AREA STUDIES

12

INTRODUCTION

Over the course of the Transportation System Plan (TSP) development, the City of Portland also conducted a number of area studies that inform the TSP's content. These planning studies focus on key areas that will accommodate employment and housing growth, as identified in the Region 2040 Growth Concept. Each study identifies issues that affect the area's ability to meet its intended 2040 design types. The studies also identify implementation strategies, including transportation improvements and, in some cases, changes to land use regulations. The studies' recommended changes to the transportation system are incorporated into the TSP.

This chapter summarizes the approach and findings of the following area studies:

- Burnside Transportation and Urban Design Plan
- Central Eastside Development Opportunity Strategy
- Columbia Transportation Corridor Study
- Division Green Street/Main Street
- Eastside Streetcar Alignment Study
- Eastside Transit Alternative Analysis
- Foster Road Transportation and Streetscape Plan
- Freight Master Plan
- Hollywood and Sandy Plan
- I-5 Transportation and Trade Partnership
- Killingsworth Improvements Planning Project
- Lents Town Center Business District Transportation Plan
- North Macadam District Planning
- Northwest District Plan
- Opportunity Gateway Concept Plan
- Pleasant Valley Plan District

- Portland Aerial Tram Study
- Powell/Foster Corridor Transportation Plan
- Red Electric Trail Planning Study
- Russell Street Improvements Planning Project
- St. Johns/Lombard Plan
- St. Johns Truck Strategy
- South Portland Circulation Study
- Swan Island Trails Action Plan
- Tacoma Main Street Plan
- Transportation System Plan for the Urban Pockets of Unincorporated Multnomah County
- West Portland Town Center Transportation Plan
- 2004 South/North Land Use Final Order Amendment
- 2040 Centers Transportation Strategies and Mode Split Targets Project

BURNSIDE TRANSPORTATION AND URBAN DESIGN PLAN

Introduction

For over a century, Burnside Street has played an important role in Portland's transportation system. As the major east-west route through the City, it touches the Northwest, Pearl, and Downtown districts, the Old Town-China Town, Goose Hollow, Kerns and Buckman neighborhoods, the Central Eastside District, and provides access for residents, employees and visitors to the downtown. The plan provides a vision for Burnside that integrates it more fully into downtown Portland and creates a street that connects, instead of divides the districts and neighborhoods to the north and south on both sides of the river. The plan was adopted by City Council Resolution (No. 36114) on December 11, 2002.

Study Location

The project study area includes Burnside Street from W 24th Avenue on the west side to NW 15th and NE Sandy Boulevard on the east side. It also reaches one half-block north of Couch Street and one block south of Ankeny Street on both sides of the Willamette River.

Purpose

Much of the street and sidewalks on Burnside are failing or are in poor condition and need reconstruction or repair. Before undertaking major maintenance and construction expenditures, a plan was needed to address the future role of Burnside and how it could continue to serve its many functions, including as a major thoroughfare carrying heavy traffic through downtown and across the river. In addition, Burnside's narrow sidewalks make it uncomfortable for pedestrians, difficult to cross because of the heavy traffic, and a barrier between neighborhoods. The prohibitions on left turns in many locations limits access to downtown Central City.

The planning process included a number of steps including a pre-planning phase to identify issues and needs and to determine the scope of the project. Subsequent steps include an inventory and analysis phase, developing and evaluating conceptual options, developing a draft concept plan, and adoption.

Recommendations

Based on more than two years of work, the Burnside Transportation and Urban Design Plan's recommendations respond to the diverse needs of the Central City and its surrounding neighborhoods. The plan identifies catalyst development opportunities, functional and aesthetic improvements to the right-of-way, and establishes a blueprint for public and private investment.

The plan features seven catalyst development areas, expansion of the downtown one-way grid to Couch Street from East 14th Avenue to West 15th Avenue excluding the Burnside Bridge from NE 3rd Avenue to NW 2nd Avenue and a series of special places. Burnside and Couch become a couplet, which reduces the width of Burnside and balances traffic on both streets. Burnside would serve eastbound traffic while Couch would serve westbound traffic.

The 12th/Sandy/Burnside intersection, currently unsafe and congested, on the east side would be reconfigured to simplify transportation for vehicles, transit, pedestrians, and bikes. Left turns would be allowed at Martin Luther King, Jr. Boulevard, Grand, and 7th Avenue, and on-street parking would be instated fulltime on Burnside and Couch from the Burnside Bridge to East 14th Avenue.

Using "leftover" right-of-way on the north side of Burnside would create opportunities to bring social and economic vitality to the central Burnside area. A number of options were identified including enhanced pedestrian space and activities such as "pop-out" cafes and restaurants or additional parking. A subsequent design process will determine the ultimate use of the remaining public right-of-way.

The plan proposes transforming SE Ankeny into a special street with its own identity to bolster the established entertainment district within the central Burnside area.

A Flanders Bike Boulevard will provide a continuous bike route from Waterfront Park to Westover in the Northwest district.

On the west side, reducing traffic lane widths between W 15th and 23rd Avenues from 11-foot to 10-foot lanes would allow sidewalks to be expanded to 10 feet. Additional sidewalk width would be obtained from private development as properties redevelop. Additional traffic signals would be placed at 20th Place and 22nd Avenue.

Policy Changes

The couplet design shifts the function of Burnside to NE and NW Couch and to the streets where the couplet transitions – NE 3rd and 4th and NW 2nd and NW 15th. Following are the recommended street classification changes that will require amendments to the Transportation Element of the Comprehensive Plan.

Street	Segment	Classification	Description
E/W Burnside			No change
NE/NW Couch	NE 14th – NE 3rd and NW 2nd – NW 15th	Traffic Transit Bicycle* Emergency Response Freight Street Design	Major City Traffic Street Major Transit Priority Street No change Major Emergency Response Street No change Regional Main Street
	NE 14th –NE 3rd, NW 2nd – NW 9th, I-405 – NW 15th NW 9th – I-405	Pedestrian	City Walkway No change
NE Sandy	Between NE 12th and NE 14th	All	With the physical closure of Sandy Boulevard between 12th and 14th, all street classifications for this segment should be

			removed.
NE 3rd, NE 4th, NW 2nd, and NW 15th	between Couch and Burnside	Traffic Transit Bicycle Pedestrian Freight Emergency Response Street Design	Major City Traffic Street Major Transit Priority Street No change City Walkway No change Major Emergency Response Street Regional Main Street

**NW Flanders:* With the completion of the NW Flanders bike and pedestrian bridge, NW Flanders should be reclassified to a City Bikeway between I-405 and Naito Parkway.

Implementation

The Burnside project on the Major Transportation Improvements list (Chapter 3 of the TSP) is being updated by splitting it into four projects.

As the project moves forward into preliminary engineering, the design of intersections, couplet transitions and traffic signals will be further refined. Special consideration will be given to ensuring safe and efficient bus operations and to coordination of improvements with the addition of light rail to the transit mall.

CENTRAL EASTSIDE DEVELOPMENT OPPORTUNITY STRATEGY

Introduction

The Portland Development Commission (PDC), in conjunction with a citizen and business steering committee, the Portland Office of Transportation (PDOT), the Portland Bureau of Planning, and the Portland Bureau of Parks and Recreation, are completing the Central Eastside Development Opportunity Strategy (DOS) for a portion of the Central Eastside, which is a subdistrict of the Central City. The current schedule calls for a review of the DOS in spring 2002.

Study Area

The DOS area lies entirely within the Central Eastside Industrial District. Stretching from SE Morrison on the north to SE Caruthers on the south, the DOS area lies between the Willamette River and the railroad mainline; at SE Caruthers Street, the DOS area lies between the river and SE Grand Boulevard.

Study Purpose

The DOS was initiated to determine the feasibility of capturing new jobs and development and to establish a vision for the area. This area was selected because of the availability of vacant/developable land. The study reviews the transportation infrastructure to determine if it is adequate to serve new jobs and development, which provide for more dense employment and different work patterns, and examines how the infrastructure could provide better connections to the Central City and surrounding districts.

Previous Studies

Previous studies reflect a long-term concern with access to and from the Central Eastside and identify several opportunities to improve that access.

- The Central Eastside Transportation Study (July 1990) reviewed existing transportation policies, evaluated current and future transportation conditions, and developed a set of improvement options and recommendations for the study area. The recommended improvements included several surface street projects (restriping, construction, extension, signalization, improvements, railroad crossings); highway improvements (realignment, ramps, reconstruction, signalization); transit improvements; and pedestrian and bicycle improvements.

- The I-5 Southbound Access Study (November 1995) identified and evaluated alternative freeway access routes and supporting improvements to I-5 southbound from the Central Eastside. This study concentrated on assessing the differences between connecting a Water Avenue ramp directly to I-5, versus improving the connection to the Ross Island Bridge as a way to I-5 on the west side of the Willamette River. City Council rejected the recommendation for a Water Avenue ramp connection.

- The Central City Transportation Management Plan (December 1995) addressed the entire Central City. The plan identifies connection to the existing transportation infrastructure as a discrete policy for the Central Eastside (Policy 2.1: System Investments). It also identifies a need for access to the Central Eastside from the I-5 freeway system. Policy 20: Central Eastside, states: "Preserve the Central Eastside as an industrial sanctuary while improving freeway access and expanding the area devoted to the Eastbank Esplanade."

All of these previous studies also recognize concerns about parking in the Central Eastside, especially for people working or shopping downtown; barriers to convenient pedestrian and bicycle movement; and inadequate transit service.

Existing Conditions

Land Use

No single type of land use dominates the DOS area. The area includes institutions, offices, distribution, and manufacturing uses. The KPTV offices, Portland Community College, and the Oregon Museum of Science and Industry are located in the southern portion. The northern portion is occupied more by manufacturing and distribution. Several surface parking lots and vacant parcels add to the redevelopment potential. The surrounding area is largely dominated by truck-related manufacturing and distribution uses. Martin Luther King, (MLK) Jr. Boulevard and Grand Avenue serve as the area's commercial/retail corridor.

Zoning

The Portland Comprehensive Plan designates the majority of the area as industrial sanctuary, including heavy and general industrial uses. Some portions of the study area are designated for employment uses. Willamette Greenway overlay zoning protects the riverbank.

Transportation

Bridges largely determine the study area's character. The Marquam, Hawthorne, and Morrison bridges pass through the DOS area above grade. The bridge approach structures and elevated portion of I-5 dominate the area's appearance, and also limit development opportunities.

It is anticipated that both area-generated (employment) traffic and pass-through north/south traffic will continue to increase in this area, creating serious demand for the available traffic capacity, particularly along the MLK/Grand corridor. It is also assumed that commercial/retail growth will continue within this corridor. Access to the Ross Island Bridge and I-5 southbound continues to be indirect and difficult.

East/west travel in the area has been and remains an issue as well, particularly for pedestrians and bicyclists trying to access the river and greenway. The Eastside Esplanade runs along the east bank of the Willamette and provides an attractive environment that draws people, both locally and regionally. Access to the surrounding areas and particularly to

I-5 southbound remain circuitous and at times difficult. This situation is exacerbated during peak hours when the MLK/Grand corridor operates as a commuter access route.

Recommendations

The Central Eastside DOS report summarizes key elements of the steering committee's oversight of the study and describes the vision, plan, strategies and action items for its implementation. Further refinement of the transportation recommendations is needed to address the traffic impacts of the proposed vision. Two particular issues need to be addressed in more detail, as follows.

Implementing the Central Eastside DOS vision may suggest the need to enact potential amendments to the Comprehensive Plan and Zoning Code. In this event, further transportation analysis and findings are required regarding potential impacts on the regional transportation system, given the requirements of the Transportation Planning Rule.

Also, the Central Eastside DOS vision introduces a potential new blend of employees and visitors into the area that may have different transportation service needs and expectations than that of current businesses. Further refinement of the DOS should address potential street use conflicts that may occur concerning on-street parking, loading activities and the mixing of truck and automobile traffic.

Transportation Projects

The Central Eastside DOS confirms that most of the transportation projects identified in the 1991 Central Eastside Transportation Study are still viable and would help serve the DOS vision. These and other potential new projects identified by the DOS include:

- I-5/McLoughlin Ramps
- Belmont-King ramp realignment and intersection improvement
- Clay/King restriping and intersection improvement
- Yamhill/Taylor Couplet
- SE Stark Street
- Grand Avenue Bridgeheads improvements
- SE Main (or SE Salmon) signals with King and Grand
-

Other Transportation Recommendations

Other transportation recommendations and action items are identified by the Central Eastside DOS that will require more study and definition before they can be categorized as projects. These include:

- Strengthen Water Avenue as the primary north-south multi-modal street in the DOS area
- Investigate potential for streetcar connections to the CEID from Downtown and Lloyd Districts
- Improve vertical connections between the viaducts and Water Avenue for pedestrian access to transit services

- Improve SE 2nd Avenue for trucks and loading functions
- Initiate transit service along Water Avenue and the entire length of the King-Grand couplet through the district
- Investigate, decide and implement improved access from the study area to southbound I-5
- Preserve south-north light rail transit corridors
- Consider future construction of a below-grade integrated transportation facility incorporating high-speed rail, freight rail and I-5.

COLUMBIA CORRIDOR TRANSPORTATION STUDY

Introduction

City Council accepted the Columbia Corridor Transportation Study by Resolution No. 35811 on August 4, 1999.

Study Area

The Columbia Corridor reaches from the Rivergate Industrial District on the west to the City of Troutdale on the east. The Columbia River is its northern boundary, and N Columbia Boulevard, NE Lombard Street, and NE Sandy Boulevard are its southern boundary. The Columbia Corridor Transportation Study area includes only about the eastern two-thirds of this area, from Portland Road east to the city limits.

Study Purpose

Bicycle and pedestrian advocates, and residents living adjacent to NE Marine Drive east of I-5 were central to the initiation of this study. The study looks at ways to reduce or remove the impacts of truck traffic on NE Marine Drive and NE 33rd Drive. Conflicts exist between bicyclists/pedestrians and truck traffic. Heavy traffic, excessive speeds, and numerous access points along NE Marine Drive create additional friction. Future growth of industrial uses in the corridor will create the need for additional traffic capacity.

Objectives

The study's five objectives were:

- Develop an interconnected intermodal and multimodal transportation network using existing arterials to serve the area.
- Determine if the transportation network will be able to accommodate the planned levels of development based on Comprehensive Plan designations, and determine whether designations should be modified to reflect the capacity of the network.
- Improve efficiency and access along and between NE Columbia and NE Lombard to primarily serve intermodal goods movement using these arterials.
- Determine environmental impacts and neighborhood mitigation/protection for residential areas close to NE Lombard, which may result from increased truck traffic.
- Develop a strategy to improve NE Marine which will enhance regional recreation opportunities in the Columbia Corridor.

Companion Study

The St. John's Truck Strategy will provide a transportation vision for the westernmost one-third of the corridor. The focus of this companion study is to reduce truck through-trips in

predominantly residential areas and to improve the existing routes for truck local and through-trips.

Existing Conditions and Issues

Demographics

The Columbia Corridor is home to approximately 7,500 residents and 2,100 firms that employ more than 41,000 people. It provides a significant opportunity for employment growth because of the large amount of developable land, primarily zoned for employment or industrial use. Corridor employment is anticipated to be 64,000 people by 2010, an increase of 55 percent.

Land Use

The area encompasses diverse land uses. Single-family homes lie adjacent to industrial uses along the edge of the river and within the East Columbia and Bridgeton neighborhoods. The predominant land use in the eastern two-thirds of the corridor is industrial. Encouraged by numerous transportation advantages, including shipping terminals, airfreight facilities, three freeways, and two national railroads, the industrial uses are largely devoted to the movement of goods and merchandise. Heavy machinery manufacturing and airport-related businesses are also common within the area. Two airports (Portland International and Troutdale), several golf courses, and a large regional recreation facility are located within the study boundary.

Zoning

Portland's Comprehensive Plan designates the majority of the area as an industrial sanctuary, allowing heavy and general industrial uses. Some portions of the study area are designated for employment uses. Environmental overlay zoning protects the riverbank and the Columbia River Slough that meanders through the area. Open space zoning protects several recreational facilities in the corridor that provide opportunities for golf, motor sports, and field sports.

Transportation

Traffic

East-west travel in the corridor is accomplished via NE Marine Drive on the north edge and NE Columbia and Lombard Streets on the south edge. Northeast Lombard Street is actually a series of connected road segments, including (from east to west) NE Sandy Boulevard, NE Killingsworth Street, N Portland Highway, and N and NE Lombard Street. City street designations encourage the use of NE Columbia as the primary arterial for east-west truck trips and access to major employers. Poor connections between NE Columbia and NE Lombard have led to inefficient use of available roadway capacity and congestion.

