Powell-Division Transit and Development Project

Existing Conditions Reports

March 7, 2014

City of Portland

City of Gresham

Metro

Powell-Division Transit and Development Project

Existing Conditions Report
City of Portland

February 2014

Existing Conditions Report (City of Portland)

Introduction

Recent regional transportation studies, including Metro's Regional High Capacity Transit System Plan and the East Metro Connections Plan, a 2-year effort in east Multnomah County that that identified specific transportation, community, economic development projects and their phasing over the next 20 years, identify the Powell-Division corridor as an area with a significant need for improved transit.

Project Purpose

The Powell-Division Transit and Development Project seeks to bring investment to Southeast Portland, East Portland, and Gresham, and make it easier for people to get around by increasing public transit options in the Powell Boulevard-Division Street corridor, from inner Southeast Portland to Portland Community College's Cascade Campus on SE 82nd Avenue and Division Street all the way to Gresham and Mount Hood Community College.

Between now and 2015, the community, including representatives from organizations such as Catholic Charities, East Portland Neighborhood Office and OPAL Environmental Justice Oregon; and agency staff from the Cities of Portland and Gresham, Metro, TriMet, Multnomah County and ODOT, will work together to create a plan to improve the public transit connection between Portland and Gresham and support economic development at key places along the route.

Project Outcomes

Specifically, this project will result in:

1. Identification of a preferred high capacity transit route between Portland's Central City, Portland Community College Cascade Campus, downtown Gresham and Mount Hood Community College, among other major destinations.

2. Identification of the most appropriate high capacity transit mode for the route. Options include bus rapid transit, light rail or streetcar.

3. Identification of development nodes.

4. An action plan and capital projects needed to support high capacity transit and community development.

Report Purpose

The intent of the document is to provide a snapshot of the conditions within the study area. This information will be used to guide decisions about where to locate the new high capacity transit service, where to encourage development, where to preserve existing community places and where and when programs to help reduce gentrification and displacement are needed.

Specifically, this report describes demographic conditions, such as household size and the race/ethnicity and age of people who live in the study area. It also describes development patterns, which includes things like common building types and building age; regulations that apply in the project area; identifies major employers and institutions that many people need to travel to and from; environmental conditions like watershed health; and identifies areas that may be at risk of gentrification.

This document complements the existing conditions report prepared by the City of Gresham. Together, they form the existing conditions for land use for the project area. A separate document,

prepared by Metro, describes current transportation conditions in the corridor. Together, these documents make up a compendium of the project area's land use and transportation existing conditions.

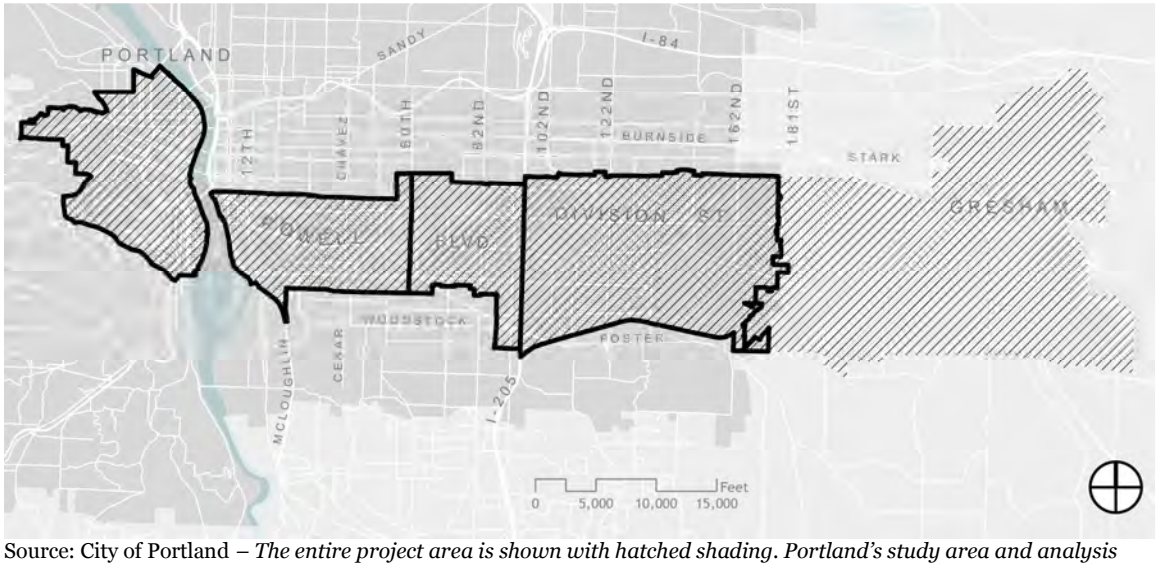
Project Area and Study Area

The project area generally extends along the east-west axis of Powell Boulevard and Division Street, from central city Portland to Gresham, and also including a portion of the southeastern edge of Troutdale. The City of Portland study area, which is addressed in this report, stretches from downtown Portland to the eastern city limit around 174th Avenue.

Given the breadth of the project area and diversity of conditions along Powell Boulevard and Division Street within Portland city limits, information in this report is provided, to the greatest extent possible, in four smaller geographies, shown from left to right in Figure 1.

1. Central City
2. Inner Portland
3. Jade District
4. East Portland

Figure 1. Location of Study Area in Portland Relative to Project Area



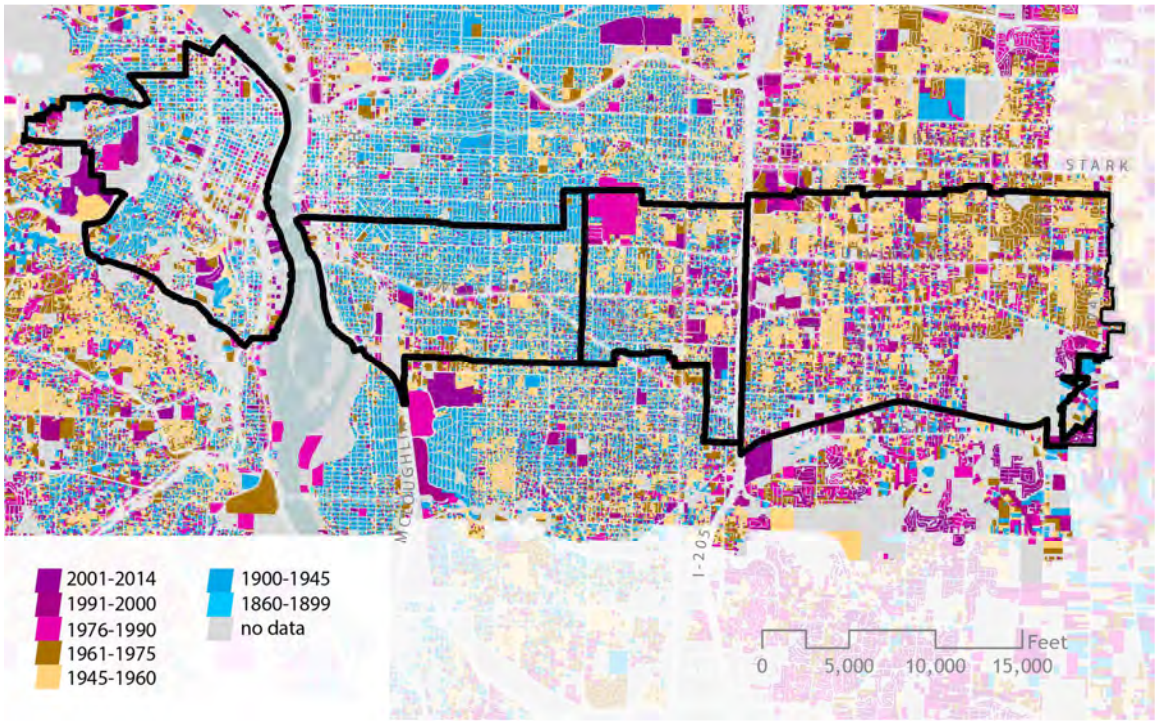
Source: City of Portland – *The entire project area is shown with hatched shading. Portland's study area and analysis geographies are outlined in black.*

