby increasing runoff volume; and (2) reduce the effective time for runoff to leave a site by collecting rain and runoff more efficiently with pavement and storm sewers. Without mitigation of hydrologic impacts from the development of new impervious surface, peak discharge rates rise, increasing the possibility of flooding if the capacities of downstream storm drainage system components (pipes, streams, or bridges) are constrained.

The SE Powell to McLoughlin portion of the South Willamette River Crossing segment is within the Willamette River watershed wherein stormwater drains directly to the Willamette. The Willamette River has been listed under Section 303(d) of the federal Clean Water Act and is classified as a major source of pollutants to the Lower Columbia River due to its suspended sediment and total phosphorus and bacterial concentrations. Water temperature in the lower Willamette River is higher than regional interim water quality criteria recently proposed by the Environmental Protection Agency to protect endangered salmonids. Fish listed under the Endangered Species Act have been found in this water body, and the National Marine Fisheries Service and the US Fish & Wildlife Service have determined that the Willamette River and its tributaries, including all of the rivers and creeks described below, are critical habitat for fish

listed as threatened or endangered.

Pollutant sources include municipal and industrial wastewater and stormwater discharges. The river is also listed as not meeting water quality standards because of skeletal deformities in fish, elevated mercury concentrations in fish tissue, and arsenic and pentachlorophenol concentrations in sediment, although the sources of these pollutants appear to be upstream from the Portland metropolitan area.

Suspended sediment, total phosphorus, and bacteria sources are located both upstream from and within the Portland metropolitan area.

Within the SWRC Segment, LRT would result in a net increase in impervious area associated with redevelopment of the Southgate Cinemas site to a transit center and smaller improvements at SE Holgate Boulevard and SE 17th Avenue.

The new impervious surface resulting from LRT improvements in this segment could result in an increase of peak runoff for the 2-year, 24-hour design storm. However, this increase in peak runoff can be mitigated through stormwater detention or retention.

The light rail trains used in the LRT alternatives are expected to contribute less to the stormwater pollutant loading of area streams than busses or cars because propulsion is from electric power rather than internal combustion engines. Using electric power greatly reducing emissions to the air and environment that could get into surface water. In addition, light rail trains commonly run on embankments of pervious ballast rail beds (i.e., coarse crushed rock) rather than impervious pavement, slowing the rate of stormwater runoff and pollutant transport to surface water bodies.

In addition, motor vehicle travel contributes to water quality deterioration by adding petroleum products, heavy metals and other pollutants to roads and streets that in turn drain into streams and rivers. While some of the LRT ridership will come from people driving motor vehicles to LRT park-and-ride sites, others will walk or bike to LRT, resulting in no water pollutants generated. Even for those driving to gain access to LRT, total vehicle miles traveled typically would be far less than if they drove to their final destinations reached by transit. By reducing vehicle miles traveled, LRT reduces the overall amount of water pollutants released into the local environment.

Based on the information contained in the South Corridor SDEIS, the Council concludes that, with mitigation, no significant stormwater runoff or water quality impacts are expected in the SE Powell to McLoughlin section of the SWRC Segment . The City of Portland requires Best Management Practices (BMPs) to mitigate project impacts on water quality, stormwater volume, and floodplain function. The City requires that the quantity and quality of stormwater runoff from new impervious surfaces and, in some cases, redeveloped impervious surfaces be managed to protect streams. The specific mitigation details for each project segment will be worked out with the affected jurisdictions in compliance with their permitting procedures.

More generally, mitigation for hydrologic and water quality impacts resulting from the creation of new impervious surfaces would require a two-fold approach. First, the effective amount of

imperviousness in the project area would need to be reduced to the maximum extent practicable. This could be done by reducing the footprint of impervious surface areas, by using BMPs designed to infiltrate runoff (e.g., stormwater planters), or by using innovative design practices such as pervious pavement or eco-roofs. Second, once the amount of imperviousness is reduced as much as possible, stormwater generated from remaining impervious surfaces would need to be treated for water quality and detained for release at a lower peak flow rate for hydrologic control.

Treatment of stormwater would require use of BMPs that remove pollutants. Typical BMPs include swales, constructed wetlands, detention facilities with suitable capacity, and devices that absorb, filter, or float pollutants. In locations where the project would encroach on stream corridors, compliance with local and regional stream setbacks or buffer requirements would help protect riparian vegetation that provides water quality and habitat functions.