NE Marine Drive and NE 33rd Drive are designated as scenic routes, with facilities for pedestrian and bicycle recreation. The internal collector street system is incomplete because of the airport uses, environmental constraints of the Columbia Slough system, and undeveloped lands.

An origin and destination survey found that both NE Columbia and NE Marine are used primarily for local truck access and circulation in the corridor, not truck through-trips.

Transit

Light rail transit service between downtown Portland and Portland International Airport began in September 2001, after this study was adopted. The line serves Cascade Station, the emerging commercial center adjacent to the airport.

Bus service in the corridor is both limited and intermittent. At the time of the study, eight bus lines served the area, each serving only a small portion of the overall corridor. Most transit demand occurs along NE Columbia where employment is concentrated, but is largely underserved by transit.

Pedestrians and Bicycles

Pedestrian and bicycle facilities are mostly lacking on the corridor's street system. Inconvenient and discontinuous access to facilities inhibits travel by these modes.

Recommendations

The study recommends alleviating identified issues and future capacity problems for the existing transportation system by directing excess traffic to existing underutilized facilities before considering construction of new, extended, or widened roadways. Proposed solutions fall into five categories: expanded transit service, transportation demand management, safety and traffic management projects, connectivity improvements, and system improvements.

- Expanded transit service within the corridor will include light rail to the airport (completed September 2001), fixed bus routes, and paratransit services.

- The formation of the Columbia Corridor Transportation Management Association provides additional opportunities to reduce traffic volumes and/or peak hour traffic volumes through flexible work hours, telecommuting, vanpooling, and carpooling.

- Safety and traffic management improvements will include signalization of certain intersections, improved pedestrian crossings, bike path improvements, and traffic calming measures such as truck traps or semi-diverters, pedestrian refuges, and lowered speed limits.

- Connectivity improvements will enhance local circulation and make it easier for truck traffic to use appropriate streets. Such improvements include left-turn lanes, new connections between roadways, and redesign and reconstruction of certain intersections.

- System improvements will include coordination of traffic signals and access management strategies.

Transportation Projects

The study identifies transportation projects to improve access and circulation in the corridor. The improvements fall under two categories: regional and major city traffic street improvements, and neighborhood collector and local street improvements.

Regional and Major City Traffic Street Improvements

- Reconstruct NE 82nd intersections with NE Columbia and NE Lombard
- Reconstruct MLK Jr. Blvd between NE Lombard and NE Columbia
- Improve capacity at NE Columbia/I-205 interchange
- Install I-205 auxiliary lane
- Improve signal system along NE Columbia and NE Lombard
- Improve capacity at NE Airport Way/I-205 interchange
- Construct Port of Portland International Center street improvements
- Improve I-5 freight mobility
- Reconstruct NE 33rd/NE Columbia interchange

Neighborhood Collector and Local Street Improvements

- Construct Bridgeton neighborhood street improvements
- Construct NE Marine improvements, including signal upgrades, traffic calming, and pedestrian and bicycle facilities
- Improve NE 47th intersections with NE Cornfoot and NE Columbia
- Add left-turn lanes at major intersections along NE Cornfoot
- Connect NE Columbia and NE Cornfoot over Columbia Slough
- Realign NE Alderwood/Cully Blvd intersection
- Extend NE Marx
- Widen NE Alderwood between NE 82nd and NE Cornfoot
- Extend NE Cornfoot to NE 82nd
- Improve NE 138th, NE 148th, and NE 158th to City standards

DIVISION GREEN STREET/MAIN STREET

Background

The Division Green Street/Main Street project was a collaborative effort between the City of Portland Bureau of Planning and Office of Transportation and the community to improve the livability and economic vitality of the SE Division Street corridor. The project study area was SE Division between SE 11th and SE 60th Avenues. The study area is adjacent to four neighborhood associations (HAND, Richmond, Mt. Tabor, and South Tabor) and is within the Division/Clinton Business Association. The project was initiated at the request of DivisionVision, a coalition of the affected neighborhood groups and business association.

Project Goals

The purpose of the project was to create a plan with goals, objectives, and implementation strategies to create a pedestrian-friendly commercial district that reflects and reinforces community values, including a focus on sustainable and "green" development. Project considerations included:

- Improving access to transit
- Improving safety for pedestrians, bicyclists, and drivers
- Improving traffic signalization
- Examining alternative vehicle lane and on-street parking configurations
- Examining innovative rainwater management techniques
- Examining land use patterns in relation to existing zoning
- Proposing zoning changes consistent with project goals
- Examining "green" building techniques

Plan Elements

The Division Green Street/Main Street Plan was created through the work of an 18-member Citizen Working Group, a technical advisory committee, and members of the community in collaboration with City staff. Citizens expressed a desire to focus commercial activity in elongated nodes along the street interspersed with quieter residential areas, to create art and water features at these nodes, and to integrate the five nearby primary and secondary schools into the fabric of the corridor.

The goals of the plan focus on four themes: Healthy Community, Clean and Green Environment, Shared Economy, and Making a Place. Goals were developed for each of these themes and a number of objectives for each goal. Although the Division Green Street/Main Street Plan has a land use/transportation orientation, the goals and objectives also focus on the overall health and vitality of the street and the community. Goals address environmental health, integrating green infrastructure and building into the corridor, connecting the community, fostering an educational landscape and taking advantage of cultural and historic assets.

The Plan includes a rezoning proposal to nearly eliminate nonconforming uses, and it created design standards in the Main Street Corridor Overlay Zone to support the urban design for the corridor that is desired by the community.

Transportation Issues and Outcomes

The community identified a number of characteristics of the Division corridor that interfered with their goals – traffic volumes and speeds, the presence of pro-time (part time) lanes between SE 11th and SE 28th Place, inadequate opportunities for pedestrian crossings, and the lack of cohesiveness and pedestrian amenities along the street. A number of alternatives were developed and analyzed by the CWG and the community at workshops. There was general consensus on a number of improvements at key locations to smooth traffic flow and enhance pedestrian crossing opportunities. The community considers "7 Corners" the complex intersection of Division, Ladd, 20th, and 21st to be the heart of the community. A number of improvements are recommended to improve safety for all users including moving bus stops, adding bike lanes and bike "boxes", curb extensions, pedestrian signal improvements and adding a crosswalk.

The corridor-wide alternatives were narrowed to two – creating two travel lanes the entire length of the corridor with full-time parking and eliminating the pro-time lanes only between 13th/14th and 19th and retaining pro-time lanes from "7 Corners" to 28th Place.

Next Steps

The plan is intended to guide the Division Streetscape and Reconstruction Project that will repave the street and build streetscape improvements between SE 6th and SE 39th Avenues. The street repaving and construction is funded with a combination of federal and local funds and is scheduled to begin in 2007.

EASTSIDE STREETCAR ALIGNMENT STUDY

Introduction

The Portland Streetcar is part of the City's growth management strategy. Ridership on the westside streetcar has grown and leveraged a significant amount of new investment. The impetus for evaluating an extension of the streetcar service came out of the Lloyd District Development Strategy completed in July 2001. The development strategy identifies opportunities for additional development and amenities to leverage the development. One of the sub-areas of the Lloyd District is the Central Core between NE Halsey and Holladay Streets and NE 6th and 9th Avenues. It has the potential for high-density, high-rise development. Streetcar can play a role in connecting to other parts of the district and to westside streetcar as well as to the Central Eastside.

Purpose

In January 2003, an Eastside Streetcar Alignment Study Steering Committee was appointed. The steering committed was asked to prepare recommendations on the Eastside Streetcar alignment for consideration by City Council. This preliminary assessment included:

- Preferred alignment
- Public support
- Public process
- Federal funding
- Oversee workshops

A technical committee was formed to conduct the analysis of the options and prepare recommendations for the Steering Committee.

Findings

Preferred Alignment

A loop transit system as called for in the Central City Plan was preferred by the committee. The loop would connect Lloyd District and the Central Eastside to the downtown and other Central City districts. The preferred alignment on the eastside is Martin Luther King, Jr. Boulevard and Grand with a jog to NE 7th at Oregon to better serve the Central Core of Lloyd District. Three phases are recommended. Phase 1 from NW Lovejoy to NE 7th to Oregon; Phase 2 from Oregon to Water Avenue; and Phase 3 crossing either a new Caruthers bridge or the existing Hawthorne Bridge and connecting to the existing streetcar.

Public Support

The Steering Committee conducted public meetings and two public workshops to assess public opinion. There was strong general support for extending the streetcar to the eastside but a variety of opinions on specific alignments.

Recommendations

The Steering Committee recommended a number of actions:

1. Steering Committee. Retain the steering committee with broad representation to take their recommendations to decision making bodies.
2. Citizen Process. Support the existing Streetcar Citizen Advisory Committee process by adding new members to represent eastside interests.
3. Environmental Assessment. Commence the environmental assessment process in consultation with the Federal Transit Administration (FTA) for Phase 1.
4. Alternatives Analysis. Petition the FTA to waive the alternatives analysis as the eastside streetcar is an extension of the existing system.
5. Conceptual Engineering. Commence conceptual engineering of Phase 1 of the eastside streetcar preparing street alignment, proposed stop locations and assessment of Broadway Bridge requirements for rail installation.
6. Finance Plan. Phase 1 of the eastside streetcar is estimated to cost $39.6 million (in 2003 dollars). Federal funding in the amount of $19.8 million should be sought to support Phase 1 construction.
7. Engineering Funds. Seek Housing and Urban Development (HUD) Funds to cover engineering.
8. Amend Regional Transportation Plan. Amend the RTP and City's TSP to include the eastside streetcar alignment and project.
9. Development Proposal. Phase the streetcar extension to coincide with development commitments adjacent to the alignment.

EASTSIDE TRANSIT ALTERNATIVE ANALYSIS

Purpose

The purpose of the Eastside Transit Alternatives Analysis is to develop, evaluate and select a transit alternative that is responsive to community needs and the travel demand in the Central City and which serves as a catalyst for economic development and supports and focuses land use. The goals for the project are intended to:

- Reduce reliance on the auto for trips to, from and within the Central City.
- Improve Central City transit circulation, capacity, connectivity and local access that facilitates economic development and promotes the vitality of the Central City.
- Support existing and future streetcar and light rail investments in the region by expanding the system and increasing ridership in a cost-effective manner.
- Support economic development.
- Support community goals and has strong public acceptance.

Alternatives

Alternatives include the No Build/Baseline alternative (referred to henceforth as the No-Build Alternative) and a streetcar alternative including a full loop, and minimum operable segments -Oregon Street, Morrison Street and Oregon Museum of Science and Industry (OMSI). In addition, a two-way Grand Avenue alignment was included as a design option to the MLK/Grand alignment.

The Streetcar Alternative includes three Minimum Operable Segments. Each MOS is a potential terminus for the first phase of streetcar construction. In order to maintain full loop connectivity for purposes of comparison, connecting bus service would link each MOS to OMSI and RiverPlace, connecting with the existing Portland Streetcar via the Hawthorne Bridge. The Oregon MOS would terminate in the Lloyd District at the Oregon Convention Center and would be compatible with either the MLK/Grand Couplet or the Two-way Grand Design Option. The Morrison MOS would terminate at SE Morrison Street and would be feasible with either the MLK/Grand couplet or the Two-way Grand Design Option. The OMSI MOS would terminate immediately south of OMSI. A flyover would be constructed over the Union Pacific railroad right of way, and would be feasible with either the MLK/Grand couplet or the Two-way Grand Design Option.

The alternatives were evaluated based on how well they performed relative to the project's evaluation measures:

- improve Central City transit ridership, improve eastside transit ridership,
- improve north/south transit connectivity and capacity through the Central Eastside,
- improve transit circulation in the Central City, serve important visitor destinations,
- easily identifiable,
- reduce demand for parking,
- consistency with state, regional and local land use plans and policies,
- land use plans and policies have demonstrated results that create a transit friendly environment for the project,
- economic development policies and the private sector support the proposed transit investment

- economic development potential in the Lloyd District and Central Eastside
- assessment of federal funding sources
- assessment of operating revenue sources
- assessment of cost-effectiveness, comparing ridership and costs

The Full Loop alternative was found to have the best overall improvement in total transit travel times to/from and within the corridor compared to the No-Build alternative. The MOS alternatives would have somewhat less improvement, in part because of required transfers along the central eastside for some origin and destination pairs.

Conclusions

The Eastside Project Steering Committee recommended a "locally-preferred alternative" based on the evaluation of the alternatives against the measures. The streetcar is the mode of choice because it will result in higher ridership than an equivalent level of bus service. Streetcar provides better opportunities for land uses that foster a compact urban form, reduce vehicle miles traveled and a higher transit mode split and has strong community support. The Full Loop Alternative is the ultimate build out assuming capital and operating funds become available because it is the most cost-effective, provides the best transit circulator function, and will have the highest ridership. OMSI would be the logical interim terminus until such time that the proposed Caruthers Bridge or other Willamette River crossing is viable. City Council approved Resolution No. 36425 on July 5, 2006 adopting the Eastside Transit Alternatives Analysis Locally Preferred Alternative Recommendation and the Eastside Transit Project Work Program Considerations.

Next Steps

The "locally preferred alternative" will be forwarded to the Federal Transit Administration for their review and comment. Before a construction grant application can be submitted, additional environmental analysis and financing work needs to be completed as well as an evaluation of any needed mitigation, especially on MLK, Jr/Grand.

FOSTER ROAD TRANSPORTATION AND STREETSCAPE PLAN

Introduction

The Foster Transportation and Streetscape Plan was initiated at the request of the community through the Foster Target Project. The goal of the planning process was to develop a plan that would outline improvements for the street and sidewalk on Foster Road to improve the safety and appearance of the street and support the people and businesses of the surrounding community.

Study Location

The project area includes the public right-of-way of SE Foster Road from SE 50th to SE 90th Avenues.

Project Funding

The planning process was funded by the City of Portland and by a grant from the State of Oregon's Transportation and Growth Management Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development.

Recommendations

The City Council adopted the Foster Transportation and Streetscape Plan by resolution (No. 36158) on July 9, 2003. The project goals are to:

1) Make the street a safe, pleasant, attractive, and comfortable place to walk;
2) Create a safe walking environment for pedestrians walking along and across the street;
3) Provide a safe corridor for vehicle travel that maintains an acceptable level of service and ensures smooth, consistent traffic movement;
4) Improve transit service on Foster; and
5) Ensure bicyclists can safely ride on and across Foster, and access Foster-area businesses.

In addition to physical improvements for vehicles, pedestrians and transit, and streetscape improvements, the plan recommends new City Bikeway classifications as follows:

SE Raymond Street from 72nd to 82nd, SE 82nd from Raymond to Liebe, SE Liebe to 86th Court, SE Steele between 86th Court and 87th, and 87th from Steele to Ellis. The streets on the bikeway route would be evaluated for any improvements necessary to meet the City's criteria for a bikeway.

FREIGHT MASTER PLAN

Background

The Freight Master Plan (FMP) was identified as a future study in the 2002 TSP. In doing the FMP, the City recognized the need to better understand freight-related issues to ensure that Portland's transportation network could support the projected increased demand for freight movement. Portland is more dependent on freight movement than most US cities. According to the Oregon Department of Employment, one out of nine jobs in the Portland areas are in the transportation sectors. The FMP was adopted by City Council on May 10, 2006 (Ordinance No. 178520, effective date, June 9, 2006).

Freight Policies

The freight-related policies in the TSP have been rewritten to address balancing freight mobility needs with community impacts and other transportation modes. The policies focus on the three main goals of the FMP:

- Mobility – improving the reliability and efficiency of the freight network to meet increased demands and to identify where to invest in system improvements
- Livability – strategies for reducing community impacts from freight movement and balances truck movement needs with those of other transportation modes
- Healthy economy – promoting a multimodal transportation system that supports long-term economic development by recognizing the role of goods delivery in supporting healthy and vibrant mixed-use centers and main streets

Street Classifications

The FMP includes a new freight network classification system based on a hierarchy of freight-related and use access.

- **Regional Truck Way**: Primarily serves heavy freight activities for interregional and interstate freight movements. Serves both industrial and commercial land uses via access ramps (e.g., I-5, US 30).
- **Priority Truck Street**: Serves heavy freight activities in and between freight districts and provides truck access and circulation to industrial land uses (e.g., Going Street, NW Front Street, and St. Helens Road).
- **Major Truck Street**: Primarily serves goods delivery for truck mobility between commercial centers and corridors and provides truck access and circulation to regional main streets (e.g., Sandy Boulevard, MLK, Jr. Boulevard, SE Powell Boulevard).
- **Truck Access Street**: Primarily serves goods delivery for distribution of truck trips in neighborhoods and provides truck access and circulation for delivery of goods and services to commercial and residential uses (e.g., N. Interstate Avenue, NE 33rd Avenue, N. Lombard Street).
- **Freight District Street**: Provide local truck circulation and access on streets located within a freight district unless classified with a higher designation (e.g., Swan Island and NW Industrial Districts).