Land Use

The study area covers a nearly 10 mile long section through the middle of the east side of Portland in addition to the Central City, where a potential new line would link to multiple regional transit lines. The area includes a variety of residential, commercial and industrial districts and a varied development history. Brief summaries of the land use history and current land use conditions, by this reports four study area geographies: Central City, Inner Portland, Jade District and East Portland are provided below.

The Year Built map, Figure 2, provides a quick view of when properties in the study area were developed. The map shows the era in which buildings on the property constructed.

Figure 2. Year Built



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Central City

In this analysis, the Central City includes the area commonly recognized as downtown Portland, over to OHSU and South Waterfront on the south end and up to Goose Hollow, Washington Park, Jeld-Wen field and West Hills in northwest Portland.

Development in the Central City reflects its historic and current role as the state and region's economic center and major transit hub. In some areas of the Central City, there are historic buildings dating back Portland's urban beginnings. However, there are also significant portions of downtown that were built and rebuilt in the 20th and 21st centuries.

Today, the Central City consists of a mix of retail, offices, educational and cultural institutions, and higher-density housing. The West Hills include Marquam Hill, home to Oregon Health Sciences University (OHSU). Some multi-family housing is also located, there, adjacent to OHSU. The rest of the West Hills includes mostly single-residential neighborhoods, but north of Highway 26, also contains a portion of Washington Park and other hillside residential areas.

For detailed information on land use and development in Portland's Central City, please see the Central City 2035 Background Reports, which are available at:
http://www.portlandoregon.gov/bps/52119

Inner Portland
Inner Portland, within the study area, includes areas south of Powell Boulevard and north of Division Street from the Willamette River to SE 60th Avenue. Land use and development in this area reflects its Streetcar Era origins. Most of this area was developed prior to 1945.

Many lots in this area were originally platted in conjunction with the late 19th- and early 20th Century expansion of the streetcar system. Streets where streetcar lines were located sometimes include "main street" business districts, where streets are lined by clusters of storefront buildings directly abutting the sidewalks. Most of the urban fabric of the inner neighborhoods is characterized by a consistent pattern of rectilinear blocks, with residential lots approximately 50'-wide by 100'-deep (blocks with narrower lots and closely-set houses are common in the innermost neighborhoods that originally developed during the Victorian era). This original platting provides a fine-grain pattern of relatively small-scale buildings, the majority of which are detached houses.

Inner Portland consists of a mixed but fairly ordered and interconnected set of uses. Industrial uses are prominent near the river north of Powell and adjacent to the rail corridor south of Powell Boulevard. Powell Boulevard from the river to around 50th/52nd Ave consists primarily of automobile-oriented strip commercial. Division Street, along the same stretch, is notably more of a mix of main-street commercial and mix-used buildings— one to three floors of housing above ground floor business.

Multifamily structures are most frequently found along or near the former streetcar lines or in neighborhoods close to Downtown, and were often built on individual residential lots, continuing the established development pattern. In the adjacent residential areas, single-family residences on smaller lots are the main housing type in this section, but some multi-family housing is mixed into the neighborhood fabric, notably below Powell in the vicinity of SE Cesar Chavez and Gladstone.

For more information, please see the Urban Form Background Report, prepared for the Comprehensive Plan, which is available at:
http://www.portlandonline.com/portlandplan/index.cfm?c=51427

Jade District
The Jade District, for the purposes of this study, includes an area roughly bounded by Powell Boulevard on the south and Division Street on the north and from SE 60th Avenue to SE 92nd Avenue. The heart of the Jade District, 82nd Avenue, also is the marker of transition from Inner Portland to East Portland. The street is lined primarily with strip commercial uses, as are Powell and Division from here to Interstate-205. Between the Powell and Division, newer multi-family housing is mixing in with older single-family residences.

From the 50s/60s to 82nd Avenue, the corridor's character begins to shift. Here, Division is flanked primarily by multi-family housing interjected by two colleges—Warner Pacific College and Portland Community College. On Powell Boulevard, the stretch contains a mix of auto-oriented commercial and multi-family housing. On the south side of the street, a set of remnant properties have been turned into parking lots. Between Powell and Division, the single-family housing remains the main type of use.

East Portland
In contrast to the Central City and Inner Portland, most of East Portland developed after 1945. Here, much of the existing urban fabric is based the post-war single-family housing construction boom and the increasing preference for getting around in a private automobile

Land use and development in East Portland, which in this study generally includes land east of I-205, is highly variable. It is reflective of incremental development that occurred in different development eras, each period leaving its own distinct imprint on the area's street, block and lot structure. These areas were largely outside the city boundaries until the 1980s, before which development was often not provided with urban infrastructure such as sidewalks and sewers.

The major streets in East Portland began as rural roads, between which agricultural holdings were urbanized in a patchwork manner over time, sometimes with only limited connectivity between different developments. The area remains dependent on the widely-spaced, once rural roads for through-street connections. The area includes some clusters of blocks that are continuations of the 200'-deep block structure of the inner neighborhoods.

During the Streetcar Era, the Springwater interurban line near Johnson Creek provided access that resulted in the creation of large "junior acre" lots (sometimes as deep as 400'), often built with small bungalows. Later, car access enabled more households larger-lot living. At that time, shopping centers with large parking lots, rather than compact "main streets" became the norm and cul-de-sacs, which offered respite from increasing car traffic, quickly became part of the area's underlying urban pattern.

In East Portland, Division Street is widens to a multi-lane major arterial. The land uses are primarily a mix of single-story auto-oriented commercial businesses; a variety of residential uses, from single-family homes, duplexes, and town homes to garden apartments and manufactured homes; and a few newer office buildings and multi-family housing trending towards pedestrian-oriented design.