Construction of surface impoundments or subsurface vaults could provide stormwater detention for water quality improvement or hydrologic control. Subsurface vaults could be empty chambers that simply hold water to let pollutants settle out, or they could be designed to include filtration systems that provide additional pollutant removal beyond settling. Surface detention would likely be designed for pollutant settling only, with restricted exits that reduce discharge volumes.

In summary, the Council finds that a range of measures are available to reduce stormwater impacts to acceptable levels. Site-specific mitigation for stormwater quantity and quality impacts will be refined and selected during the FEIS design and local permitting process.

6.4.3.7 Criterion 8: Historic and Cultural Resources

"Identify adverse impacts on significant historic and cultural resources protected in acknowledged comprehensive plans. Where adverse impacts cannot practicably be avoided, identify local, state or federal review processes that are available to address and to reduce adverse impacts to the affected resources."

Historic and cultural resource impacts specific to the SWRC Segment are addressed in the following section. Historic and cultural resource impacts and mitigation common to segments throughout the South Corridor, including the SWRC Segment, are addressed in the General Findings. Historic and cultural resource impacts and mitigation measures are also described in *South Corridor SDEIS*.

Within the South Corridor Project area, forty-five historic and cultural resources were identified. Two of the resources, the Brooklyn (railroad) Yard and the Iron Fireman Building (PECO) were identified in the vicinity of the SE 17th Avenue section. However, the South Willamette River Crossing Segment, including the SE 17th Avenue section will not result in any displacement or taking of any historic or cultural resource.

The Council finds that, based on the South Corridor SDEIS, especially section 3.9, that the LRT improvements in the SWRC Segment will not have an adverse effect on protected historic and cultural resources. Nonetheless, during the Final Environmental Impact Statement process and

Preliminary Engineering, project staff will initiate a review of the project design in the area of the affected resource, to determine whether the project could avoid or reduce impacts to potentially eligible historic resources. If the impacts cannot be avoided, then staff would consult with the State Historic Preservation Office (SHPO) regarding potential mitigation.

Mitigation for historic resource impacts could include design treatments and minimization of construction impacts such as noise and vibration, dust, visual and access impacts. Mitigation for long-term impacts such as visual effects could include use of complementary materials or landscape architectural design to minimize impacts. Where adverse effects cannot be mitigated through design treatments, it may be appropriate to document buildings or structures prior to any actions that would affect the resource. Recording and salvage of building elements may be used to mitigate for buildings that may be demolished.

The Council understands that the SWRC Segment includes one high-probability archaeological site. A professional archaeologist will monitor construction activities near this high-probability site. The archaeological monitoring will be undertaken within the framework of a Monitoring Protocol to be prepared in consultation with the Federal agencies, the SHPO, Metro, TriMet and appropriate interested Tribes.

6.4.4 Interstate MAX Segment

The following provide findings of fact and conclusions of law, pursuant to Section 12 of HB 3478, for technical amendments to the Interstate MAX Segment. These changes amend and supplement findings of fact and conclusions of law made as part of the IMAX LUFO in section 6.4.7, Albina Segment and section 6.4.8, Upper Interstate Segment.

Authorization

Section 12 of the Oregon Laws 1996 Special Session (HB 3478) states:

> "*1) Upon execution of a Full Funding Grant Agreement, the council shall amend the land use final order to be consistent with the terms and conditions of the Full Funding Grant Agreement.*
>
> *(2) The following amendments to a land use final order shall be considered technical and environmental and shall not be subject to judicial or administrative review:*
> *a) Amendments resulting from adoption of a Final Statement;*
> *b) Amendments required to ensure consistency with an executed Full Funding Grant Agreement;...*"

IMAX LUFO

On October 18, 1999, the Federal Transit Administration approved the North Corridor Interstate MAX Light Rail Project. On October 28, 1999, the Metro Council adopted amendments to the original LUFO, adding the Interstate MAX Segment.

Technical Amendments

In the year 2000, during final Project review and prior to receiving a Full Funding Grant Agreement, TriMet found the need to make several changes to the IMAX LRT design. These changes are as follows:

- Albina Station: the light rail station was relocated from the block between N Knott and N Russell Streets approximately 800 feet south along N Interstate Avenue to the block between N Mississippi and N Albina Avenues.