Other freight elements are also included – Main and branch rail lines and freight facilities – that contribute to a multimodal freight system.

System Improvements

System improvements are grouped into the same three core values listed under policies.

Mobility improvements – Providing upgrades at key freight interchanges. Implementing Intelligent Transportation System improvements (variable message signs, closed-circuit cameras). Upgrading load-restricted bridges and seismic upgrades.
Livability improvements – Truck route signage program to direct truck movements onto appropriate routes. Partner with railroad operators and ODOT to institute 'quiet zones' to reduce train whistle noise and improve track safety.
Healthy economy improvements – Access and circulation improvements within freight districts. Partnerships with the Portland Development Commission and Port of Portland to implement transportation improvements that enhance the marketability of industrial sites.

The FMP also includes a section on trucks and street design that lays the foundation for the development of The Portland Design Guide for Trucks that will vary street designs based on street classifications and existing constraints.

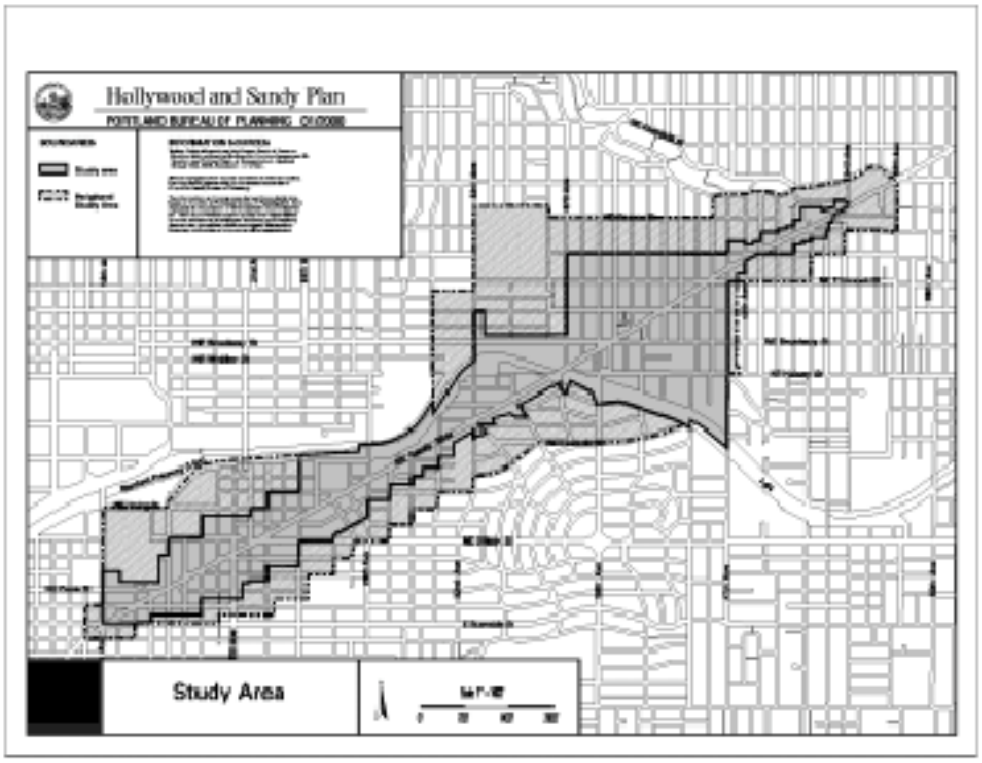
HOLLYWOOD AND SANDY PLAN

Introduction

The Hollywood and Sandy Plan is the outcome of a comprehensive land use, transportation, and public services planning study for the Hollywood District and a portion of Sandy Boulevard. The Portland Bureau of Planning and PDOT, in coordination with other agencies, began the study in November 1997. City Council took action on the final plan in April 2000 through Ordinance No. 174325 and Resolution No. 35875.

Study Location

The study area includes Sandy Boulevard between NE 12th Avenue and NE 54th Avenue and extends north and south of the street for approximately one to three blocks, depending on location. The Hollywood District portion of the study area is located between NE Tillamook Street on the north, I-84 on the south, NE 37th Avenue on the west, and NE 47th Avenue on the east.



Study Purpose

The Region 2040 Growth Concept designates Sandy as a main street and the Hollywood area as a town center and station community, based on their historic development patterns and the light rail station near NE 42nd and Halsey Street. The intent of the 2040 designations is to direct growth to locations and in ways that will result in mixed use areas that take advantage of existing and planned transportation facilities and other infrastructure and encourage modes of travel other than the automobile.

Goals and Objectives

The study's goals were to:

- Enhance business and economic vitality
- Reinforce the connection between the Hollywood Transit Center and the business core
- Promote housing and mixed-use development
- Enhance the pedestrian experience
- Enhance building character
- Improve and enhance the transportation system
- Maintain adequate parking
- Promote open spaces and gathering spaces
- Enhance community services and activities
- Maintain public and private infrastructure facilities

Transportation Elements

The Hollywood and Sandy transportation concept was developed to meet the following three objectives:

- Address community concerns related to transportation
- Support desired land use and zoning patterns
- Meet State and regional needs and requirements

Existing Conditions

Demographics

The Hollywood and Sandy planning study area encompasses the entire Hollywood neighborhood, as well as parts of the Kerns, Laurelhurst, Grant Park, and Rose City Park neighborhoods. Population in most of the study area has been relatively stable. Overall, a small population increase occurred between 1980 and 1990 (34,176 versus 34,439), but the number of households declined.

People from various racial backgrounds, age groups, and professions live in the study area, similar to the composition of the City of Portland as a whole. Also similar to the City as a

whole, the number of people who drive alone to work increased from 1980 to 1990, ranging from a high of 68 percent in Laurelhurst to a low of 51 percent in Buckman.

Land Uses

Existing land uses result from the study area's evolution from a streetcar suburb to an automobile-oriented commercial district. The current mix of land uses along Sandy Boulevard includes industrial, retail, office, residential, and other uses. Large auto sales businesses are one of the defining land uses. Many of the existing commercial storefront buildings date from the streetcar era and are located at major intersections and other locations that were once streetcar stops. The Hollywood District is predominately commercial north of Sandy; south of Sandy, it has a mix of uses, including churches, medical offices, and high-density residential development. The light rail station and transit center are located near 42nd, south of Halsey.

Little new development has occurred within the study area since 1980. The study area is surrounded by moderate-density residential development around the lower stretch of Sandy and predominately single-family residential around Hollywood and near Sandy north and east of Hollywood.

Economic Development

The primary/local trade areas for businesses in the study area are the nearby neighborhoods. Because of the study area's location and characteristics (proximity to downtown Portland, access to the freeway, the presence of a street grid and sidewalks throughout the area, and frequent bus and light rail service), it also houses businesses that rely on a regional trade area. Changes in retailing, such as internet shopping, may result in redevelopment opportunities as car dealerships relocate or change business practices. Although Hollywood is well located as a shopping district for adjacent neighborhoods, its traffic circulation system and the proximity of other major shopping areas results in a sizable portion of local consumer dollars 'leaking' out of the trade area to stores in competing retail areas.

Transportation

Traffic

Sandy Boulevard in the Hollywood District has multiple and sometimes conflicting transportation functions, including providing freeway access, serving as a State highway, linking the neighborhoods to the Central City, providing access to shopping, and serving as a transit hub. The Hollywood Transit Center serves four bus lines and MAX light rail.

Interstate 84 carries about 181,700 vehicles (both directions) east of the Hollywood District and about 170,600 west of Hollywood. As one of the few I-84 locations with a full interchange, the Hollywood area attracts freeway users, contributing to traffic volumes and circulation issues. Sandy Boulevard is a State highway and Major City Traffic Street that functions well for moving cars through the project area by prohibiting left turns at most major intersections between NE 12th and NE 43rd. These left-turn prohibitions were put in place in the early 1980s in conjunction with other transportation changes that addressed congestion and crashes.

Major north-south arterials along Sandy are NE 12th, 20th, 28th, and 54th. Other arterials in the study area are NE Broadway, 39th, 42nd, and 47th in the Hollywood District. Northeast Broadway is two-way until 37th, where southbound traffic is routed to Sandy or Halsey.

Transit

Transit service is excellent throughout the study area, with four Tri-Met bus lines and MAX light rail serving Hollywood and several other bus lines crossing Sandy along its length. Completion of the MAX line to the airport will result in rerouting the #12 bus so it continues on Sandy rather than being routed through the transit center.

Pedestrians and Bicycles

The study area has sidewalks along almost all streets. The major barriers for pedestrians are the lack of safe crossing opportunities along Sandy and substandard sidewalk widths along most streets. The exception is the core area of Hollywood, where there are wide sidewalks along Sandy, and crosswalks and pedestrian-activated signals at all signalized intersections.

Designated bicycle lanes are provided along 12th north of Sandy and on Glisan east of Sandy. Portions of Tillamook and Hancock are developed as an east-west bicycle boulevard with striped lanes in Hollywood. Portions of NE 42nd and 47th are developed with bike lanes in Hollywood. Sandy Boulevard is designated as a City Bikeway, but has no bicycle lanes.

Parking

The availability of on-street parking varies along the length of Sandy. In some places, on-street parking is lacking because of large curb cuts, bus zones, and turn lanes. Parking is generally prohibited in the core of Hollywood along Sandy to allow wide sidewalks and lane configurations. The remainder of Hollywood typically has on-street parking, and many businesses along Sandy and within Hollywood have off-street parking. Many older buildings were constructed without off-street parking, including the Hollywood Theater in the center of the district.

Recommendations

To develop the transportation concept, the study analyzed several alternatives. The preferred transportation concept envisions more frequent pedestrian crossings along Sandy, enhanced transit stops, more opportunities to make left turns at key nodes, wider sidewalks, and more on-street parking.

In Hollywood, the transportation concept is intended to simplify circulation, particularly at the intersections of Broadway, NE 39th, and Sandy, and to improve signage to public parking. The concept includes circulation changes that will reduce travel times for buses through the transit center and improve the pedestrian environment to and within the transit center.

Transportation Projects

The study identified a large number of projects to address transportation issues along Sandy and within the Hollywood District. The Hollywood and Sandy Plan groups these projects into three categories: circulation and parking, transit, and pedestrian/bicycle. Some of the projects for each area of the plan are listed below.

Sandy Boulevard - Circulation and Parking

- Intelligent transportation measures, including central traffic signal monitoring and traffic flow management
- 18th/Sandy – Convert pedestrian signal to full signal
- 20th/Sandy – Add curb extensions at all corners and enlarge island
- 22nd/Sandy/Glisan – Realign intersection, install full traffic signal
- 33rd/Sandy – Add eastbound left-turn pocket, modify signal to allow left turns, build curb extensions
- Selectively close streets that intersect Sandy at oblique angles

Sandy Boulevard – Transit

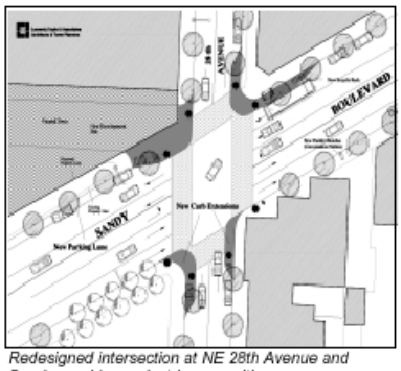
- Reevaluate bus stop spacing to align with new pedestrian plazas, crossings, and nodes
- Develop route #12 as a frequent bus with preferential transit measures
- Add shelters at bus stops and include schedule information and lighting

Sandy Boulevard – Pedestrian/Bicycle

- Implement enhanced pedestrian nodes at 20th, 28th, 33rd, and 42nd
- Add new signalized pedestrian crosswalks at 14th, 31st, and 35th
- Add curb extensions or medians to improve pedestrian crossings
- Reinforce 24th as the north/south bicycle connection between Ankeny and Glisan
- Widen sidewalks along Sandy as properties redevelop

Hollywood – Circulation and Parking

- Reconfigure Sandy between 40th and 42nd to add on-street parking on north side of street
- 37th/Sandy – Restripe lanes for more through movement
- 39th/Halsey – Add westbound left-turn lane, increase northbound turn radius, modify signal
- 40th/Sandy – Reconfigure intersection to remove 'jug handle' turn
- 41st/Halsey – Signalize intersection
- 45th/Sandy – Install full traffic signal
- 47th/Sandy – Create left turn pocket westbound, modify signal



Redesigned intersection at NE 28th Avenue and Sandy provides pedestrian amenities

Hollywood – Transit

- Add bus shelters, rider information, amenities
- Improve signage to transit center, add 'real time' information boards
- Reconfigure transit center to remove onsite circulation lane
- Add second access to light rail platform

Hollywood – Pedestrian/Bicycle

- 37th/Sandy – Add curb extensions
- 42nd – Add pedestrian improvements to enhance it as a Pedestrian Street
- Add bicycle parking along streets and at transit center
- Increase width of sidewalks as redevelopment occurs

Other Transportation Recommendations

In addition to transportation projects, the plan recommends other transportation improvements for the Sandy corridor and Hollywood District. These include closing unused curb cuts to create more on-street parking opportunities, encouraging shared parking arrangements to increase parking availability, seeking vendors and concessionaires at the transit center, establishing transportation management associations, and evaluating locations and financing for public or private parking structures.

To meet the requirements of Metro's Regional Transportation Plan (RTP), the plan establishes mode split goals for Hollywood and Sandy. It also identifies benchmarks for these goals and for other performance indicators. In 1994, non-single-occupant-vehicle (SOV) trips comprised 39 percent of all trips to, from, and within the Hollywood District and 34.9 percent of all trips to, from, and along Sandy Boulevard. The plan establishes a non-SOV goal of 55 percent for Hollywood and 50 percent for Sandy by 2020.

The plan also establishes benchmarks for transit service, transportation demand management, sidewalks, and bicycle facilities for both the Sandy corridor and Hollywood District. In addition, it establishes benchmarks for parking, residential and employment density, and mix of uses for Hollywood.

The plan provides detailed street design guidelines for major intersections along Sandy: 20th, 28th, 33rd, 42nd, and 52nd. (See Hollywood and Sandy Plan, Appendix J for complete text.) The street guidelines will be used to guide project development for Sandy Boulevard. The TSP is proposing several projects for Sandy Boulevard and the Hollywood District that will carry out the Hollywood and Sandy Plan and incorporate the plan's recommendations for an improved environment for all modes of travel.

I-5 TRANSPORTATION AND TRADE PARTNERSHIP

Introduction

The Regional Transportation Plan (RTP) and TSP identified a Major Refinement Plan for "Interstate 5 North from Interstate 84 to Clark County." The I-5 Trade and Transportation Partnership was formed in 1999 to address the issues identified in the refinement plan – freight mobility and access needs. The I-5 Partnership was comprised of Washington and Oregon citizens and leaders to respond to concerns about growing congestion on I-5 and develop a recommended Strategic Plan for the I-5 Corridor between I-84 and I-205 in Washington.

Background

Interstate 5 is the only continuous interstate on the West Coast and between Portland and Vancouver, Washington it experiences some of the region's worst congestion. Interstate 5 provides a key economic connection to two major ports, deep-water shipping, up-river barging, two transcontinental rail lines, and industrial districts. For residents of the region, I-5 provides one of two crossings of the Columbia River for access to work, recreation, shopping, and entertainment purposes. An average of 125,000 trips are made across the I-5 bridge every day.

In 1999, a bi-state leadership committee considered the problems in the corridor and recommended that a public process be initiated to develop a plan for the I-5 corridor based on the following findings:

- Doing nothing in the I-5 corridor is unacceptable. While there are some transportation improvements planned in the corridor, they are insufficient to address the transportation and economic needs of the corridor. Without additional improvements, congestion in the corridor will increase to unacceptable levels.
- There must be a multi-modal solution in the I-5 corridor, but there is no silver bullet. The needs of the corridor will require highway, transit, and rail improvements, and better management of traffic demand.
- Transportation funds are limited. Paying for improvements in the I-5 corridor will require new funds. The scale of improvements needed in the corridor far exceeds currently available state and federal funds. Assuming the current structure of public funding, tolling will be required to pay for a new Columbia River crossing and other corridor improvements.
- The region must consider measures that promote transportation-efficient development. This includes a better balance of housing and jobs on both sides of the river and other measures that manage additional demand.

In January 2001, the Washington and Oregon governors initiated the Portland/Vancouver I-5 Transportation and Trade Partnership (I-5 Partnership). A 28-member task force was established to guide development of the Strategic Plan for the corridor.

A number of option packages were analyzed, all of which included new river crossing capacity across the Columbia River for transit and vehicles. Each option package was

evaluated against three scenarios – existing conditions 2000, no build 2020, and baseline 2020.