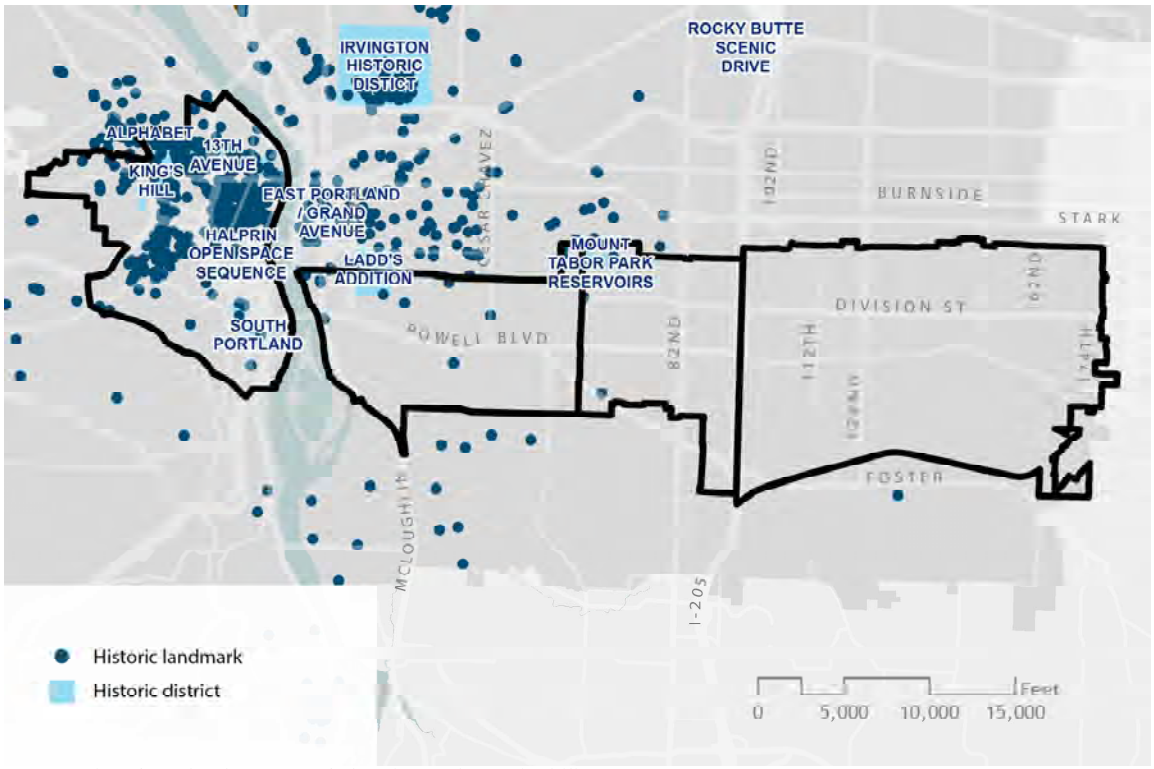
Powell Boulevard, in contrast, is noticeably narrower than Division Street. The street is typically consists of two travel lanes with an occasional left-turn lane, striped bike lanes, and characteristically few and far between sidewalks. Where they do exist, typically near commercial crossroads and along isolated newer stretches of development, they are no more than a couple blocks long, tend to be on just one side of the street, and are noticeably isolated and rarely connect to another segment of sidewalk. The land uses on this stretch are primarily a mix of residential, ranging from single-family houses to garden apartments, townhomes to manufactured homes. Commercial uses are concentrated typically near major intersections and sparsely scattered and intermixed along the whole stretch. Altogether, including the many stands of trees visible on this stretch of roadway, the Powell Boulevard travel experience here feels more like a rural highway than urban arterial.

For more information and land use and development in Portland, please see the Urban Form Background Report, prepared for the Comprehensive Plan, which is available at: http://www.portlandonline.com/portlandplan/index.cfm?c=51427

Historic Resources

As suggested by the timing of development described in the preceding sections, most of the acknowledged historic resources in the study area are located in the Central City and Inner Portland areas. This is mainly the result of the timing of development and redevelopment of Portland. However, more buildings and places in East Portland may become eligible for historic or landmark status. In 2009 and 2011, the City of Portland produced *The East Portland Historical Overview and Historic Preservation Study and Modern Historic Resources of East Portland: A Reconnaissance Survey*. These studies highlight areas in East Portland that may be studied to identify additional resources.

Figure 3. Historic Landmarks and Districts



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

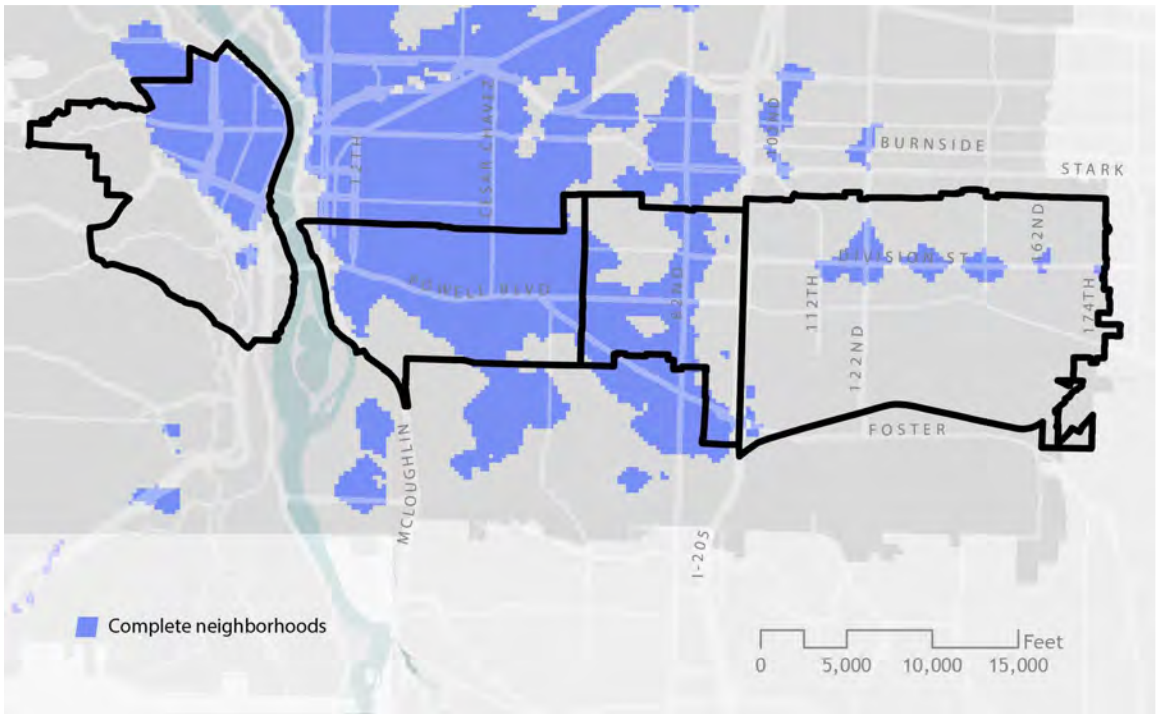
Healthy Connected Neighborhoods
Through the Portland Plan, in 2012 the City of Portland resolved to improve human and environmental health by creating safe and connected neighborhoods. It also resolved to encourage active transportation, integrate nature into neighborhoods, enhance watershed health and provide access to services and destinations, locally and across the city.

Healthy connected neighborhoods are places that support the health and well-being of all Portlanders. They are parts of the city where people of all ages and abilities have safe and convenient access to more of the goods and services needed in daily life — grocery stores, schools, libraries, parks and gathering places — reachable on foot or by bike. They are well connected to jobs and the rest of the city by transit. They have a variety of housing types and prices so households of different sizes and incomes have more options.

In service to this effort and to provide a factual basis for understanding where healthy, complete and connected neighborhoods connected people to goods, services and nature, Portland developed the Complete Communities Index. The index showed that residents in the Central City and Inner Portland neighborhoods had markedly better access to services than residents in the east and west parts of the city. It also showed that, today, only about half of all Portlanders live in places with convenient and safe, walkable access to services. Most residents with good access to services live in the Central City and in Portland's inner neighborhoods. With the exception of the Central City, which has an extremely diverse economic profile, many of those with greater access to services in and around where they live are higher income Portlanders. Often it is lower income Portlanders and Portlanders of color who are not able to live in healthy, connected neighborhoods. Outside of limited areas along SE Division Street and 82nd Avenue, most East Portland residents do not live in healthy connected neighborhoods.