- Overlook Park Station: the Overlook Park light rail station platforms were relocated approximately 325 feet south along N Interstate Avenue, such that the south bound platform extends south from N Overlook Boulevard and the northbound platform extends north from N Fremont Street.

- Prescott Station (former North Going Street Station): the North Going Street station boundary shown north and south of the intersection between N Going Street and N Interstate Avenue was relocated to a position on the north side of North Prescott Street along North Interstate Avenue to North Skidmore Street.

Map D in the 2004 South/North LUFO Amendment shows the general location of these changes. Figures #4-1 and 4-2 of the 2004 South/North LUFO illustrate the exact changes.

Reasons for Technical Amendments

On June 13, 2000, a draft Categorical Exemption for Design Changes was submitted to the Federal Transit Administration. TriMet stated in the draft Categorical Exemption that the changes would improve the fit and operation of the project. They also asserted that the changes would not:

- induce significant impacts to planned growth or land use for the area;
- require the relocation of significant numbers of people;
- have a significant impact on any natural, cultural, recreational, historic or other resource;
- involve significant air, noise or water quality impacts;
- have significant impacts on travel patterns.

After Federal Transit Administration review and approval of a proposed Categorical Exemption for the design changes, the Full Funding Grant Agreement for the Interstate MAX Project, including the above changes, was granted.

Conclusions of Law

The IMAX LUFO and the Full Funding Grant Agreement are inconsistent at the Albina, Overlook and Prescott stations. Given that HB 3478 provides for amendments to LUFOs to ensure consistency with Full Funding Grant Agreements, the Metro Council concludes that the IMAX LUFO should be amended to reflect the changes to the Albina, Overlook and Prescott

stations included in the Interstate MAX Full Funding Grant Agreement and as illustrated in the 2004 South/North LUFO Amendment by figures #4-1 and 4-2.

Effect of Amendments

These amendments are modifications to the LUFO resulting from the approval of the Full Funding Grant Agreement. The amendments supercede the Metro Council's findings and conclusions adopted on October 28, 1999, but only to the extent that these amendments create inconsistencies with those earlier findings and conclusions. In all other respects, the earlier findings and conclusions remain valid.

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 03-3372 FOR THE PURPOSE OF AMENDING THE SOUTH/NORTH LAND USE FINAL ORDER, TO INCLUDE THE TWO PHASES OF THE SOUTH CORRIDOR PROJECT CONSISTING OF THE ADDITION OF THE I-205 LIGHT RAIL TRANSIT PROJECT FROM GATEWAY TO CLACKAMAS REGIONAL CENTER WITH THE DOWNTOWN PORTLAND TRANSIT MALL ALIGNMENT, AND MODIFICATION OF THE PROPOSED LIGHT RAIL BETWEEN DOWNTOWN PORTLAND AND MILWAUKIE, DELETION OF PLANS TO EXTEND LIGHT RAIL FROM MILWAUKIE TO CLACKAMAS REGIONAL CENTER, AND TO REFLECT THE FINAL INTERSTATE MAX DESIGN

Date: December 15, 2003 Prepared by: Mark Turpel

BACKGROUND

This resolution pertains to amendments to a Land Use Final Order (LUFO) for the South/North Light Rail Project (Project), in accordance with Oregon Laws 1996, Chapter 12 (House Bill 3478). This LUFO amends two earlier South/North LRT Project LUFOs. The first LUFO was adopted by the Metro Council by 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, on July 23, 1998, for the entire South/North Transit Corridor. A second LUFO adopted by Resolution No. 99-2853A, For the Purpose of Adopting a Land Use Final Order Amending the Light Rail Route, Light Rail Stations, and Park-and-Ride Lots, Including Their Locations, For That Portion of the South/North Light Rail Project Extending From the Steel Bridge to the Exposition Center, by the Metro Council on October 28, 1999 for the North Corridor Interstate Max Light Rail Project.

This third South/North Light Rail LUFO includes revisions and additions which consist of: the South Corridor Project Locally Preferred Alternative (the I-205 LRT segment from Gateway to Clackamas regional center, including extension of LRT onto the Portland Transit Mall as Phase 1 and extension of LRT from downtown Portland to Milwaukie as Phase 2) revisions to reflect the final design of the Interstate MAX and deletion of plans to extend light rail from Milwaukie to the Clackamas regional center.