Recommendations

On January 29, 2003, City Council adopted Resolution No. 36120, endorsing the recommended Portland/Vancouver I-5 Transportation and Trade Study Strategic Plan. The recommendations are summarized as:

- Three through lanes in each direction on I-5, including southbound through Delta Park;
- A phased light rail loop in Clark County, in the vicinity of the I-5, SR 500/45h Plain and I-205 corridors;
- An additional span or a replacement bridge for the I-5 crossing of the Columbia River, with up to two additional lanes in each direction for merging and two light rail tracks;
- Interchange improvements and additional merging lanes where needed between SR 500 in Vancouver and Columbia Boulevard in Portland, including a full interchange at Columbia Boulevard;
- Capacity improvements for freight rail that will improve freight and inter-city passenger rail services;
- Bi-state coordination of land use and management of our transportation system to reduce demand on the freeway and to protect the corridor investments;
- Involving communities along the corridor to ensure that the final project outcomes are equitable and committing to establish a fund for community enhancements; and
- Develop additional transportation demand and system strategies to encourage more efficient use of the transportation system.

The resolution included a recommendation that the Oregon Department of Transportation (ODOT) and TriMet partner with the City in a Hayden Island land use and circulation study to address land use, development, and circulation issues on Hayden Island as part of the environmental studies for the bridge influence area in recognition that properties on Hayden Island could be impacted by the recommended transportation investments.

Implementation

Before any improvements recommended in the plan can be made, a formal environmental process must be conducted under the National Environmental Policy Act (NEPA) to identify the specific design of improvements and the impacts. The NEPA process includes public participation and a thorough assessment of environmental and community impacts. Plans for mitigating impacts that cannot be avoided will need to be developed.

On January 8, 2004, City Council adopted Resolution No. 36195, endorsing the formation of a Bi-State Coordination Committee and its Charter to replace the Bi-State Transportation Committee and expand its scope to include transportation, land use, economic development, and environmental justice issues in the vicinity of the I-5 corridor in the Portland-Vancouver area. The committee will be a forum to discuss and make recommendations concerning land use, economic development, transportation, and environmental justice issues of bi-state significance.

KILLINGSWORTH IMPROVEMENTS PLANNING PROJECT

Introduction

Killingsworth Street is designated as a Region 2040 main street and a station community. It functions as the center for commercial and educational activity for surrounding neighborhoods. In 2002 and 2003, with funding from a state Transportation Growth Management grant, the Portland Office of Transportation worked with community members and business representatives to develop a plan for street improvements along N/NE Killingsworth. The planning project was adopted by City Council on August 7, 2003 (Resolution No. 36161).

Study Location

The project area is N/NE Killingsworth Street right-of-way between N Interstate Avenue on the west and NE Martin Luther King, Jr. Boulevard on the east. A larger study area includes businesses and institutions that are connected to the project area but are not contained within it. The larger study area allows the project to develop solutions to traffic issues related to the project area. The Killingsworth study area includes Killingsworth Street from N Greeley Avenue to NE Martin Luther King, Jr. Boulevard. Local streets perpendicular to Killingsworth Street between N Emerson Street and N Jessup Street were also included in the study area to identify opportunities to improve access to Killingsworth Street from adjacent neighborhoods.

Study Purpose

The plan addresses streetscape improvements, including trees, curb ramps and sidewalk improvements, street lights, pedestrian crossing and bus stop changes, traffic signs, trash containers, bicycle access, and art. The plan creates a public investment strategy for the street to improve the quality of the street for local businesses and residents and helps strengthen the connection between Killingsworth Street, the Interstate MAX, the surrounding community, and major destinations such as Portland Community College Cascade. Through improving these connections the project also helps bridge the divide caused by the I-5 freeway.

Recommendations

The recommended transportation improvements adopted by the 19-member Citizens Advisory Committee reflect the community's vision for a vibrant mixed-use Killingsworth main street. The plan calls for reconstructed and widened sidewalks with different streetscape treatments applied in:

- the residential area between N Interstate and N Michigan,
- the main street commercial area between N Michigan and N Borthwick,
- the main street commercial area between N Commercial and N Williams, and
- the campus area between N Borthwick and N Commercial to match the character of those street segments.

The campus area includes improvements to the N Kerby "promenade" between Killingsworth and Jefferson High School.

Curb extensions are proposed at key locations for street crossings and transit stops, and in areas with narrow sidewalk width to add space for trees and street lights. The plan also identifies transit stop improvements, new ornamental street lights and street furniture such as benches, bike racks, and street art to improve the pedestrian environment. Two design options to widen and landscape the I-5 over-crossing bridge are included.

Implementation

The Killingsworth Street Improvements Project will be implemented through a combination of publicly and privately funded improvements. Design standards and guidelines have also been created through the project to ensure that improvements to individual sites that occur prior to public improvements area consistent with the recommended design of the street.

Phase 1 of the project will complete sidewalk improvements between N Commercial Avenue and N Interstate Avenue. Phase 1 improvements emphasize the key crossing and sidewalk improvements in the main street and campus areas and connect the area with the new Interstate MAX station.

LENTS TOWN CENTER BUSINESS DISTRICT TRANSPORTATION PLAN

Introduction

The Lents Town Center Business District Transportation Plan results from an intensive analysis of transportation alternatives to support the revitalization of the Lents business district. PDOT and PDC managed the plan, which City Council accepted by Resolution No. 35854 on January 12, 2000.

Study Location

The plan focuses on the historic core of the Lents business district (the area surrounding the intersection of SE 92nd and SE Foster) and the function of the three arterial streets serving the core area: SE 92nd, SE Foster, and SE Woodstock.

Study Purpose

The Lents business district is at the heart of the Lents town center and Lents urban renewal district. City Council created the urban renewal district in 1998 to support revitalization of this economically depressed area and support its designation as a town center in the Region 2040 Growth Concept.

A top priority of the urban renewal plan is to revitalize the core of the business district. The plan directs the City to develop an economic development strategy and to identify transportation infrastructure improvements to support economic development, consistent with the town center concept. The purpose of the Lents Town Center Business District Transportation Plan is to create a comprehensive transportation improvement plan, paying specific attention to improving multimodal accessibility to support the commercial redevelopment goals of the business district.

Objectives

A citizen advisory committee developed plan objectives to guide the process and to help evaluate proposed alternatives. The objectives include:

- Enhance the pedestrian access and circulation throughout the business district; improve connections into the neighborhood and to transit service.
- Ensure transportation improvements support local commercial redevelopment opportunities.
- Develop a strategy for the provision and management of adequate on and off-street parking to support commercial development.
- Improve transit service and connections; coordinate with high-capacity transit in the I-205 corridor.

- Create a more attractive environment for pedestrians and commercial development through streetscape design and planning.
- Determine the feasibility of decoupling Foster/Woodstock.
- Keep through (non-local) traffic off local streets.
- Maintain acceptable traffic levels of service and stabilize traffic speeds.
- Ensure safety for all modes of travel.
- Improve bicycle access and circulation to and through the business district.

Existing Conditions

Traffic

Congestion is a problem along 92nd in the evening rush hour because of inadequate storage for southbound vehicles between Foster and Woodstock. Significant future growth in traffic volumes is expected. It is anticipated that new development east of I-205 will substantially increase traffic volumes on Foster. Increased traffic congestion on I-205 is likely to increase traffic volumes on 92nd, a parallel route.

Although a survey found that most traffic obeyed the posted speed of 35 mph on Foster and Woodstock, people perceive traffic speed as detrimental to the pedestrian and retail environment. This perception results from the current cross-section of the streets, which have narrow sidewalks and no on-street parking to act as a buffer for pedestrians.

Transit

Transit service to downtown Portland is considered good relative to the rest of the region. However, there are poor transit connections to link Lents to the Gateway regional center to the north and the Clackamas regional center to the south.

Pedestrians and Bicycles

Pedestrian access and circulation is poor in the business district because of the narrow sidewalk widths, lack of sufficient signalized crossings along Foster and Woodstock, and the volume and speed of traffic moving through the area. The absence of amenities such as landscaping and street trees also makes the area uninviting to pedestrians.

Bike lanes are provided along Foster and Woodstock, creating an adequate east-west connection to the core business district. The north-south connection along SE 92nd is incomplete because bike lanes are missing north of Woodstock.

Parking

On-street parking is limited along Foster and Woodstock. Peak-hour restrictions further reduce the supply at key demand times. Current use of the existing supply is low.

Recommendations

Using the plan's objectives for guidance, two transportation system alternatives were developed and evaluated. The plan recommends retaining and enhancing the existing one-way Foster/Woodstock couplet through the business district. The plan also includes a streetscape developed in conjunction with the preferred street network and provides specific design guidelines for sidewalks, street trees, and street lighting.

Transportation Projects

The plan recommends the following transportation improvements:

- Widen the sidewalks along Foster, Woodstock, and 92nd Avenue
- Stripe bike lanes on 92nd Avenue
- Provide on-street parking along both sides of Foster and Woodstock
- Install new traffic signals at the intersections of Woodstock and Foster with 90th and 91st

Other Transportation Recommendations

The plan also recommends the following actions:

- Study the feasibility and desirability of providing a direct connection between Harold and Ellis in the vicinity of 92nd.
- Work with Metro and Tri-Met to study and develop a high-capacity transit system in the I-205 corridor, including a station in Lents.

NORTH MACADAM DISTRICT PLANNING

Introduction

The North Macadam District is a 130-acre sub-district of Portland's Central City. As the last major undeveloped area of the Central City, this area presents the opportunity to create a vibrant new urban district.

Several planning efforts have occurred to define a development strategy for the district. Currently, the Planning Bureau, PDC, PDOT, the Bureau of Environmental Services, and the Parks Bureau are jointly refining the North Macadam Framework Plan. Adoption of the updated plan is expected in summer 2002.

Study Area

The North Macadam District is located along the Willamette River south of Portland's downtown area. As defined by the Central City Plan, the North Macadam sub-district is bounded by the I-5 freeway to the west, the Willamette River to the east, the Marquam Bridge to the north, and Hamilton Court to the south.

Study Purpose

North Macadam has the potential become a vibrant mixed-use urban district of Portland's Central City. The purpose of the City's planning efforts is to develop a common vision for how the district should develop and to establish a regulatory framework to support the vision's realization.

Previous Studies

North Macadam Framework Plan

The North Macadam Framework Plan was initiated by PDC and the North Macadam Steering Committee in June 1997 and accepted by City Council in August 1999. The plan defines goals, objectives, and an overall vision to guide future redevelopment of the North Macadam District. It also describes an implementation strategy, including proposed actions the public and private sectors can take to achieve the vision, and conceptual amendments to the City's Comprehensive Plan and development code to support the vision.

Urban Renewal District

City Council accepted the North Macadam Urban Renewal District on August 11, 1999. The urban renewal district will provide tax increment dollars to fund the public improvements needed to support redevelopment. Urban renewal will also leverage the private investments required to realize the vision presented in the Framework Plan, and will be the primary mechanism for creating public/private partnerships.

North Macadam Proposed Revisions to Plans and Title 33: Zoning Code
When the Framework Plan and urban renewal district were created, the Bureau of Planning was directed to propose amendments to existing plan policies, development regulations, and design guidelines. The proposed amendments are currently under review.

North Macadam Street Plan
The North Macadam Street Plan was developed by PDOT and accepted by City Council as part of the City Engineer's report on November 12, 1996. The Street Plan identifies the optimum location, dimensions, and right-of-way requirements for future public streets and accessways to support urban development of the district. The plan integrates various urban design and transportation planning principles and provides multimodal services for current and planned land uses in the district.

North Macadam Right-of-Way Criteria and Street Standards
Street standards developed for North Macadam in 1997 add further detail to the Street Plan guidelines. The design criteria and standards in this document establish a detailed common understanding of the required improvements for streets and accessways within the public right-of-way.

North Macadam Transit and Parking Strategies
PDC asked PDOT in 1999 to help develop a parking and transit strategy for the North Macadam District. PDOT analyzed the relationship between travel demand and transit and parking. Using the Metro travel model, PDOT calculated the number and types of trips produced by and attracted to North Macadam, and determined the level of transit service and amount of parking required over the next 20 years.

Existing Conditions

Demographics

Historically, North Macadam was an active industrial district with companies involved in manufacturing, shipbuilding, and steel production. Today, North Macadam has large plots of vacant land and a mixture of smaller industrial and commercial businesses. It currently accommodates approximately 3,000 jobs and 300 housing units. By 2020, the district is envisioned to grow to 8,500-10,000 jobs and 1,500-3,000 housing units.

Land Use

The district currently consists primarily of vacant land. The district has remained largely undeveloped for many reasons, including inadequate infrastructure and soil contamination. The primary limitations on future development are transportation access and circulation constraints and lack of transit service.

Zoning

The majority of North Macadam is currently zoned central commercial, which is intended to provide for a broad range of uses in the City's most urban commercial districts. The Planning

Bureau initiated a process in 1999 to update the Central City Plan and Title 33: Zoning Code and to create regulations specific to North Macadam and consistent with the Framework Plan vision. The proposed changes add bonus options and overlays to encourage the desired mixture of jobs and housing. The proposed zoning also includes a 100-foot greenway along the Willamette River shoreline.

Transportation

Traffic

Only a small portion of the planned street network identified in the North Macadam Street Plan has been completed to date. Two new north-south streets are planned. Bond is designated as a Traffic Access Route and will serve as the primary street through the center of the district. River Parkway is designated a Local Service Street and will serve developments along the eastern edge of the district and the greenway. East-west local service streets are also planned to provide for circulation within the district. Pedestrian and bicycle accessways will connect this new street system to the greenway trail.

Vehicle access to North Macadam is limited to two primary traffic portals: SW Moody/ Harbor Drive to the north and SW Bancroft to the south. Although traffic congestion currently is not a major issue in the district, limited vehicle access and circulation will be a growing issue and a constraint on development potential as the district develops.

Transit

Current transit service is minimal, with only a few bus lines travelling along the western and northern edges of the district. However, extensive transit improvements are planned to meet the growing demand of residents, employees, and visitors. Multiple new bus lines, the Central City streetcar, light rail, and an aerial connection from Oregon Health Sciences University (OHSU) are all proposed to serve the district. A transit hub is proposed near SW Moody and Gibbs to provide a focussed connection between these transit investments.

Pedestrians and Bicycles

All streets in the district will meet or exceed City guidelines for sidewalks. A number of enhanced pedestrian streets are proposed to provide an improved pedestrian environment at key retail locations.

Bond Street is designated as a Central City Bikeway and will serve as the primary on-street bike route through the district. The greenway trail will be built to accommodate both bicycle and pedestrian traffic and will also serve an important transportation and recreation function.

Parking

Parking in North Macadam will be provided through a mixture of on-street spaces, surface lots, and structured lots. Because of the constrained street network and access portals, managing the supply of parking is of key importance to the district's future viability. Proposed parking regulations will manage the supply of off-street parking to improve mobility, promote the use of alternative modes of transportation, maintain air quality, and enhance the urban form of the district.

NORTHWEST DISTRICT PLAN

Introduction

The Northwest District Plan (NWDP) updates the 1977 Northwest District Policy Plan in the Comprehensive Plan. The plan includes new Comprehensive Plan policies, objectives and implementation actions along with new zoning regulations in Title 33. It also amends the Guild's Lake Industrial Sanctuary Plan and the Central City Plan.

Study Location

The Northwest study area is generally bounded on the south by West Burnside Street, on the north by NW Vaughn Street and NW St. Helen's Road, on the east by the I-405 freeway and on the west by the Hillside neighborhood and Forest Park. The boundary of the Northwest District Plan generally corresponds to the Northwest district neighborhood, except for those portions that are within the Guild's Lake Industrial Sanctuary (north of NW Vaughn Street) and the central City (west of I-405 and along West Burnside Street) plan areas.

Study Purpose

The plan provides policy direction for the Northwest District in the areas of land use, urban design, transportation, housing, and economic development. The (NWDP) builds upon the 1999 Northwest District Association (board-adopted) Northwest District Neighborhood Plan. The NWDP is intended to protect and enhance the livability, urban character and economic vitality of the Northwest District neighborhood while providing guidance for change over time.

The NWDP was adopted by City Council in two parts – the plan itself, and a parking plan that further amends the Northwest District Plan and plan district.[1] The overall plan was adopted by City Council on September 24, 2003 (Ordinance No. 177920, effective November 8, 2003). The parking plan was adopted on November 5, 2003 (Ordinance No. 178020, effective date December 20, 2003).

Northwest District Plan Transportation Policy and Objectives

The transportation policy for the NWDP states, "Provide a full range of transportation option for moving people and goods thereby supporting neighborhood livability and commerce and reducing reliance on the automobile."