The Complete Neighborhoods map below shows the locations that provide the greatest level of access to services. These are areas with complete sidewalk networks, parks and basic commercial services, like grocery stores, within a safe and walkable distance.

Figure 4. Complete Neighborhoods



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Increasing access to services is a City of Portland goal. Increased access to services comes in the form of both public and private investment. These investments, which can come in the form of new sidewalks and streetscapes, business development and building improvements, can often increase a neighborhood's attractiveness. Increased attractiveness and better services intended to benefit existing residents can also, and have often, caused problems for existing residents. Increased neighborhood attractiveness can lead to risin were g property values and the involuntary displacement of residents and businesses as the result of rising rents.

Portland's experience of gentrification and displacement has racial dimensions. In the past, in Northeast Portland, African-Americans were segregated and the neighborhood was redlined, or denied access to housing loans. Large public investments, such as the construction of the I-5 freeways and Legacy Emanuel Hospital, including demolitions of housing and commercial buildings, caused displacement and physically split African-American communities.

More recently, public policies were adopted to improve inner North and Northeast Portland. As these areas became more desirable to higher income buyers and property values increased, many African-American residents and businesses were displaced. While some community institutions remain in place, many long-time residents or people who grew up in the neighborhood can no longer afford to live there.

Figure 5, below, shows where in the study area households are more vulnerable to displacement.

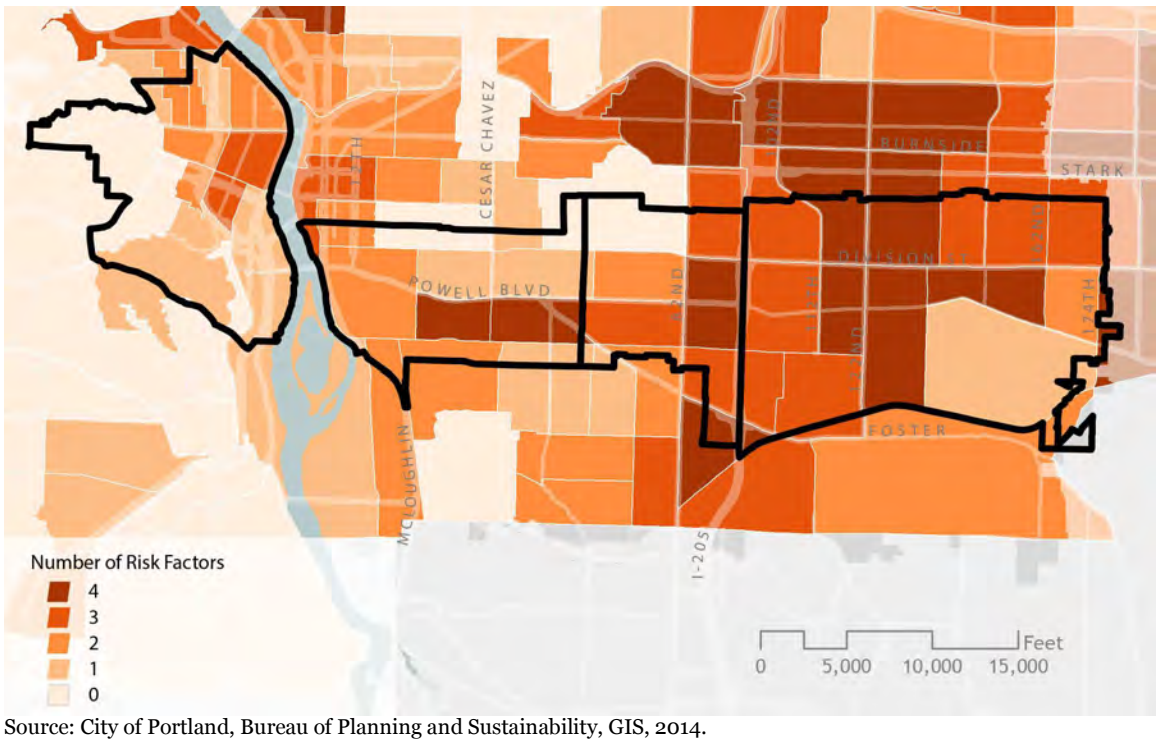
The vulnerability assessment is based on four risk factor thresholds. The factors include:

- Renters are equal to or make up more than 44 percent of the occupied households.
- Communities of color are equal to or make up more than 26 percent of whole population.
- Families at or below 80 percent of median family income are equal to or greater than 47 percent of all families.
- Population age 25 years or more without a bachelor's degree is equal to or more than 58 percent.

The more factors that are true about a census tract, the more vulnerable households are to displacement. On the map, the darker shades represent more risk factors; the lighter tones fewer risk factors.

Among the sub-areas, the number of census tracts increases in proportion to distance east of the downtown. In the Central City, most census tracts have relatively few risk factors. Only two, near Portland University and in the vicinity south of Burnside, have 3 risk factors. In inner Portland, three census tracts just below Powell in the Cesar Chavez vicinity have 4 risk factors. In the Jade District, five areas around of 82nd Avenue have 3 or 4 risk factors. In East Portland, all but two census tracts have 3 or 4 risk factors.

Figure 5. Households Vulnerable to Displacement, 2010



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Overall, these areas highlight the locations where it will be particularly important to evaluate the potential effects of investments and new development. And where it is important to develop tools and programs to help reduce and mitigate negative effects.

Currently, the City of Portland and the Portland Development Commission have a program called the Neighborhood Prosperity Initiative (NPI), which aims to increase neighborhood business district economic competitiveness. The program includes six focus areas, two of which are in the Powell-Division Transit and Development Project study area: Jade District, along 82nd Avenue between Powell and Division and Division-Midway, which is along SE Division Street between 117th and 148th Avenues. For a map of these areas and existing economic conditions, please see the Employment section of this report or visit the PDC website: http://www.pdc.us/for-businesses/business-district-programs-support/neighborhood-prosperity.aspx

Zoning

Zoning designations regulate the land use for each site and also the size, placement, height and setback of the building. Unlike many other cities, the City of Portland allows residential and mixed-use development in commercial zones. The city also sets density limits by allowable height and floor area rather than a set number of residential units. Zoning within the study area varies throughout. The study area contains all 27 zoning designations of the city in five main zoning categories. In addition to the 27 zoning designations, the Powell Boulevard Special Setback also applies to a significant portion of the study area.

Summaries of the primary zoning characteristics in each of the four study area geographies, as well as summaries of the locations of groups of zones are noted below. A summary of the Powell Boulevard Special Setback is also provided.