REQUIREMENTS OF HOUSE BILL 3478

Section 6(1) of House Bill 3478 requires the Council to "establish the light rail route, stations, lots and maintenance facilities, and the highway improvements for the project or project extension, including their locations." Section 6(1)(a) further provides that the locations for each of these facilities and improvements:

> "*shall be in the form of boundaries within which the light rail route, stations, lots and maintenance facilities, and the highway improvements shall be located. These boundaries shall be sufficient to accommodate adjustments to the specific placements of the light rail route, stations, lots and maintenance facilities, and the highway improvements for which need commonly arises upon the development of more detailed environmental or engineering data following approval of a Full Funding Grant Agreement*."

Section 6(2) of the Act addresses amendments to the original LUFO. As relevant to this proceeding, it provides that any siting of the light rail route or a station, lot or maintenance facility outside the boundaries previously established in a LUFO, or any new station, lot or maintenance facility,

> *"shall require a land use final order amendment or a new land use final order which shall be adopted in accordance with the process provided for in subsection (1) of this section."*

Section 7 of HB 3478 requires the Council to apply land use criteria established by the Land Conservation and Development Commission ("LCDC") in making decisions in a land use final order on the light rail route, stations, lots and maintenance facilities, and the highway improvements, including their locations, and to prepare and adopt findings of fact and conclusions of law demonstrating compliance with those criteria. *These findings serve to demonstrate compliance with LCDC's criteria for the modifications selected in this LUFO amendment.*

Section 3(1) of HB 3478 provides that the procedures and requirements set out in the Act are the only land use procedures and requirements to which the Council's decisions on the light rail route, the stations, lots and maintenance facilities, and the highways improvements for the Project, including their locations, are subject. Consequently, these findings focus on the matters identified in HB 3478 as land use actions being taken at this time. Draft findings addressing the LCDC criteria are attached to the Metro Council resolution as Exhibit C.

ANALYSIS/INFORMATION

1. **Known Opposition**

The LUFO identifies the properties where light rail routes, stations, lots and maintenance facilities are planned. A large portion of the properties included in the proposed LUFO is already held in public ownership. For example, most all of the I-205 LRT segment from Gateway regional center to Clackamas regional center is within the existing I-205 freeway right-of-way (when the right of way was acquired, it was based on possible future light rail and expansion of the existing number of lanes.) Concerns have been voiced by some about the location and design of park and ride facilities, the location and design of some station areas and storm water and flood plain management at the Flavel Street station.

The downtown Portland Transit Mall is almost all along the existing rights-of-way on 5th and 6th avenues. There are substantial differences about the design or location of some of the facilities along these existing public rights-of-way, however, these issues will be addressed within the lands identified in the LUFO. Others have expressed concern with the overall location of LRT, favoring a subway project, or use of surface streets other than 5th and 6th avenues, or shuttle bus alternatives. However, there is a long history of examining the best location for expanded LRT in the downtown. In the original studies completed for the Banfield MAX in 1979, in the Central City Plan in 1978 and in the South/North study in 1993, each of these analyses concluded that the Portland Transit Mall was the best alignment. There have also been concerns voiced by property owners whose properties may be acquired.

2. Legal Antecedents

There are legal antecedents for this action at the State and Metro levels. At the State level, the HB3478 enacted as Chapter 12 of the 1996 Oregon Laws, provides for South North MAX Light Rail Project land use final orders (LUFO) to decide:

a. the light rail route for the project or project extension;
b. stations, lots or maintenance facilities; and,
c. highway improvements for the project or project extension.

The State LUFO enabling legislation (Chapter 12, 1996 Oregon Laws) also called for the Land Conservation and Development Commission (LCDC) to prepare criteria to be addressed in a LUFO. On May 30, 1996 the LCDC approved LUFO criteria.

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. 99-2853A, For the Purpose of Adopting a Land Use Final Order Amending the Light Rail Route, Light Rail Stations, and Park-and-Ride Lots, Including Their Locations, For That Portion of the South/North Light Rail Project Extending From the Steel Bridge to the Exposition Center

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..

3. Anticipated Effects

Approval of this resolution would further the efforts to complete the South/North LRT Project by providing further definition of the direct land use aspects (light rail route, station areas, park-and-ride lots) of this light rail project.

4. **Budget Impacts**

None at this time. 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. 03-3372.