The adopted objectives support:
- Increasing the availability of, and incentives to, alternatives to the automobile.
- Maintaining and reinforcing the historic street grid.
- Providing safe and convenient access to public transit and improving service.
- Maintaining and improving bicycle and pedestrian connections.
- Enhancing the main streets and streetcar line as pedestrian places.
- Providing convenient bicycle parking.

[1] The NWDP is under appeal. If the appeal is upheld, this section will be modified to reflect the outcome and projects in Chapter 3 of the TSP may need to be modified or changed.

- Preserving the function of local streets and using traffic calming methods as needed.
- Avoiding street improvements that would accommodate increased vehicular traffic
- Discouraging through-commuter and truck traffic in residential zones.

Northwest District Plan Parking Policy and Regulations

The Parking Policy states, "Provide and manage parking to serve the community while protecting and enhancing the livability and urban character of the district." It's objectives support:

- Reducing the demand for automobile parking.
- Providing efficient use of on- and off-street parking.
- Providing for a limited amount of additional structured parking while minimizing its impact on the main streets and streetcar line.
- Discouraging parking by PGE patrons and Central City commuters.
- Encouraging turn over of on-street visitor parking and focusing it along NW 21st and 23rd Avenues.
- Encouraging new parking to be in structures and limiting new surface lots.

Northwest District Master Street Plan

The NWDP includes a master street plan for the part of the district that currently has oversized blocks and EXd (Mixed employment) zoning. The master street plan becomes a new objective in Goal 11B, Policy 11.11, Street Plans, of the Transportation Element of the Comprehensive Plan. The master street plan will guide the location of new streets as this part of the district redevelops and intensifies over time. The new NW 20th connection could act in concert with improvements at the NW 23rd/Vaughn/I-405 ramps improvement identified in the Action Chart.

Northwest District Transportation Fund

As part of the Northwest District Plan, Council adopted a Northwest Transportation Fund Bonus Option for the Transition Subarea and for the North of Vaughn area. Non-residential uses can generate a lot of peak-hour traffic that will negatively impact the neighborhood's streets. By requiring development to contribute to a fund when building over a 1:1 floor area ratio, money will be accumulated that can finance the needed transportation improvements.

City Council adopted Ordinance No. 177993 on October 22, 2003, amending Title 17, Public Improvements, to implement the Northwest Transportation Fund. The Northwest Transportation Fund revenues can be used to provide transportation improvements in the area bounded by NW Pettygrove Street, NW Nicholai Street, the I-405 freeway and NW 27th Avenue. The revenues can also be used in the immediate vicinity of this area if the need arises. The revenues can be used to address both existing deficiencies and the transportation impacts of growth. No specific projects are earmarked for funding although the intersection of NW 23rd and NW Vaughn was identified during the planning process as needing improvements to address congestion and to be improved as a gateway to the Northwest District neighborhood.

OPPORTUNITY GATEWAY CONCEPT PLAN

Introduction

The Opportunity Gateway Concept Plan is the result of a year-long planning process to determine long-term transportation, land use, parks, and other public services in the Gateway regional center. PDC managed the project, in cooperation with PDOT, the Planning Bureau, and the Parks Bureau. City Council accepted the plan by Resolution No. 35867 on February 23, 2000.

Study Location

The study area comprises approximately 600 acres. It is bounded on the north by the NE Halsey/Weidler couplet, on the south by SE Market Street, on the west by I-205, and on the east by a ragged line to the east of 102nd that delineates the boundary between single-family zoning and multi-family zoning.

Study Purpose

The Region 2040 Growth Concept designates Gateway as a regional center, the only area within the City of Portland to receive such a designation. Gateway occupies an important position in the regional hierarchy of development. The district is envisioned to become a center of activity for east Portland--a destination for employment, shopping, and recreation as well as home to thousands of people.

Project Principles, Goals, and Objectives

Standing Principle

ESTABLISH THE GATEWAY REGIONAL CENTER

The purpose of all urban renewal activities is to facilitate the full and productive use of the land for appropriate regional center uses. The regional center concentrates compact mixed-use development that is home to a range of travel and housing options, and multiple opportunities for community interaction and economic advancement. It is a physical and functional center for housing, employment, and services. It is physically defined by a pedestrian orientation that contributes to a clear and attractive identity. It is distinguished by the ongoing efforts of citizens, government, and investors to be a part of the individual and institutional choices that shape the look, feel, and function of the regional center.

Subordinate Principles

1. Utilize Information Public Participation

   Goals and Objectives

   - Inclusiveness
   - Leadership
   - Education
   - Accountability

2. Maximize Investment in the District

   Goals and Objectives

- Community Investment
- Strategic Public Investment
- Policy-Supportive Private Investment

3. Establish a Distinctive Identity

Goals and Objectives

- Unity and Coherence
- Attractive Appearance/Deliberate Design
- Elimination of Visual Blight
- High-Visibility Projects

4. Support Compact Development

Goals and Objectives

- Respect Adjacent Neighborhoods
- Efficient Land Use
- Focus on Station Areas

5. Support a Mixture of Land Uses

Goals and Objectives

- Within the District
- Within Development Projects

6. Create a Mixture of Public Spaces

Goals and Objectives

- Parks and Plazas
- Rights-of-Way
- Public Buildings

7. Establish a Pedestrian Orientation

Goals and Objectives

- Safety/Amenities
- Destinations
- Connectivity/Accessibility
- Visual Interest

8. Expand and Improve Travel Options

Goals and Objectives

- Street Grid
- Facilitate Non-Auto Trips
- Transit Improvements
- Traffic Management

9. Expand and Improve Housing Options

Goals and Objectives

- Mixed Income
- Home Ownership
- Neighborhood Compatibility
- Minimize Residential Displacement

10. Enhance Economic Opportunities

Goals and Objectives

- Support Small Local Business
- Employment Center
- Family Wage Jobs
- Complement I-205 Corridor Development

Existing Conditions

Demographics

Largely developed after World War II, the Gateway area is characterized by low-density, suburban-style development. It consists primarily of small and medium-sized businesses, medical and dental offices, national retail chains, and a mixture of single-family and multi-family housing. Today, it has a relatively small population and large employment base. The largest employer in the district is the Adventist Medical Center, with more than 2,000 employees. Like many inner-ring suburban areas, Gateway shows signs of disinvestment and stagnation: few new businesses, a lack of parks and open space, an aging building stock, vacant and poorly maintained property, and a jumble of unplanned land uses.

Land Use

Existing land uses in the study area result from mostly unregulated suburban development following World War II. The north and south ends are dominated by auto-oriented retail uses surrounded by large surface parking lots. The southern third is composed of low-intensity industrial uses. The northern two-thirds is filled with aging single-family and multi-family use, with strip commercial on 102nd Avenue.

Little new development has occurred within the study area since 1980. During the last five years, however, this trend has begun to reverse itself, particularly with regard to multi-family housing. Several new large-scale residential developments have been built in Gateway, and several more are being planned.

Economic Development

The primary/local trade areas for business in the study are the nearby neighborhoods. Traffic modeling done for the area shows that more than half of the traffic on 102nd is of local origination. The area has excellent access. It is served by two freeways (I-84 and I-205), two light rail lines, eastside MAX and airport MAX, one major north-south urban arterial, 102nd, and five east-west urban arterials (Stark, Washington, Glisan, Halsey, and Weidler) that serve many regional destinations. It is also well located between the existing commercial centers at Lloyd District, Gresham, and Portland International Airport.

The ease of access to Gateway has made it particularly attractive for new multi-family residential development in the last five years.

Transportation

Traffic

The urban arterials and Gateway have multiple and sometimes conflicting transportation functions, including freeway access, linking neighborhoods to the regional center, and serving as a major regional transit hub (the largest outside of downtown Portland).

Major traffic congestion currently occurs on Glisan at both the freeway entrance and 102nd and will continue in the future. Other arterials operate at near capacity, both now and in the future. High levels of congestion also occur around the Gateway Transit Center as a result of bus and auto access to the rail platforms and parking. For example, over 200 buses pass through the intersection of NE 99th and Pacific during both the a.m. and p.m. peak hours.

Transit

Gateway has the best transit service in the region, outside of downtown Portland. With the opening of Airport MAX in September 2001, light rail headways at the Gateway Transit Center will be approximately every three minutes. Planned transit service changes after Airport MAX is opened will provide 15-minute service on Halsey/Weidler, Stark, and Washington. Line 15 will travel the length of the district from Main Street to the Parkrose park-and ride facility.

Pedestrians and Bicycles

There is a bike path along I-205 and bike lanes along some of the east-west arterials (Halsey, Glisan, and Stark). The north-south bike access is limited.

Pedestrian facilities are equally, if not more, lacking. Pedestrian travel is restricted by the lack of a local street network; as a result, most pedestrian travel is indirect and inconvenient.

Parking

Parking is abundant in Gateway, except in and around the transit center park-and-ride lot at the Gateway light rail station. Parking there is scarce, resulting in widespread use of on-street parking in the adjacent neighborhood after the park-and-ride lot is full.

Recommendations

This intensive two-year planning process resulted in a concept plan map and associated public infrastructure improvements and redevelopment strategies. The concept map will guide future development and policy decisions affecting Gateway. The most important principle illustrated in the map is the unification of the 650-acre district, using an improved street network and park system.

Transportation Projects

The plan identifies the following key transportation improvements:

- Improve SE 102nd as a boulevard.
- Transform SE 99th into a local carrier and spine for the district's new identity.
- Create additional north-south local street connections.

- Improve freeway access points on major east-west arterials to create a friendlier environment for local traffic, pedestrians, and transit users.

PLEASANT VALLEY PLAN DISTRICT

Background

The Pleasant Valley Plan District was created to manage growth in an area that was added to the Urban Growth Boundary in 1998. In 2000, the cities of Portland and Gresham, in partnership with Metro, Clackamas and Multnomah Counties, and the Johnson Creek Watershed Council, embarked on the Pleasant Valley Concept Plan. The Concept Plan is a guide to the creation of a new 1,532-acre community neighborhood south of Gresham and east of Portland. The planning process created a vision and a plan for the transition of a rural community of 800 residents into an urban community of approximately 12,000 residents and 5,000 jobs. The Pleasant Valley Plan District is the City's implementing tool for the Pleasant Valley Concept Plan and the Pleasant Valley Implementation Plan. The Pleasant Valley Plan District was adopted by City Council on December 15, 2004 (Ordinance No. 178961).

Pleasant Valley Concept Plan

Key features of the Pleasant Valley Concept Plan include:

- A mixed-use town center as the focus of retail, civic and related uses.
- A new elementary school and middle school located adjacent to 162nd Avenue.
- The location of major roads away from important historic resources and 'park blocks' that connect the town center to the historic central section of Foster Road.
- A framework for protection, restoration and enhancement of the area's streams, flood plains, wetlands, riparian area and major tree groves through the designation of areas as 'environmentally sensitive/restoration areas' (ESRAs).
- Designation of a 'neighborhood transition design area' adjacent to the ESRA so that neighborhood development is compatible with adjacent green corridors.
- A 'green' stormwater management system intended to capture and filter stormwater close to the source through extensive tree planting throughout the valley, 'green' street designs, swale conveyance and filtration of run-off, and strategically placed stormwater management facilities.
- Nine neighborhood parks dispersed throughout and a 29-acre community park centrally located between the utility easements north of Kelley Creek.
- A network of trails including east-west regional trails paralleling Kelley Creek and north-south regional trails following the BPA power line easement.
- A reorganization of the valley's arterial and collector street system to create a connected network that will serve urban levels of land use and all modes of travel.
- Re-designation of Foster Road from arterial to local street status between Jenne Road and Pleasant Valley Elementary School. The intent is to preserve the two-lane, tree-line character of Foster Road and to support restoration efforts at the confluence areas.
- A network of transit streets that serve three mixed-use centers and seven nodes of attached housing.
- A variety of housing organized in eight neighborhoods.
- Planned housing that is 50 percent attached, 50 percent detached and has an overall density of 10 dwelling units per net residential acre.
- Two five-acre mixed-use neighborhood centers.

- Employment opportunities in the town center, mixed-use employment district, and general employment district as well as home-based jobs.

The cities of Gresham and Portland have agreed to adopt similar policies and development codes to achieve the goal of 'creating a complete community'. Portland will eventually annex approximately 290 acres of the study area and Gresham will annex the other 1,242 acres.

Pleasant Valley Implementation Plan

In 2002, Gresham and Portland started the Pleasant Valley Implementation Plan project. The purpose of the implementation plan was to create a report that would provide a bridge document between the 2002 Concept Plan and final comprehensive plan amendments, ordinances and intergovernmental agreement. The Pleasant Valley Implementation Plan was completed in December 2003. The Plan includes:

- A plan district map with refined residential land use districts
- Draft land use districts and development code
- Major street functional and design classifications
- A street connectivity plan and bike and trail plan
- A State Goal 5 natural resources analysis and draft regulatory code
- A public facility plan for water, wastewater, stormwater, transportation, and parks to generally describe projects, costs, timing, and funding options
- An annexation analysis and strategy report to compare infrastructure costs and revenues, nest fiscal positions ijn sub-areas of Pleasant Valley, and preliminary annexation strategies.

Transportation

Goal 8 of the Concept Plan states, "Pleasant Valley shall be a community where a wide range of safe and convenient transportation choices are provided." The intent is to a transition a transportation system that was designed to serve the farm-to-market travel needs of an agricultural community to an urban system adequate to serve the growing demand and reduce its impact on the area's streams and wetlands.

The Implementation Plan defines the transportation system for the area. The plan includes:

- A functional classification for streets
- Street design types illustrating street cross-section designs and location of collector and arterial streets
- Connectivity plan that responds to Metro's requirements of an overall spacing standard of 530 feet
- A bike and trail plan that includes regional trails and additional local walking/hiking trails.
- An illustrative street plan that helps illustrate the recommended spacing for local street connections with the collector and arterial street network.

Pleasant Valley Natural Resources Overlay Zone

An overlay zone was adopted by the City for Pleasant Valley that differs in several substantial ways from the City's existing environmental protection program. The overlay zone protects continuous natural areas along streams, but allows new development in some cases. In terms of transportation, standards for rights-of-way are intended to protect natural resources by requiring bridges where streets cross streams, limiting fill and excavation, requiring mitigation, and limiting street to only those shown in the Pleasant Valley Street Network Plan along with common greens and pedestrian connections.

PORTLAND AERIAL TRAM STUDY

Introduction

The Portland Aerial Tram study grew out of the MarquamHill Plan (2003) as a transportation tool to address growth in traffic on Marquam Hill due to institutional uses and to link to South Waterfront where Oregon Health Sciences University (OHSU) intended to expand. As the Marquam Hill Plan was in its final stages in early 2002, the Portland Aerial Transportation, Inc. (PATI) was created as a non-profit board to provide oversight of the design and construction of the tram. The PATI board asked PDOT to undertake an independent analysis of connection options between Marquam Hill and South Waterfront. A public process was developed and presented to the Portland Planning Commission for advice and to City Council for acceptance.

Background

OHSU, along with other developer parties, has recognized the value of developing in South Waterfront, but recognized its access limitations. OHSU participated in early transportation planning efforts for South Waterfront, including looking at ways to connect to Marquam Hill. OHSU concluded that of the options available, an aerial tram would be the best way of making this connection. Construction of an aerial tram was proposed to serve new development in South Waterfront, including an OHSU expansion, and the concept was included as a "study item" in the Marquam Hill Plan, adopted by City Council in July 2003.

In order to assess the various alternatives for connecting Marquam Hill to South Waterfront, and to provide a clear public process, PDOT developed a "Process for Consideration of a Suspended Cable Transportation System." The process was comprised of five primary steps:

- Phase 1: Process Development
- Phase 2: Project Assessment
- Phase 3: Policy Evaluation
- Phase 4: Design Development
- Phase 5: Preliminary Engineering/Final Engineering/Construction

The intent of the process was to evaluate and select the best options for connecting Marquam Hill to South Waterfront and to provide City Council with a public go/no-go decision on the preferred option at the end of each phase. The process was intended to respond to the fact that the tram, if it were to be developed further, would be a public transportation project, located within the public right-of-way and owned by a public agency.

To date, City Council has taken action on the first three stages of the process. The Process Development Phase was accepted by Resolution No. 36071 on May 23, 2002; the Project Assessment Phase was accepted by Resolution No. 36085 on July 10, 2002; and the Policy Evaluation Phase was completed by City Council as part of their adoption of the Marquam Hill Plan on July 10, 2002. Since then City Council has taken a number of actions to complete Phase 4 including a work plan, approving contracts with PATI, directing PDOT to undertake a competitive design competition, and approving contracts for pre-construction services. The Portland Aerial Tram Final Report and Recommendations (adopted by City Council Resolution No 36224 on June 10, 2003) provides the information that City Council needs to complete the Design Development phase of the process and direct the completion of

the Final Engineering and Construction phase. Upon completion of the Design Development phase and the acceptance of those recommendations, the primary decisions related to the tram project will be in place, with the exception of contractual items which will be finalized as the tram design is completed.