Zoning by Geography

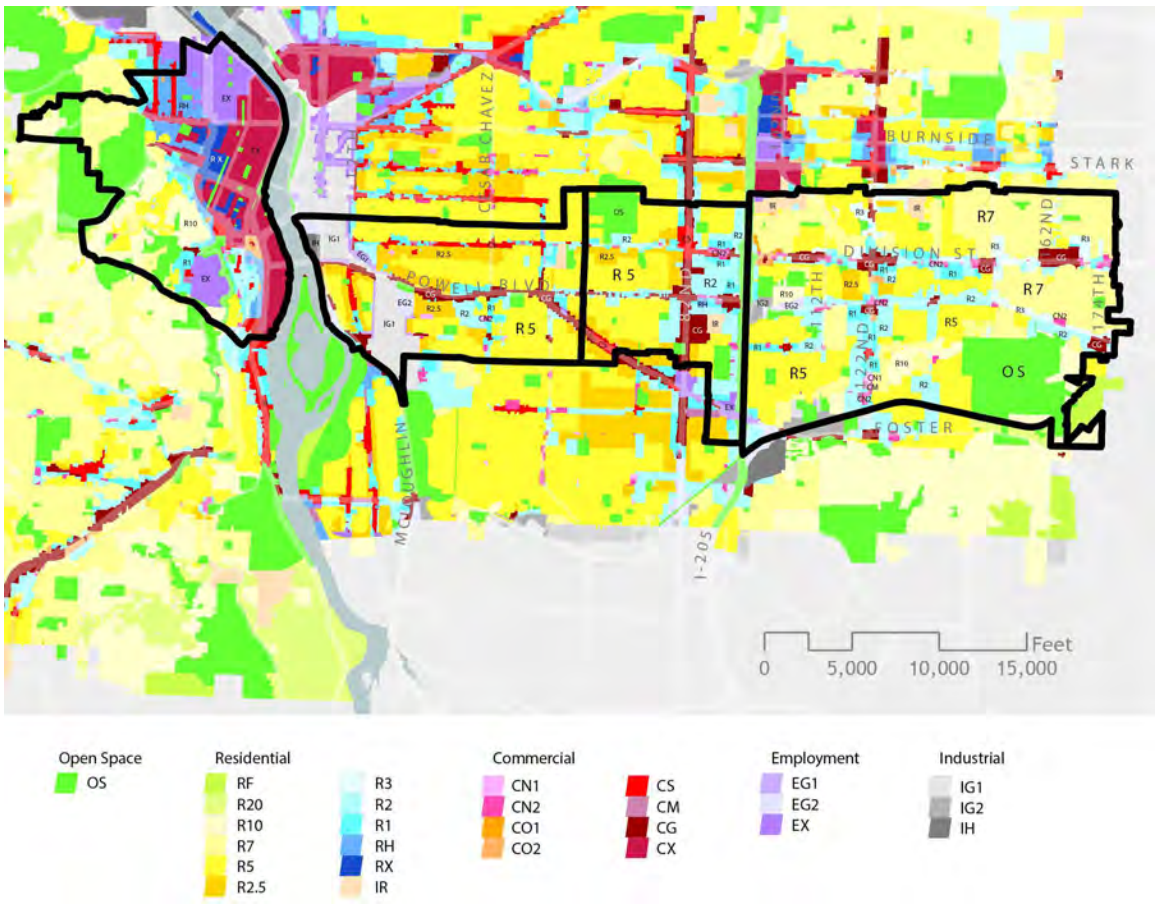
Central City – Zoning in the Central City, west of the Willamette River, includes significant amounts of Central Employment (EX), Central Commercial (CX) and Central Multi-Dwelling Residential (RX). All 784 acres of Central Commercial (CX) is located in the Central City. Nearly 600 acres are located in the Central City sub-area, which includes Washington Park.

Inner Portland – Zoning patterns in this area follow historical development patterns with mixed use zoning (commercial) on main streets, with mainly single-family residential zoning (primarily R-5) in the areas between main streets. Notable exceptions to this pattern can be found in the areas closest to the Willamette River and rail lines, where a significant number of parcels are industrially-zoned.

Jade District – Zoning patterns in this area, between the western boundary and 82nd Avenue, follow the patterns established in Inner Portland. From 82nd Avenue to the eastern boundary, the zoning intensifies. Commercial zoning along 82nd Avenue is typically deeper and the lots are larger than along the Inner Portland main streets and much of the residential areas is multi-family (R-2).

East Portland – Zoning in East Portland is more varied than in other portions of the study area. East Portland includes significant multi-family zoning (R-1, R-2 and R-3) along the 122nd Avenue corridor, among other places; pockets of lower density residential zoning near the Gresham border and in areas like Johnson Creek. The Gateway area has zoning similar to the Central City and it is a designated Regional Center.

Figure 6. Zoning Designations



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Zoning Distribution by Designation

Open Space – There are more than 1,800 acres of Open Space land in the study area, third most behind single-family dwelling zones R5 and R7. Nearly 600 acres are located in the Central City sub-area and 860 acres in East Portland. The study area includes multiple parks, including Powell Butte and portions of Washington Park.

Residential - Of the residential zoning designations, Single-dwelling zones are the most prominent, especially R-5, consisting of over 3,700 acres. The R-7 zone covers the single most area by sub-area, more than 1,700 acres in East Portland. Low- to medium-density multi-dwelling residential (R-3, R-2), are also mostly located in East Portland. Medium-density, multi-family dwelling zone, R-1, is Low-density/larger-lot residential zone (R-10) are only found in the Central City (about 400 acres)—in the hillside residential areas—and East Portland (about 330 acres).

Employment - Employment lands (EG1, EG2, EX) are located primarily in the Central City—nearly all Central Employment (EX)--and Inner Portland—making up most of EG1 and EG2 lands.

Industrial - Of the industrial lands, more than eighty percent—about 360 acres—is located in Inner Portland. About 70-plus acres, mostly IG2, are located in East Portland.

Commercial - Commercial zoning pattern vary across the sub-areas. Of the zones with more than 100 acres among all the sub-areas, a few notable patterns are observed.

General Commercial (CG) is fairly evenly split among Inner Portland, the Jade District, and East Portland—about 200 plus or minus acres each—and less than ten acres in the Central City. In contrast, Storefront Commercial (CS) is fairly evenly split between Central City, Inner Portland, and the Jade District—about 70 acres plus or minus—and only 11 acres located in East Portland.

Neighborhood Commercial – Of the 120 acres of Neighborhood Commercial (CN2) that allows for a smaller building footprint on the land, 80 acres of it is in East Portland.

Central Commercial – All 784 acres of Central Commercial (CX) is located in the Central City.

Figure 7. Zoning Acreage by Sub-Area

Open Space and Residential Zones

	CG	CM	CS	CN1	CN2	CO1	CO2	CX	EG1	EG2	EX	IG1	IG2	IH	IR
Central City	8	7	77	1	10		24	784	3		417	3			
Inner Portland	179	9	68	10	7	1			49	72	13	341		25	20
Jade District	208	12	65	0	24	3				2	31				24
East Portland	187	13	11	8	79	10	31		2	47	15	14	62		94
Total	582	41	221	20	119	14	55	784	54	120	475	358	62	25	137

Commercial and Industrial Zones

	OS	RF	R20	R10	R7	R5	R2.5	R3	R2	R1	RH	RX
Central City	579	5	23	404	267	185	1		102	152	238	145
Inner Portland	66				2	1,263	378		140	154	0	2
Jade District	357					713	243		396	120	6	
East Portland	860	0	0	327	1,743	1,552	64	250	662	236		
Total	1,861	5	24	731	2,013	3,712	686	250	1,299	662	244	147

Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Powell Boulevard Special Setback

In 1979, the City of Portland adopted the Powell Boulevard Special Setback. It is a special setback for development along Powell Blvd.. from Ross Island Bridge to SE 50th Ave. The special setback requires a setback of ten feet from the property line for all new construction along Powell Blvd. for the purpose of providing light, air, driver sight distance, pedestrian safety and space for street tree growth. The special setback remains in effect.

In 1984, the City of Portland adopted a special zone, previously known as the "Y Powell Boulevard, Phase II Land Use Control Zone" as a part of Phase II of the Powell Blvd. Project. The "Y-zone" was only applied to certain properties along Powell Blvd. The purpose of the zone was to assure that redevelopment within the project area preserves the quality of the neighborhood. The land use controls established specific criteria in addition to the regulations of regular zones, to maximize the opportunity for commercial redevelopment and to provide buffering of all residential development within the project area.

In 1991, the "Y-zone" was replaced by the "Powell Boulevard Plan District," Chapter 33.567 of the Portland Zoning Code. The Chapter is located in Appendix A. The regulations of the Powell Boulevard plan district are intended to buffer residences from the noise and traffic of Powell Boulevard, to promote commercial redevelopment opportunities, and to ensure the smooth flow of traffic on Powell Boulevard. The regulations of this chapter support the intent of the highway improvements which widened Powell Boulevard and created public off-street parking. The Powell Boulevard Environmental Impact Statement required noise protection for the adjacent residential neighborhood, the encouragement of commercial opportunities and the preservation of highway traffic flows.

Planning

The Powell-Division Transit and Development Project builds upon both current and past community work and planning. Some plans have been recently implemented and/or are under construction. Other plans have not yet been implemented.

Division Streetscape Project

Neighborhood groups and the business community formed the Division Vision Group in 2001 and spent several years working to develop a vision of Division as a main street that could better serve the residential, and business communities.
Between 2003 and 2005, the City of Portland and community members used the findings of the Division Vision Group to develop the Division Green Street/Main Street Plan. The plan focuses on improving the livability of Division Street between SE 11th and SE 60th avenues over the next 20 years.
Working with a technical advisory group and a community advisory group, the city started designing the Division Streetscape Project in 2009. With input from the public and advisory groups, the city completed design in 2012.
The project will update the streetscape design on SE Division Street from SE 11th Avenue to SE Cesar Chavez Boulevard. Streetscape improvements will include:
Building curb extensions for bus landing
Adding new crosswalks and streetlights
Improving signalization
Installing public art

Construction work began in May 2013. For more information, please see:
http://www.portlandoregon.gov/transportation/41107

Division Street – High Crash Corridor Safety MAP

High Crash Corridors are streets in Portland with a high concentration of crashes. The High Crash Corridor program uses relatively inexpensive education, enforcement and engineering solutions to address crash problems in a short period of time. There are ten identified corridors, which helps the City target limited resources on improved safety.

Recent improvements on SE Division St include the conversion of Division St to a three lane street, with a center turn lane, bike lanes and one travel land in each direction, between 60th Ave and 80th Ave. Other improvements are also described in the plan. For more information, consult:
http://www.portlandoregon.gov/transportation/article/445014

Division-Midway Neighborhood Street Plan, City of Portland

The street plan will define the primary active transportation routes and identify new opportunities for street system connections in the project area, which is centered on SE Division St from SE 112th to 148th Avenues, and roughly one mile north and south to SE Stark St and SE Holgate St. An additional project in this area is the Division-Midway Neighborhood Prosperity Initiative.
http://www.portlandoregon.gov/TRANSPORTATION/63384

122nd Avenue Rezoning Project

The SE 122nd Avenue Rezoning Project was a one-year effort to increase opportunities for neighborhood-scale commercial uses along the southern portion of the 122nd Ave corridor and improve multi-dwelling design and compatibility within the study area. The study explored land

use, transportation and connectivity, and development design issues in multi dwelling residential and commercial zones in the area generally within ¼ mile of SE 122nd Avenue from SE Division Street to SE Foster Road.

Final recommendations included creating more mixed use zoning at key intersections. Initially, the project recommended converting some multi-family zoning on Powell to mixed use; however, that recommendation was changed due to concerns about traffic conditions on Powell Blvd. For more information on the project, please visit: http://www.portlandoregon.gov/bps/50636

Outer Powell Boulevard Design Plan, City of Portland

The plan identifies improvements and right-of-way width requirements that will allow Outer SE Powell Blvd to serve vehicle traffic movement while also improving safety, accessibility and the aesthetic environment for pedestrians, cyclists and transit riders over the next 20 years. http://www.portlandoregon.gov/transportation/53084

East Portland Action Plan

In 2009, the City of Portland adopted the East Portland Action Plan. Since that time, the community organization, East Portland Action Plan, has been actively stewarding the implementation of a variety of the plans actions and ideas. A few sample actions in the plan that relate to the Powell-Division Transit & Development Project include:

HD.6.3 Initiate a pilot project in East Portland to test new land use concepts: consider land development, transportation and connectivity, services.

CM.1.2 Promote redevelopment in "centers" and along "main streets."

T.1.3 Explore opportunities for expanded transit service and improved connections between East Portland neighborhoods and Columbia Corridor employment areas.

T.1.7 Expand City of Portland and TriMet partnership linking sidewalk improvements with transit stop improvements.

T.3.3 Develop complete and more well-defined bike system plan for East Portland; consider/incorporate safety innovations such as divided bike lanes, "bike boxes", path systems.

T.6.1 Develop a complete and more well-defined future street plan for East Portland.

For more information on the plan, please review:
http://www.portlandoregon.gov/bps/article/214221

For more information on the East Portland Action Plan organization, please see:
http://eastportlandactionplan.org/

Pedestrian Network Analysis (TriMet)

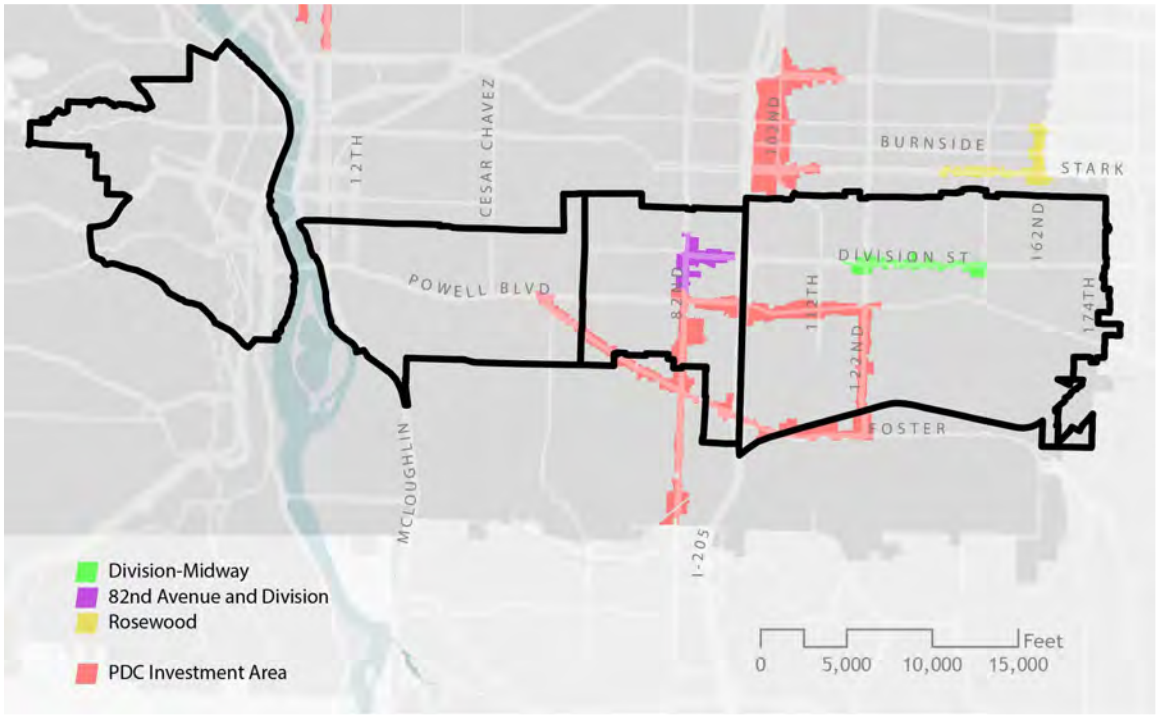
Through the Pedestrian Network Analysis Project, TriMet partnered with cities and counties to identify areas around the region where pedestrian improvements will provide safer and more comfortable access to transit. The project looked at areas where sidewalks are missing, traffic volumes are high, speed limits are high and pedestrian crashes have occurred in the past. Seven thousand transit stops were analyzed and a report with specific recommendations was published.