Recommendations

The Final Recommendations and Report includes a Concept Plan that is a vision for the South Portland area, providing an urban design context for the aerial tram project and reflecting the community's desire to improve the neighborhood consistent with long-standing neighborhood priorities. The implementation of the Concept Plan is the key to ensuring that neighborhood livability improves, that tram impacts are reduced or offset, and that the tram is integrated into Portland's urban fabric and transportation system. Out of the Concept Plan came recommendations for the area that are organized in five categories: Marquam Hill, Terwilliger Parkway, Lair Hill, South Waterfront, and Regional. Within the five categories, projects are prioritized into three tiers.

Implementation

City Council directed PDOT to proceed with implementation of the Tier 1 Study and Project Lists, although many projects will be done through other entities, including OHSU, the Parks Bureau, and private property owners. Many of the projects are already included in the TSP. Projects and one study are being added to the TSP with its first update.

In addition, the Council directed the City Engineer to complete the final design for the tram and to issue the design as a City Standard Improvement in the Right-of-Way.

POWELL/FOSTER CORRIDOR TRANSPORTATION PLAN

Introduction

In the fall of 2002, Metro commenced a Phase 1 Corridor Transportation Plan. The need for a study was identified in the Regional Transportation Plan (RTP) and the TSP. The purpose of Phase 1 was to define and preliminarily evaluate an initial range of multi-modal alternatives that will accommodate the 2020 corridor travel demand in a way that supports the 2040 Concept Plan. The Cities of Portland and Gresham, Multnomah and Clackamas counties, the Oregon Department of Transportation (ODOT) and TriMet partnered with Metro in this planning effort. The plan was funded by Metro and the State Transportation Growth Management Grant Funds.

Study Location

The Powell/Foster Corridor study area is generally defined as follows: 1) The northern boundary is roughly north of division Street from OR Highway 99E (McLoughlin Boulevard) in Portland to 242nd/Hogan Road in Gresham; 2) The eastern boundary is roughly 242nd/Hogan Road from Burnside Street to OR Highway 212 and 232nd from OR 212 to OR 224; 3) The southern boundary runs roughly along the Clackamas River from 232nd to OR 212, northward along 152nd, 147th and 145th, along SE Clatsop and SE Flavel from 147th to 36th, and just south of Tomas Street from 36th to OR 99E; 4) The Western boundary is OR 99E from Bybee Boulevard to Hawthorne Boulevard.

Study Purpose

Due to extensive growth in the eastern part of the study area, congestion has become an increasingly serious problem in the Powell/Foster Corridor. This congestion will continue to increase as the unincorporated rural communities of Pleasant Valley and the Damascus area develop and add substantial amounts of new housing and jobs. Despite regional policy changes to level of service (LOS) standards that permit greater levels of congestion, changes are needed within the Corridor to provide multi-modal access to Portland's Central City, to Regional Centers in Gresham and Portland, and to Town Centers in Lents, Pleasant Valley, and Damascus as well as to Employment Areas identified in the 2040 Concept Plan.

The goal of the Powell/Foster Corridor Transportation Plan is to identify the complementary transit, roadway, bicycle and pedestrian networks and transportation demand management (TDM) and transportation system management (TSM) strategies that meet the Corridor's anticipated 20-year travel demand based on projected land uses.

Some of the key criteria used to develop and evaluate alternative were:

- Cost effectiveness
- Impacts to neighborhoods and the environment
- Preservation of the through movement function of the alternatives
- Safety; and
- Opportunities for access management.

Alternatives Evaluation

Metro and David Evans (DEA), with input from the Powell/Foster Technical Advisory Committee (TAC) and Project Management Group (PMG), conducted a preliminary evaluation of the initial range of multi-modal alternatives for primary roadway segments within the Powell/Foster Corridor. The evaluation of initial alternatives was based on system-wide and corridor-level travel performance measures, as well as planning level environmental and engineering measures.

Recommendations

The Phase I recommendations are organized by transportation mode and facility segment or route. Projects have been prioritized into three categories based on needs: short-term (within 5 years); intermediate term (5 – 10 years); and long-term (10+ years). (The recommendations below affect facilities within Portland only.

Powell Boulevard (Ross Island Bridge to I-205). Develop and implement streetscape improvements to Powell between the Ross Island Bridge and SE 50th Avenue, including pedestrian crossing improvements.

I-205/Powell Boulevard Interchange. Design the short-term design and construct improvements to allow full turn movements at the Powell Boulevard and I-205 interchange. Pursue the study in the TSP to plan and design modifications to the existing overpass with full access ramps to I-205.

Powell Boulevard (I-205 to SE 174th). In the short term, conduct a project development study to determine the right-of-way requirements and general dimensions needed to support four traffic lanes, plus turn lanes where needed, as well as bike lanes and sidewalks. The project development study should examine detailed needs and develop schematic designs that support multi-modal transportation needs and planned land uses in this segment. It should include significant community input and address specific needs for turn lanes, lane widths, signals and other traffic control, bicycle facilities, pedestrian refuges, bus stops, stormwater management, and access management. For the segments from 122nd to 162nd Avenues, alternative interim improvement approaches may be considered, subject to further specific needs analysis and compatible with the long term planned street improvements.

Foster Road (Powell Boulevard to I-205). Implement the Inner Foster Transportation and Streetscape Plan.

Foster Road (I-205 to Jenne Road). Widen Foster Road to a four-lane section from Se 122nd to Barbara Welch Road and advance a range of alternatives to be studied in Phase II of the Powell/Foster Corridor Transportation Plan from Barbara Welch Road to Jenne Road. The Phase II Plan should consider the need for, and feasibility of, various two to four lane configurations east of Barbara Welch.

Jenne Road/New 174th Avenue. As part of Phase II of the Corridor Plan, complete a project development study of a new extension of SE 174th between Jenne and the future Giese Roads. A new extension of SE 174th may be in lieu of widening Jenne Road to three lanes between Foster and Powell.

Transit Recommendations. The study affirms the RTP designation of Foster Road as Rapid Bus. Roadway design should incorporate transit-preferential treatment for transit. Transit preferential treatments should also be included in the design of Powell between I-205 and SE 174th. The study recommends improvement in north-south bus service serving the growing areas.

Bicycle/Pedestrian Recommendations. Significant pedestrian and bicycle improvements are needed throughout the corridor to provide connections to regional and town centers and other key land uses and encourage the use of alternative modes. Streets within Portland's portion of the study area with TSP pedestrian/bicycle projects are: SE 92nd, SE Division, SE 122nd, SE Holgate, SE 111th/112th, Foster/Woodstock within Lents, SE 50th/52nd, and SE 136th.

METRO COUNCIL ADOPTED ON OCTOBER 23, 2003 RECOMMENDATIONS TO IMPLEMENT THE ROADWAY, BICYCLE, PEDESTRIAN, AND TRANSIT IMPROVEMENTS THROUGH CHANGES TO THE RTP AND LOCAL TRANSPORTATION PLANS, DEVELOP MORE DETAILED DESIGN AND ENVIRONMENTAL STUDIES OF SPECIFIC IMPROVEMENTS AND, IN SOME CASES, ADDITIONAL ANALYSIS DURING THE NEXT PHASE OF THE CORRIDOR STUDY.

RED ELECTRIC TRAIL PLANNING STUDY

Background

The Southwest Urban Trails Plan, completed in July 2000 by the Portland Office of Transportation (PDOT), recommended the Red Electric historic rail alignment as one of seven possible walking routes in southwest Portland, In January 2003, the Fanno Creek Greenway Trail Action Plan was finalized, recommending that the Red Electric alignment be studied as the easternmost portion of that regional trail system extending to Tigard. In October 2003, Portland Parks and Recreation, with the assistance of the Office of Transportation, began the Red Electric Trail Study to investigate potential routes for an east-west trail that would extend the Fanno Creek Greenway Trail, creating a continuous, 16-mile bicycle and pedestrian trail between the Willamette and Tualatin Rivers.

Process

A comprehensive public involvement process was developed that focused initially on landowners and neighbors living along potential routes. A public open house was held in June and October 2004. A draft trail study was released for public review and comment in August/September 2005.

Staff reviewed potential routes and trail types in the field to evaluate road crossings, note sight distance constraints, select potential sidewalk locations and locate right-of-way encroachments.

Recommendations

The process resulted in a recommended route, with some other options that could still meet project criteria and result in a safe and useful east-west route for a diversity of trail users. The trail would look different along various stretches of the route, based on existing conditions, topography, and other features. Cost estimates were developed for each project-sized segment. It will likely take decades to design and construct all segments, but will ultimately offer increased recreational opportunities as well as transportation use to southwest Portland residents and visitors.

Once City Council has taken action on the study, the Transportation System Plan classification maps (and potentially master street plan map) for southwest Portland will be updated to reflect the adopted alignment.

RUSSELL STREET IMPROVEMENTS PLANNING PROJECT

Introduction

North Russell Street was the main street of the original City of Albina and connected the Lower Albina industrial area and the river with the commercial hub at the intersection of Russell Street and N Williams Avenue. It forms the core of the Russell Street historic district that was adopted in 1993 by City Council. In 2002 and 2003, with funding from a state Transportation Growth Management grant, the Portland Office of Transportation worked with community members and business representatives to develop a plan for street improvements along N/NE Killingsworth. The Russell Street Improvement Planning Project was adopted by City Council on November 19, 2003 by resolution (No. 36184).

Study Location

The project area is N Russell Street right-of-way between N Interstate Avenue on the west and N Williams Avenue on the east. It also includes N Mississippi between N Interstate and N Russell and N Albina between N Interstate and N Russell. Russell Street is the main east-west corridor in the Lower Albina area and provides a connection from the Mississippi/Albina light rail station, as do Albina and Mississippi, and the Lower Albina Industrial area to the major employment center at Legacy Emanuel Hospital and the residential part of the Eliot neighborhood.

A larger study area includes Emanuel Hospital, Harriet Tubman Middle School and the Lower Albina Industrial Sanctuary. The larger study area allows the project to develop solutions to pedestrian and traffic issues on streets connected to the project area.

Study Purpose

During the development of the 2002 MAX Station Area Revitalization Strategy, business owners and community members in the Eliot neighborhood were concerned about the impact the new light rail station at Mississippi/Albina would have in their area. Their concerns led to this study to plan street improvements for the Russell Street corridor.

The goals of the study were to:

- Identify barriers to pedestrian and bicycle access to the light rail station;
- Define priority access routes for pedestrian and bicycle travel, and any needed improvements along those routes;
- Create a streetscape design plan for N Mississippi and N Albina Avenues from N Interstate to N Russell and N Russell Street from N Interstate to N Williams;
- Identify streetscape improvements and create attractive, safe, and convenient pedestrian and bicycle access to light rail and to support planned land uses;
- Provide connections to the residential part of the Eliot neighborhood and Emanuel Hospital Street via N Russell Street; and
- Enhance the pedestrian environment around the light rail station.

The specific objectives were to:

- Recognize the diverse historic, cultural, and ethnic identity of N Russell Street east and west of I-5.

- Design improvements in a way that accommodates through truck traffic serving businesses in the industrial area.
- Identify improvements to create not only safe and convenient pedestrian and bicycle access to light rail, but improvements that draw and motivate people to want to explore this unique area and benefit from the transportation opportunities.
- Provide connections to the Eliot neighborhood and Emanuel Hospital via Russell Street.
- Enhance pedestrian environment around the light rail station.
- Balance the needs of retaining businesses in the Lower Albina Industrial Sanctuary with the needs of providing safe pedestrian access to the light rail station for existing institutions and residents.
- Plan bicycle access around truck access, on-street parking and the limited right-of-way.

A 19-member Community Advisory Committee was appointed to advise the project team on the design process, evaluate the public comments, and represent the varying perspectives in the project area.

Recommendations

The preferred design concept in the plan is the "Ribbon with Places," which features a continuous element, or "ribbon" that would help guide people from one end of the project area to the other. Places identified by the community as most important will be given attention with special improvements.

The plan calls for new sidewalks, street trees and streetlights throughout the project. These elements will be applied differently in the three types of design districts.

The most distinct ribbon element is the plan to incorporate unique markers in the sidewalk. The markers are conceived of as bronze diamonds, with a design that reflects the community's chosen theme. New pedestrian-scaled streetlights will give a unified look and more street trees will be added in the project area west of I-5. A gateway element will be added at N Interstate and N Russell. Gateways will also be added at N Interstate and Albina and at N Interstate and Mississippi. The installations will include signage or maps. Lighting and art will be used to enliven the dreary area under the I-5 underpass.

Curb extensions will be used a key crosswalk locations and a new entrance to Lillis-Albain Park will be constructed. The sidewalk along the north side of Russell between Gantenbein and Williams will be widened (with permission from Legacy Emanuel Hospital) to include benches, planters, trees, and historic markers.

Additional elements will include bus stops for the No. 33 bus line, which was rerouted onto Fremont between Williams and Interstate, new pedestrian crossings with curb extensions at N Albina, N Borthwich, and N Ross. Other pedestrian crossings will be improved at N Commercial and Flint. An improved crossing with curb extensions and overhead signs will be installed at N Williams and N Stanton. Speed bumps will be installed on N Flint and flashing school beacons will be added to the school zone signs.

Implementation

The improvements outlined in the plan will cost approximately $3.3M. Improvements could be phased and some incremental improvements have been implemented through the City's curb ramp program and an audible pedestrian signal was installed in 2003.

The Portland Development Commission will be a key funding partner in implementing the street improvements since the study area is in an urban renewal area.

ST. JOHNS/LOMBARD PLAN

Introduction

The St. Johns/Lombard Plan was initiated in the fall of 2001 to address community desires for a more livable economically viable town center and main street. The plan was funded in part by a State Transportation and Growth Management grant. The plan addresses land use, transportation, housing, and commercial and economic vitality. City Council adopted the St. Johns/Lombard Plan on May 26, 2004 (Ordinance No. 178452, effective date July 10, 2004.

Study Area

The St. Johns/Lombard plan area includes the St. Johns town center (downtown St. Johns, the hillside of Cathedral Park, and the Willamette riverfront), and N Lombard Street from Columbia Park to downtown St. Johns (N Woolsey to N Richmond). The plan includes parts of four neighborhood associations: The Friends of Cathedral Park, the Community Association of Portsmouth, St. Johns, and University Park. Two business associations are involved in the plan area – St. Johns Boosters and the North Portland Business Association.

Planning Goals

A number of planning goals and objectives were developed and used to guide development of policies and actions. The planning goals are:

- Enhance the identity of the St. Johns and Lombard area
- Implement the Region 2040 town center and main street designations in this area
- Foster revitalized St. Johns and Lombard Street commercial areas
- Provide opportunities for new housing along the Lombard main street and near the St. Johns town center
- Provide for a balanced multi-modal transportation system
- Unify the community with safe, accessible, and attractive parks and open spaces
- Promote sustainable development practices and environmental quality

Recommendations

Urban Development Concept. The St. Johns/Lombard Plan urban development concept identifies gateways, attraction/focal points, community corners, a primary framework street, secondary framework streets, enhanced pedestrian connections, and pedestrian/bicycle trails. The primary framework streets are the key streets that provide identity in the core pedestrian and retail area in downtown St. Johns and on the Lombard main street.

In St. Johns the primary framework street is N Lombard between Richmond and St. Louis and on Lombard the primary framework street is between Van Houten and Fiske. The primary framework streets are important multi-modal streets and may be the focus of more intense land uses. The secondary framework streets serve as important routes for pedestrian and vehicle activity and may be the focus of more intense land use activity.
Transportation Policy. The transportation policy for St. Johns/Lombard states, “Provide for a balanced multi-modal transportation system that supports the urban development concept and land use vision for the town center and main street.”

Implementation

Action Items

The action items for the St. Johns/Lombard Plan include a number of transportation improvements. Town center improvements include a new traffic signal, realignment of an existing island, curb extensions, lighting and pedestrian connections. Along Lombard, the improvements include curb extensions, street lighting, and bicycle improvements. These projects are being added to the Transportation System Plan (TSP). Also included as an action item is the St. Johns master street plan, which will also be included in the TSP with this update. Other action items identify the Plan's support for implementation of the entire St. John's Truck Strategy.

Code Changes

The St. Johns/Lombard Plan also includes a number of zoning code changes including a new plan district for the town center and new main street overlays. The zoning and Comprehensive Plan designations have been updated to better reflect the town center and main street objectives.

ST. JOHNS TRUCK STRATEGY

Introduction

Prepared by PDOT, the St. Johns Truck Strategy identifies interim or short-term improvements to address truck circulation and access issues on the north peninsula. City Council accepted the strategy as a report from the project advisory committee on July 11, 2001, in conjunction with a minority report. Staff was directed to prepare a follow-up report to resolve issues related to the St. Johns Bridge rehabilitation project.