The recommendations are intended to be implemented by a variety of agencies, as future projects are planned, designed and constructed. Powell Blvd and 82 Ave and Division St and 122nd Ave were two focus areas addressed in the report. For more information, please consult: http://trimet.org/pdfs/pednetwork/trimet-pedestrian-network-analysis-report.pdf

Neighborhood Prosperity Initiatives

Currently, the City of Portland and the Portland Development Commission have a program called the Neighborhood Prosperity Initiative (NPI), which aims to increase neighborhood business district economic competitiveness. The program includes six focus areas, two of which are in the Powell-Division Transit and Development Project study area: Jade District, along 82nd Avenue between Powell and Division and Division-Midway, which is along SE Division Street between 117th and 148th Avenues.

Figure 7. Neighborhood Prosperity Initiative Areas and PDC Investment Areas



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Demographics

Population and Households

In 2000, the population in the study area was about 143,000. Over a decade, the population in the study area increased by 17 percent to approximately 168,000. These residents make up the 64,000 households in the study area, with an average household size of 2.15 persons.

East Portland has the largest population among the sub-areas. It has about 16,000 more people than the next highest sub-area, the Central City. Although East Portland has more residents that the Central City, there are about 7,000 fewer households in East Portland. This is due to average household size which is much higher in East Portland (2.86) than in the Central City (1.49). In other words, there are likely more single-person and smaller households living in the downtown and inner neighborhoods; larger households and families with children tend to make up a larger proportion of households as one heads east. By subarea, there are some notable observations. The Central City and East Portland had the largest increases in population between 2000 and 2010, 33 percent and 20 percent, respectively. Figure 5 summarizes the population and household distribution within the study area by sub-area.

Figure 9. Population and Households

Population

	2000	2010	% Change
Study Area	143,403	167,727	17%
Central City	35,588	47,367	33%
Inner Portland	32,468	32,872	1%
Jade District	22,246	24,008	8%
East Portland	53,101	63,480	20%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Households

	2000	2010	% Change
Study Area	64,059	74,823	17%
Central City	22,106	28,530	29%
Inner Portland	14,399	14,930	4%
Jade District	8,624	9,616	12%
East Portland	18,930	21,747	15%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Average Household Size

	2010
Study Area	2.15
Central City	1.49
Inner Portland	2.18
Jade District	2.46
East Portland	2.86

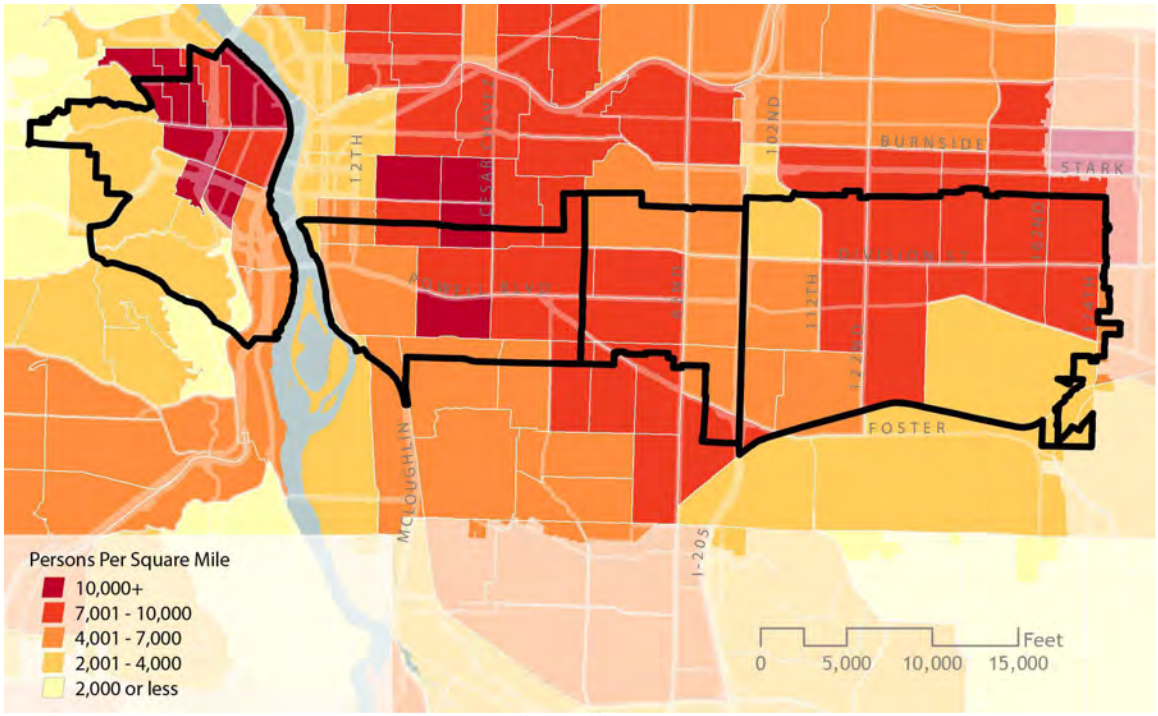
Source: U.S. Census Bureau, Census 2010 Summary File 1.

Density

The study area covers approximately 23 square miles. The average population density is approximately 7,300 persons per square mile. Within the study area, the Central City contains the highest levels of population density, exceeding 10,000 persons (dark red) per square mile in some areas. Inner Portland has a couple census tracts a with similar density level. Mostly, however,

Inner Portland, the Jade District, and East Portland have population densities ranging from 4,001 to 7,000 (orange) and 7,001 to 10,000 (burnt orange) persons per square mile. Pockets of lower density, 2001 to 4,000 persons are found in the southeast and northwest corners of East Portland and in the hillside areas of the Central City.

Figure 11. Population Density



Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table DP-1.

Race and Ethnicity

From 2000 to 2010, the population in the study area has gradually become more diverse. In 2000, communities of color made up about 20 percent of the total population; in 2010, they made up 25 percent of the total population in the study area. In 2010, of the 168,000 people in the study area, 42,000 belonged to communities of color.