Study Area

Situated on the west end of the Columbia Corridor, the St. Johns study area includes all of the North Portland peninsula, east to NE Martin Luther King Jr. Boulevard and south to N Columbia Boulevard and Cary Boulevard and the railroad 'cut.' The study area occupies approximately the western one-third of the Columbia Corridor.

Study Purpose

Residents living in and around St. Johns were central to the initiation of this study. The study's purpose was to look at ways to reduce or remove the impacts of truck traffic on residential and commercial/retail streets, while providing for truck movement across the peninsula from Columbia Boulevard, I-5, and the industrial areas to the St. Johns Bridge. The identified impacts included truck volume, vibration, cut-through truck traffic, and conflicts between modes.

Objectives

The plan has two primary objectives:

- Identify ways in which truck routing can be improved to and from the St. Johns Bridge, Rivergate, and I-5.
- Determine how non-local truck traffic can be eliminated or reduced on residential and retail/commercial streets.

Additionally, City Council directed the study's advisory committee to:

- Utilize the existing local and regional street system.
- Provide a short-term solution (two to five years).
- Limit combined solutions to $10 million.
- Coordinate with other North Portland projects.
- Carefully analyze solutions so as not to shift a problem to a different location.

Companion Study

The Columbia Corridor Transportation Study has provided a transportation vision for the eastern two-thirds of the corridor. The focus of this companion study was to look at ways to reduce or remove the impacts of truck traffic on NE Marine Drive and NE 33rd Drive. The identified impacts included speeding, volume, vibration, cut-through traffic, and conflicts between modes.

Existing Conditions

Demographics

Both employment and residential population are anticipated to increase throughout the Columbia Corridor, including the St. Johns Truck Strategy study area. Employment is predicted to increase from 21,344 positions in 1994 to 35,989 positions by 2020, with non-retail employment more than doubling. With one exception, employment increases will occur mostly through infill and expansion. The Port of Portland is expected to provide approximately 400 acres of new industrial land on West Hayden Island for marine-related business. The number of households in the study area is expected to grow from 12,229 in 1994 to 14,984 by 2020.

Land Use

Besides the natural components of the sloughs and lakes, this area has long been established as a place where blue-collar workers live close to jobs and industry. Meat processing and shipbuilding have both played important roles in the character and development of the area, which was originally an independent city.

The dominant land use along the edge of the Willamette and Columbia rivers is industrial. The area south of Columbia Boulevard (which mostly comprises the St. Johns and Cathedral Park neighborhoods) is a mix of single-family and multifamily homes and commercial/retail activities. The area's industries are largely devoted to the movement of goods and merchandise, facilitated by numerous transportation advantages, including shipping terminals, nearby airfreight facilities, three freeways, and two national railroads. Heavy machinery manufacturing and other businesses are also common within the area.

Zoning

The Portland Comprehensive Plan designates the majority of the industrial lands for industrial sanctuary, including heavy and general industrial uses. Some portions of the study area are designated for employment uses. Environmental or Willamette Greenway overlay zoning protects the riverbank, Smith and Bybee Lakes, and the Columbia River Slough that meanders through the area.

Transportation

East-west travel in the corridor is accomplished via N/NE Marine Drive on the north edge and N/NE Columbia Boulevard and Lombard Street on the south edge. Lombard Street is designated as US 30 Bypass, but passes through concentrations of commercial/retail activity

with significant residential use. City street designations encourage the use of Columbia as the primary arterial for east-west truck trips and access to major employers. West of I-5, Marine Drive is expected to provide access to the Rivergate Industrial District, Terminal 6, and eventually West Hayden Island.

Travel between Columbia Boulevard and the St. Johns Bridge (US 30 Bypass) is currently unrestricted and undefined for trucks, resulting in an overly pervasive truck presence in the St. Johns neighborhood.

Non-local trucks adversely affect residential and commercial/retail streets, with the impacts including truck volume, vibration, and mode conflicts. Additionally, no streets between Columbia Boulevard and the St. Johns Bridge are designated for trucks. The recommended truck streets need improvements to specifically accommodate trucks, and many streets need safety and convenience improvements to accommodate all modes.

Recommendations

City Council accepted both the advisory committee's report and recommendations and the minority report submitted by one advisory committee member. Council also directed staff to investigate the impact of limiting vehicle weight on streets leading to the St. Johns Bridge or on the bridge itself, including the economic impact on the trucking community.

The majority report to Council includes the following recommendations:

1. Designation of a truck route between Columbia Boulevard and the St. Johns Bridge. Portions of Lombard Street, St. Louis Avenue, and Ivanhoe Street would be designated as Major Truck Streets.

2. Follow-up studies to investigate the success of adopted/implemented projects and to recommend remedial or alternative actions if necessary; and a study of the type and quantity of hazardous materials and materials routing currently allowed.

3. A program of education and enforcement to provide interested and affected parties with a point of contact, information services, and enforcement of truck regulations; and a citywide truck sign program for design and placement of new signs and maintenance of existing signs.

4. Recommended projects that fall into two categories: 1) traffic calming and 2) safety and truck street improvements:

    - Traffic calming for Lombard Street (Pier Park to St. Louis), Fessenden (Columbia Way to St. Louis), St. Louis (Fessenden to Lombard), and pedestrian and bicycle safety on Columbia Boulevard.

    - Redesign/rebuilding of intersections at Lombard/St. Louis/Ivanhoe, Ivanhoe/Philadelphia, and Columbia Boulevard/Portland/Columbia Way, and the street segment of Burgard and Lombard from the main Rivergate entrance to Terminal Road.

The minority report includes the following recommendations:

1. Mandate all truck traffic on the already established Truck Route: US 30 to I-405 to Fremont Bridge to Marine Drive (and reversed).

2. Build a bridge between US 30 and Rivergate/St. Johns.

3. Build a road along the railroad track cut that runs north/south under viaduct between N Ida and N Carey.

4. No trucks over 18,000 pounds on the St. John's Bridge.

SOUTH PORTLAND CIRCULATION STUDY

Introduction

Conducted by PDOT, the South Portland Circulation Study provides a long-term vision to guide transportation improvements that will reconnect the Lair Hill neighborhood with the surrounding area. City Council accepted the report and recommendations by Resolution No. 36014 on August 1, 2001.

Study Area

This study area is centered on the west end of the Ross Island Bridge and Naito Parkway between I-405 and Barbur Boulevard. It extends mostly over the north half of the Corbett-Terwilliger-Lair Hill (CTLH) neighborhood.

Study Purpose

Over time, the Lair Hill community has become a crossroads for many of the region's vital transportation links, including I-405, 1-5, and the Ross Island Bridge. As the transportation system grew, no freeway ramps were built in this area; instead, regional traffic was routed along local and collector streets. As a result, the community has been physically split in two and separated from the Willamette River and downtown Portland.

City Council tabled a 1978 South Portland Circulation Study because outer southwest Portland neighborhoods opposed the study's main proposals to reconfigure the Ross Island Bridge ramps and close Naito Parkway to traffic at both Barbur Boulevard and I-405. The study's recommendations were tabled until the Terwilliger Bridge and its access ramps to I-5 could be rebuilt. Once the northbound ramp to I-5 was completed, access to southwest neighborhoods would improve, removing the objections to modifying Naito Parkway and the Ross Island Bridge. The Terwilliger Bridge and ramps were finished in the late 1980s, and the new South Portland Circulation Study was begun in 1997.

Objectives

The study's primary objectives include:

- Stop non-local traffic from using local streets within this neighborhood
- Provide access to the river
- Reunite the street grid

Existing Conditions

Land Use

South Portland is a diverse area of single-family and multifamily housing and commercial uses. Historic buildings are interspersed throughout the area. Offices are located primarily on the north and south portions of the study area. Retail activity is minimal. Although the area is close to the Willamette River, parks and open space are limited.

Transportation

Traffic
Several major travel corridors traverse the area, creating confusing travel patterns that cause traffic congestion. South Portland has some of the highest accident locations in the City (as measured against the number of vehicle miles traveled statewide), including the SW Naito Parkway connection to the Ross Island Bridge and the intersection of SW Kelly and SW Whitaker.

Transit
The area has numerous north-south Tri-Met lines that provide good transit service to downtown Portland. However, the linear nature of major north-south arterials, coupled with the lack of east-west street connections, has resulted in diminished transit service. Most cross-town destinations require riders to transfer downtown. Although transit service on Barbur, Naito Parkway, and Macadam is frequent, residents who do not live adjacent to these routes find access difficult because of inadequate connectivity.

Pedestrians and Bicycles
Pedestrian and bicyclists circulation is difficult. The major arterials and highways that divide the area are hard to cross because they have high traffic and, in some cases, serve as physical barriers. Numerous crossings are unsafe, and bicycle facilities are minimal.

Recommendations

The study recommends the following actions:

- A total rebuild of the Ross Island Bridge ramps
- Changing the character of Naito Parkway from a four-lane, limited-access expressway design to a two-lane neighborhood collector/main street with east-west cross-street intersections, pedestrian/transit improvements, bike lanes, and street trees
- Reconfiguration of the Naito Parkway/Kelly Way intersection from grade-separated to at-grade

All these amenities will reunite the severed halves of the Lair Hill neighborhood, supporting its historic landmark designation.

The study supports transportation policies that encourage the use of multiple modes to increase the person-carrying capacity of the transportation system, yet are sensitive to the unique design features of the community.

Implementation
The project is included in the RTP as part of the Financially Constrained System, but it does not have committed funding. It would cost $28,293,000 million in 1998 dollars to complete the recommended plan.

The next steps toward implementation include additional preliminary and final design engineering that would require two years to complete.

SWAN ISLAND TRAILS ACTION PLAN

Introduction

A Swan Island Pedestrian Plan was identified as a study in the 2002 TSP. The purpose of the study was to "identify pedestrian improvements and implementation strategies on Swan Island and connections on and off Swan Island." The 1998 Pedestrian Master Plan identified the need for a plan for the area. The Swan Island Transportation Management Association (TMA) and PDOT worked with the Swan Island Business Association, the Port of Portland, businesses, residents, and other agencies to develop the Swan Island Trails Action Plan. The plan was accepted by City Council on June 30, 2004 (Resolution No. 36231).

Background

The plan was initiated by the Swan Island TMA in fall, 2003 with funding from the TMA and the River Renaissance project and completed in January, 2004. The mission of the plan was to create a broad partnership of area businesses, residents and institutions to advocate for the Swan Island to River Vision in cooperation with relevant agencies, including the City, Metro, and the Port of Portland.

Swan Island provides a number of valuable assets to the regional and local community including family-wage jobs and access to the Willamette River. Access to and throughout the Island is challenging for pedestrians, bicyclists, and other non-motorized users. The Plan's vision is to create a network of safe and attractive bike/pedestrian routes to and through Swan Island that:

1) improves access to employment and increases recreational opportunities for area residents and employees,
2) fills in missing links in a regional network of trails and bike routes, and
3) enhances the attraction for users with restored and well-maintained habitats and landscapes.

The Swan Island Trails Action Plan examined nine trail connections on and adjacent to Swan Island to improve connectivity and access to employment and the Willamette River.

The Swan Island Trails Action Plan contains five sections: Design Guidelines, Trail Projects, Maintenance Guidelines, Funding, and Opportunities.

Design Guidelines

The Design Guidelines illustrate guidelines for implementing shared use paths, sidewalks, walking trails, ADA access, landscaping and re-vegetation, and treating trails in environmentally sensitive areas. Included are some green street concepts that use infiltration strips and bio-swales.

Trail Projects

The Trail Projects section includes detail on the nine proposed trails on and adjacent to Swan Island. These are:

- Willamette Bluff Trail
- Lagoonside Trail
- Basin Avenue
- Waud Bluff Trail
- Railroad Trail
- Landfill Trail and connections
- River to Lagoon Trail
- North Going Street connections
- North Greeley

Each potential project includes a map of the trail, section drawings, descriptive information about the trail, the type and width of the proposed trail, habitat in the alignment, ownership and issues, and cost estimates. In some cases alternative alignments are included.

Maintenance, Funding and Opportunities

The Maintenance Guidelines outline the various tasks for trail maintenance and a recommended schedule for completion of the tasks. The Funding section outlines various federal, state, and local funding opportunities for trails on Swan Island. The Opportunities section discusses trail opportunities, re-vegetation opportunities, and stormwater treatment opportunities to use in conjunction with trail implementation.

Implementation

The Swan Island TMA is interested in moving four projects forward as their first priority. These are: Willamette Bluff Project (currently on TSP reference list), Waud Bluff Trail, Basin Avenue Improvements, and the Landfill Trail.

TACOMA MAIN STREET PLAN

Introduction

The Tacoma Main Street Plan, managed by PDOT, recommends transportation improvements to enhance the main street character of SE Tacoma. City Council accepted the plan by Resolution No. 36052 on January 23, 2002.

Study Location

The plan focuses primarily on SE Tacoma between the Sellwood Bridge to the west and SE McLoughlin Boulevard to the east. It also considers local street impacts between SE Nehalem to the north and SE Umatilla to the south.

Study Purpose

Traffic impacts on Tacoma are a long-standing livability issue in the Sellwood-Moreland neighborhood. More than 30,000 vehicles travel through the heart of this historic neighborhood every day on their way to the Sellwood Bridge, which is the only bridge crossing between the Ross Island Bridge in downtown Portland and I-205 in Oregon City. Approximately one-third to one-half of this traffic is regional. The street design emphasizes its current role as a through route for vehicles.

Regional, City, and neighborhood policies envision a more pedestrian-friendly, neighborhood-oriented commercial and residential main street function for Tacoma. The planning challenge was to balance the needs for local multi-modal access and circulation with the impacts and needs of the regional traffic the street also serves.

Objectives

With guidance from policy, a community survey, existing conditions information, and input from the first public open house, the project's advisory committee identified the following plan objectives:

- Create a high-quality pedestrian-oriented street. Improve safety, convenience of crossings, and the design of the sidewalk area.

- Support the continued redevelopment of SE Tacoma as a commercial destination that serves the needs of the neighborhood and supports the region's growth management goals. Key issues include on-street parking, traffic, and pedestrian access.

- Reduce the barrier effect of SE Tacoma that divides the neighborhood, and protect the function and character of the surrounding local street network. Key issues include traffic diversion and bicycle and transit access.

Existing Conditions

Land Uses

Existing commercial uses are strongly oriented to SE 13th and SE 17th. A small node of commercial development also exists near the bridgehead. The areas between these three nodes reflect Tacoma's origins as a residential street before the construction of the Sellwood Bridge. The land uses are primarily residential, with a mix of single-family and multifamily dwellings.

Zoning

The zoning along Tacoma supports continued neighborhood-oriented commercial development around the bridgehead node and between 13th and 17th. These areas are zoned storefront commercial (CS). The area between the bridgehead and 13th is zoned for medium-density residential, with a Comprehensive Plan designation that allows for a mix of commercial and residential development in the future. East of 17th, the zoning supports a mix of single-family and multi-family residential development.

Economic Development

The market area assessment for the Tacoma main street area found that the area has a strong market in the surrounding area, enhanced by the regional traffic passing through. In addition, 13th has a regional draw because of its concentration of antique stores. Factors that work against future main street development include the poor quality of the pedestrian environment and potential competition with existing main street areas within the neighborhood, such as the Milwaukie-Bybee area.

Transportation

Traffic

Three pinch points on SE Tacoma affect the flow of traffic through the area. The two-lane Sellwood Bridge constrains the volume of traffic in each direction to 1,800 vehicles per hour. The demand in the p.m. peak hour exceeds this capacity and is expected to grow in the future. Heavy turn movements at the intersections with 13th and 17th also place a strain on the street's capacity. Both intersections are operating above design capacity. These capacity constraints cause increased congestion.

Traffic diversion is a byproduct of congestion, and the local street network is affected by cut-through traffic. Traffic on 17th avoids the left turn at the SE Tacoma intersection by cutting through on SE Linn or SE Marion, local service streets. At 13th, SE Spokane is a favored alternative to congestion at the Tacoma/13th intersection. The McLoughlin Neighborhoods Project has addressed some of these concerns with traffic calming.

Transit

The area is generally well served by transit. Three bus routes connect the area with downtown Portland, Marquam Hill, the Milwaukie Transit Center, and the Rose Quarter Transit Center. One bus shelter is located at the Tacoma/13th intersection, which has the highest passenger activity in the area.

Pedestrians and Bicycles

Tacoma's pedestrian facilities are lacking. The eight-foot sidewalks do not meet minimum standards for basic streetscape elements, such as street trees and comfortable pedestrian passage, associated with vital pedestrian environments. The ban on peak-hour on-street parking removes a buffer for pedestrians from the heavy traffic.

Adequate crossings are also missing along Tacoma. No crosswalks occur between 13th and the bridge, the segment with the highest traffic volumes and speeds.

Tacoma has no dedicated facilities for bicycles. The Bike Master Plan calls for the development of a bike boulevard couplet on Spokane and Umatilla, which run parallel to Tacoma.

Parking

The available supply of on-street parking is regulated by time of day. In the peak traffic hours, on-street parking is restricted between 17th and the bridge in order to create two additional lanes for traffic. These time restrictions create a potential utilization problem; during off-peak hours, motorists tend to avoid parking in the curb lane. The time restrictions in the evening peak hour also coincide with peak on-street parking demand. The lack of full-time parking also restricts the ability to add curb extensions to the roadway.

Recommendations

The planning process considered ten cross-section alternatives. The final recommendation includes the following basic design elements:

- Provide one travel lane in each direction during all hours.
- Provide full-time on-street parking.
- Create gateways at the east and west ends of the Tacoma main street that will also serve as pedestrian refuges.
- Construct curb extension to facilitate pedestrian crossings.
- Implement streetscape design guidelines, including wider sidewalks, street trees, pedestrian-scale street lighting, and bus shelters where ridership warrants.

Transportation Projects

Phase I

Implement basic traffic management elements immediately, including:

- Lane striping
- Parking sign removal and replacement
- Signal timing modifications
- Speed bumps on Spokane and Umatilla, subject to the approval of adjacent property owners

Phase II

Implement all remaining design elements, including:

- Curb extensions and medians along Tacoma
- Spokane and Umatilla bike boulevard project

TRANSPORTATION SYSTEM PLAN FOR THE URBAN POCKETS OF UNINCORPORATED MULTNOMAH COUNTY

[see Chapter 11 for details]

WEST PORTLAND TOWN CENTER TRANSPORTATION PLAN

Introduction

The West Portland Town Center Transportation Plan identifies transportation improvements that support long-term development of a town center in the West Portland area. The plan was completed in December 1997. Although City Council has not formally accepted the plan, some of the projects identified in the plan are incorporated into the TSP. In addition, one of the refinement plans identified in both the RTP and Portland's TSP calls for further study of the Barbur/I-5 corridor, including the West Portland town center area.

Study Location

The West Portland town center includes the area surrounding the intersection of SW Capitol Highway/SW Barbur/I-5. The study area is bounded by SW Brugger/SW Alice to the north, SW Arnold to the south, SW 35th to the east, and SW 50th and I-5 to the west.

Study Purpose

Most of the current impediments to town center-level development in West Portland are transportation related. West Portland is at the crossroads of three major arterials in SW Portland, which complicates access between the arterials, as well as pedestrian access from the surrounding neighborhood into the commercial core. The purpose of the plan is to identify ways to improve connections among the major facilities and overall pedestrian access to and across these facilities.

Existing Conditions

Land Use

West Portland town center is a mix of residential and commercial uses, with open space interspersed. As a result of natural and manmade barriers, these uses occur as distinct sub-districts. The wooded areas associated with the various open spaces serve as natural barriers between adjacent land uses. The wall-like barrier of SW Barbur/I-5 limits connections between uses.

Most of the existing land use designations do not support a town center designation because they do not ensure a mixture of pedestrian-oriented activities.

Economic Development

SW Barbur's proximity to I-5 is a constraint to redevelopment, particularly for housing. Opportunities for substantial mixed-use redevelopment occur in underutilized sites, but may require relocating existing businesses or reconfiguring development around existing structures.

Traffic congestion and the lack of pedestrian amenities on SW Barbur restrict the linkages required for optimum development of a mixed-use town center. Similarly, topographic constraints are a significant barrier to future development.

Transportation

Traffic
Regional traffic dominates the town center area. The I-5 access ramps in the heart of the area draw traffic from outside the town center. Topographic and other physical constraints push regionally-oriented traffic onto district streets such as Capitol, Taylors Ferry, and Huber. As a result, peak-hour operating conditions at key intersections are generally poor. These conditions also cause access problems from these streets to adjacent land uses.

Transit
Four transit routes serve the Barbur Transit Center. Boardings from the transit center average 800-900 persons per day. The 400-space park-and-ride lot is at capacity almost daily.

Pedestrians and Bicycles
Pedestrian facilities in the area are inadequate. The sidewalks are discontinuous, and crosswalks do not meet City standards for spacing. The combination of I-5 and Barbur creates an almost impenetrable barrier for pedestrians, with only two crossing points: at Capitol and the pedestrian bridge at the transit center.

Bicycle facilities are virtually non-existent, with the exception of a bike lane planned for Barbur.

Recommendations

The plan recommends a number of major changes to the I-5 connection with Barbur Boulevard to reduce the impact of regional through-traffic, as well as new local street connections to improve access across I-5 north and south of Capitol.

Most of the plan's recommendations require additional study. A TSP refinement plan (see Chapter 4) will study the Barbur and I-5 corridor. The refinement plan will evaluate both land use and appropriate transportation changes for the corridor, which includes the West Portland town center area.

2004 SOUTH/NORTH LAND USE FINAL ORDER AMENDMENT

Introduction

The 2004 South/North Land Use Final Order (LUFO) Amendment amends earlier LUFOs for the South/North Light Rail Project. 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 locations and deletion of light rail transit from Milwaukie to the Clackamas Regional Center. The Metro Council adopted the 2004 South/North LUFO Amendment by Resolution No. 03-3372. City Council action occurred on May 19, 2004 with the adoption of Resolution No. 36216.

Elements of the Amendment

I-205 Light Rail Transit

The I-205 LRT Project extends south from the Gateway transit center station along an LRT route to be located primarily with 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), 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 included a park-and-ride lot.

In addition, the I-205 Project will increase the number of trains in downtown Portland to a point where the capacity of the downtown cross-mall is exceeded. The Project includes light rail on the Transit Mall between the Steel Bridge and Portland State University (PSU). 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 is moved to a location on NW 6th Avenue between Glisan and Irving Streets.

- The location of proposed stations between Burnside and NW Couch Streets is moved 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 5th and SW 6th Avenues at Madison and Jefferson have been changed to allow stations on SW 5th and 6th within the existing street right-of-way between SW Main and Columbia Streets on SW 6th and between SW Madison and Columbia on SW 5th.
- The proposed light rail route has been revised to include an alternative that extends south on SW 5th and SW 6th Avenues south of SW Montgomery Street to a terminus at PSU at SW Lincoln. This extension includes a pair of stations on SW 5th and 6th Avenues between SW Mill and Montgomery Streets and a second set of stations on SW 5th and 6th Avenues between SW College and Jackson Streets.

Milwaukie Light Rail Transit

The 2004 South/North LUFO Amendment deletes the LRT segment from the 1998 LUFO from Milwaukie to Clackamas Regional Center and makes the following changes to the existing downtown Portland to the 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 5th 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 the LUFO.) 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 SW 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 the City of Milwaukie and included in the South Corridor Locally Preferred Alternative. Once solutions are identified and there is agreement to proceed, an amendment to this LUFO will be addressed.
- Designates a study area at the Lake Road terminus south of Washington Street in Milwaukie and north and northeast of McLoughlin Boulevard.

Interstate MAX

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 grant 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, so that the southbound platform extends south from N Overlook Boulevard and the northbound platform extends north from N Fremont Street.
- Prescott Station: the N 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 N Prescott Street along N Interstate Avenue to N Skidmore Street.
- The Kenton Station was shifted from the center to the east side of N Interstate Avenue.

Portland Mall Revitalization Conceptual Design Report

The Portland Mall Revitalization Conceptual Design Report (CDR) was developed to address three key issues: an overall revitalization strategy, the locations of light rail stations, and the

configuration of the stations. The priorities established for the Portland Mall Revitalization Project were to:

1. Reestablish the Mall as a multi-modal spine through downtown with a vibrant and interactive streetscape.
2. Establish a unique sense of place and arrival by celebrating the various "urban rooms" of the Mall and by treating each Mall station as a special civic space.
3. Make a direct link between public infrastructure improvements and new development.
4. Reestablish the Mall as a premier public space.
5. Design the Portland Mall to be flexible enough to adapt to changing conditions.

The project objectives were to:

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

Recommendations

The recommendations of the Report include:

Urban Design Vision and Concept

The changes to the Mall should enhance the functional quality, ease the maintenance burden and reflect the character variations of the "urban rooms" along the length of the Mall. Develop the station areas so that each becomes a "station as place."

Transit Operations and Transportation Strategy

Putting light rail on the Mall requires a careful re-balancing of the users of the Mall.
Study options for improving downtown bus service
Reduce bus noise and air quality impacts
Preserve and enhance the high quality pedestrian environment of the Mall
Preserve good downtown bicycle access
Maximize flexibility and consider improving auto access

Development Strategy

The goal is to create a direct link between the planning and design of the Mall and the implementation of development strategies. The objectives are:

- Create a shared commitment to the Mall among private owners and public agencies
- Encourage infill development opportunities that leverage new investment
- Enhance the relationship between ground floor uses and public space to create a better business environment
- Use the "station as place" concept to focus development
- Provide a safe and accessible retail environment

Mall Management Strategy

A coordinated management of the Mall is essential to the revitalization effort. A Mall Management entity is recommended to take responsibility for the maintenance and operation of the streets and to assist with coordinating development efforts.

Station Locations

The report recommends that all station platforms be located on the right side of the street at the following locations:

- SW Jackson/College
- SW Montgomery/Mill (consideration is being given to move the 6th Avenue station at SW Montgomery/Mill Streets to SW Harrison/Montgomery to reduce access impacts and streetcar conflicts)
- SW Jefferson/Madison
- SW Yamhill/Morrison (Pioneer Square/Courthouse)
- SW Oak/Pine (US Bank Plaza)
- NW Couch/Davis
- NW Glisan/Hoyt (Union Station)

Multi-modal Access

The recommendations include right side platforms and a multi-modal travel lane along the entire length of the Mall to improve access for autos, service vehicles, bicycles, and other modes of travel.

Mall Configuration

North Mall Configuration

The North Mall will include buses travelling on the light rail trackway except for the block between Davis and Everett. Autos and bicycles travel in the left lane and turning movements remain as they are currently.

Central Mall Configuration

Between SW Madison and Burnside buses and light rail will operate in the two right lanes and autos in the left lane. Light rail will travel in the center lane until approaching station blocks when it transitions over to a right side platform. Buses travel in the center lane through non-station blocks and pull into the right lane at their designated stops.

South Mall Configuration

On 6th Avenue between SW Madison and SW Jackson buses and light rail operate in the two right lanes. There will be two auto lanes on the left side of Clay Street to accommodate traffic coming off of I-405. At SW Clay, one lane forces a left turn and one lane continues north. On 5th Avenue buses and light rail operate in the two right lanes. One auto lane will travel southbound until College Street, after which autos will have the left lane and share two

middle lanes with a low volume of buses. Streetcars share the auto lane with autos for two blocks between SW Market and Montgomery.

Vehicle Pullouts

The report includes "Vehicle Pullout Guidelines" which would allow four vehicle pullouts between SW Alder and W Burnside with future consideration of two additional pullouts. The pullouts would be for service delivery and drop off only. No short- term parking would be allowed.

During preliminary and final engineering additional issues to be resolved include: street trees, paving materials, public art, special lighting, utility relocations, transit shelters, intersection design, street lighting, street furnishings, and vehicle turnout design.

2040 CENTERS TRANSPORTATION STRATEGIES AND MODE SPLIT TARGETS PROJECT

Introduction

State and regional requirements for Portland's TSP Plan include the development of performance measures and benchmarks to monitor progress in implementing the plan over 20 years. The 2040 Centers Transportation Strategies and Mode Split Targets project, funded by a Transportation Growth Management grant, was designed to help develop the measures and benchmarks, specifically for town centers and light rail station communities in the City of Portland, as designated by the 2040 Growth Concept.

Study Location

The project focuses on three town centers (Hillsdale, St. Johns, West Portland) and four eastside MAX light rail station communities (60th, 82nd, 122nd, and 148th). Other planning processes address the remaining centers in Portland (Gateway regional center, Hollywood town center and Lents town center).

The boundaries for each area were developed in conjunction with the City's Comprehensive Plan Update Project, which ensured compliance with Metro's Urban Growth Management Functional Plan (UGMFP). Various methodologies were used to determine area boundaries, reflecting the various levels of planning that had been undertaken in each area.

Study Purpose

The project has the following objectives:

- Development of quantitative measures for transportation and land use characteristics that could be applied to the TSP requirements
- Assignment of non-single occupancy vehicle (SOV) mode split targets for each study area
- Identification of strategies for increasing the non-SOV mode split in these areas

Elements

The project has three essential work elements: analysis of Metro's travel forecast data, development of the performance measures, and assessment of the selected study areas.

Travel Forecast Model Assessment

Metro's travel forecast model was the primary data resource for the baseline mode split information in each of the seven study areas. The 1,260 travel analysis zones were aggregated into a 105-zone system to approximate the boundaries of the 2040 design types. Using origin and destination data from the travel forecast model, baseline mode splits for 1994 base year and 2020 future year were calculated and compared against the UGMFP mode split targets for 2040 design types.

The analysis showed that the overall non-SOV mode split experienced a relatively small increase between the 1994 base year and the 2020 future year. Most of the study areas are at or near the 45 percent target established by the UGMFP for the 2020 future year. The shared ride element of the non-SOV mode split garnered the largest percentage of trips in both the base and future years. In 2020, however, the transit, walk, and bicycle modes showed substantial growth, while the mode share for shared rides declined. The rationale for this adjustment is that the land use and transportation assumptions in the 2020 model represent an optimistic view of the region's investment in infrastructure improvements and land use practices.

Additional findings from the travel forecast model include:

- 'Homebased other trips' account for the largest percentage of person trips in the model, but the overall mode shares for transit, walking, and bicycling are very low.

- Study areas exhibiting a mature pedestrian network and good street connectivity had higher mode shares for transit use, walking and bicycling.

- SOV reduction strategies have traditionally focused on the work trip, resulting in relatively higher mode shares for alternative modes in this category.

- In 2020, modeled transit network improvements increased transit mode split from between 1 percent and 6 percent, depending on the study area.

Development of the Descriptors

The development of performance measures, called descriptors in the project, relied on substantial research, including a literature review, expert interviews, and a work session with the TSP technical advisory committee. The objective was to identify measures predictive of a higher level of walking, bicycling, and transit use in a given area.

The research resulted in the identification of categorical elements and associated measures, including density, diversity, urban design, transit service, transportation demand management programs, parking management, and demographics. These descriptors were then applied to the seven study areas to assess current ability to meet the 2020 non-SOV mode split target and identify improvements to help each center achieve the desired target.

Assessment of Study Areas

Case studies were developed for each of the seven study areas to analyze the descriptors and identify improvements needed to affect non-SOV mode split. Each case study included a study area profile depicting land use, transportation, and demographics; baseline values for each of the descriptors; and analysis of current and future travel behavior based on the travel forecast model.

An overall assessment of the study areas found:

- Most of the centers have zoning and comprehensive plan designations that support the desired mix of uses and density.
- The level of pedestrian infrastructure and street connectivity varies based on the age of the center. Study areas built out in the past 30 years are more likely to have missing sidewalks, unsafe crossings, and a low street connectivity ratio.
- The majority of the planned bicycle network in each study area has yet to be constructed.
- Study areas that developed in the past 30 years have a higher ratio of vehicle parking to commercial building space than older areas. In general, however, there was ample free surface parking.
- In many study areas, the on-street parking restrictions conflict with the transit- and pedestrian-friendly commercial zoning.

Recommendations

The project identifies a target non-SOV mode split, as well as programmatic strategies and capital improvements to help achieve the desired mode split over the 20-year timeframe.

The project recommendations include:

- Adopt a 45 percent non-SOV mode split target for town centers and station community design types.
- Prepare a development plan for each study area that implements the desired growth and form of commercial and residential uses.
- Evaluate zoning and Comprehensive Plan designations for study areas not included in recent community planning efforts to ensure land use regulations are compatible with desired character.
- Coordinate with Tri-Met to implement service improvements on regional and primary routes to levels identified in the RTP.
- Work with Tri-Met to develop a secondary transit network for each study area to improve accessibility between the center and the surrounding community.
- Create a master street plan for each study area that identifies new street connections and accessways.
- Complete the pedestrian and bicycle networks.
- Adopt pedestrian districts in the 60th, 82nd and 148th station communities and expand the pedestrian district boundaries in the 122nd station community.

- Identify north-south bicycle connections to the 60th and 82nd station communities and provide secure, long-term bicycle parking at all the light rail stations.

- Increase opportunities for on-street parking in the commercial districts.

- Evaluate potential for creating transportation management associations in the study areas to reduce SOV commute trips.