Over the last 30 years, as noted in the 2012 Portland Plan, Portland's population grew by more than 360,000 people. Most of this growth occurred in the 1980s and 1990s, when Portland annexed large portions in east Portland and some additional areas in west Portland. During the 1980s and 1990s, the growth rate was approximately 20 percent each decade. Between 2000 and 2010, the city's growth rate was less dramatic. Forecasts indicate that Portland will grow by at least 125,000 households by 2035.

For most of its recent history, Portland was an overwhelmingly white city, but as population increased, so has Portland's racial and ethnic diversity. Portland's non-white population was 15 percent of the total population in 1980 and 27 percent in 2010. The national average is 33 percent.

Figure 11 summarizes the change in race and ethnicity between 2000 and 2010 in the study area and by sub-area.

Figure 11. Summary of Race and Ethnicity

Race and Ethnicity in the Study Area, 2000 and 2010

	Study Area		Central City		Inner Portland		Jade District		East Portland	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Total Population	**142,899**	**167,726**	**35,283**	**47,367**	**32,543**	**32,872**	**22,291**	**24,008**	**52,784**	**63,479**
Population Reporting One Race	137,311	160,047	34,146	45,378	31,264	31,414	21,353	22,830	50,550	60,479
White	115,026	125,717	29,575	39,149	26,791	27,677	16,616	15,942	42,044	42,950
Black	3,853	7,289	1,391	1,634	790	811	495	1,186	1,177	3,659
Native American	1,551	1,788	442	460	342	257	216	316	552	754
Asian	11,782	16,497	2,080	3,348	2,505	1,988	3,203	3,976	3,996	7,186
Pacific Islander	425	961	71	111	95	81	102	220	157	548
Some Other Race	4,674	7,795	587	676	741	600	722	1,190	2,624	5,328
Population Reporting Two or More Races	5,588	7,679	1,137	1,989	1,279	1,458	938	1,178	2,234	3,054
Total Hispanic Population	9,494	16,900	1,531	2,517	1,733	1,904	1,563	2,419	4,667	10,060

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Race and Ethnicity as a Percent of Total Population within Geography, 2000 and 2010

	Study Area		Central City		Inner Portland		Jade District		East Portland	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Total Population	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Population Reporting One Race	96%	95%	97%	96%	96%	96%	96%	95%	96%	95%
White	80%	75%	84%	83%	82%	84%	75%	66%	80%	68%
Black	3%	4%	4%	3%	2%	2%	2%	5%	2%	6%
Native American	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Asian	8%	10%	6%	7%	8%	6%	14%	17%	8%	11%
Pacific Islander	0%	1%	0.2%	0.2%	0.3%	0.2%	0.5%	1%	0.3%	1%
Some Other Race	3%	5%	2%	1%	2%	2%	3%	5%	5%	0%
Population Reporting Two or More Races	4%	5%	3%	4%	4%	4%	4%	5%	4%	5%
Total Hispanic Population	7%	10%	4%	5%	5%	6%	7%	10%	9%	16%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

The increase in diversity can be most attributed to population change in the more eastern parts of the city—for this study, in the Jade District and East Portland. Here, in 2010, diverse populations exceeded 30 percent of the total population within the same geography. Comparing each sub-area population, East Portland had the highest concentration of Hispanics.

In 2010, East Portland had the largest population among subareas. Thus, of all the population groups in the study area, East Portland also had the largest proportions of any one group compared to the other sub-areas. Figure x summarizes the study area population distribution by race and ethnicity distribution across sub-areas.

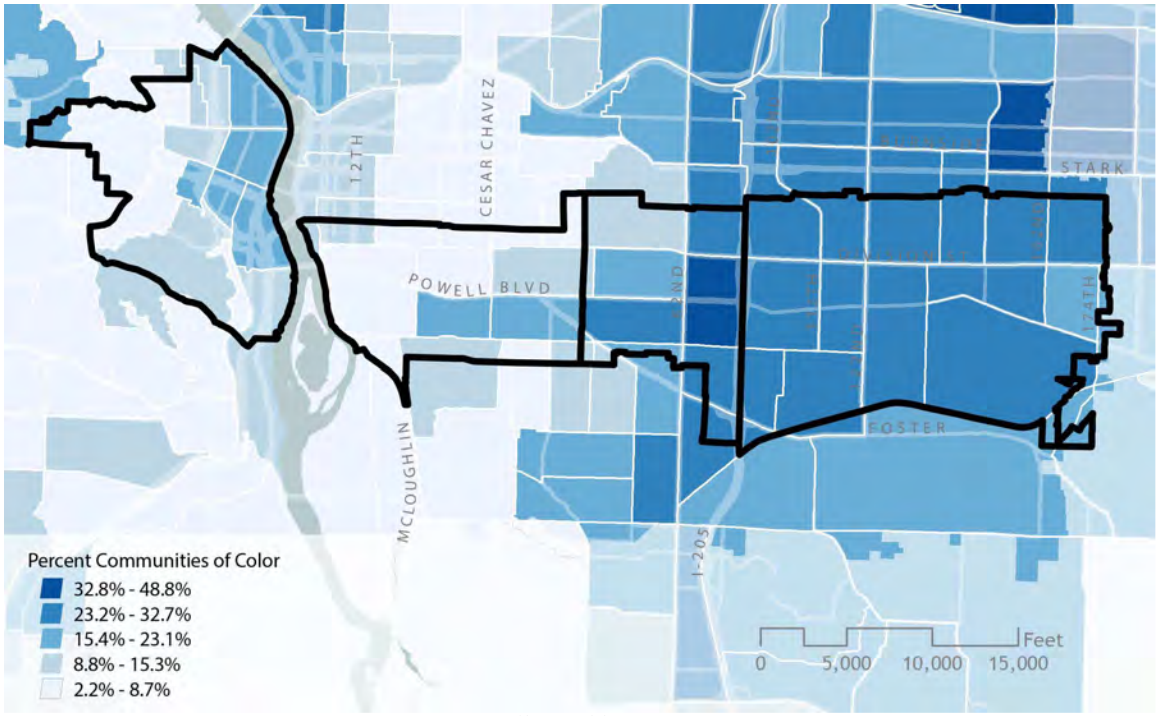
Figure 12. Study Area Population Distribution Across Sub-Areas, 2010

		Study Area	Central City	Inner Portland	Jade District	East Portland
Total Population	**167,726**	**100%**	**28%**	**20%**	**14%**	**38%**
Population Reporting One Race	160,047	100%	28%	20%	14%	38%
White	125,717	100%	31%	22%	13%	34%
Black	7,289	100%	22%	11%	16%	50%
Native American	1,788	100%	26%	14%	18%	42%
Asian	16,497	100%	20%	12%	24%	44%
Pacific Islander	961	100%	12%	8%	23%	57%
Some Other Race	7,795	100%	9%	8%	15%	68%
Population Reporting Two or More Races	7,679	100%	26%	19%	15%	40%
Total Hispanic Population	16,900	100%	15%	11%	14%	60%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Figure 13 shows, by census tract, the percent of population in the census tract self-identifying as a member of a racial group that is not white. As you move eastward through the city the proportions of communities of color in census tracts increase. Comparatively, census tracts in the Jade District and in East Portland are among the most diverse in the city.

Figure 13. Communities of Color



Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table QT-P5.

Age Characteristics

In the study area, median age of the population is 34.7 years. The majority of the population are adults—20 - 64 years of age. Children ages 0 – 19 make up 20 percent, and the senior population make up 10 percent.

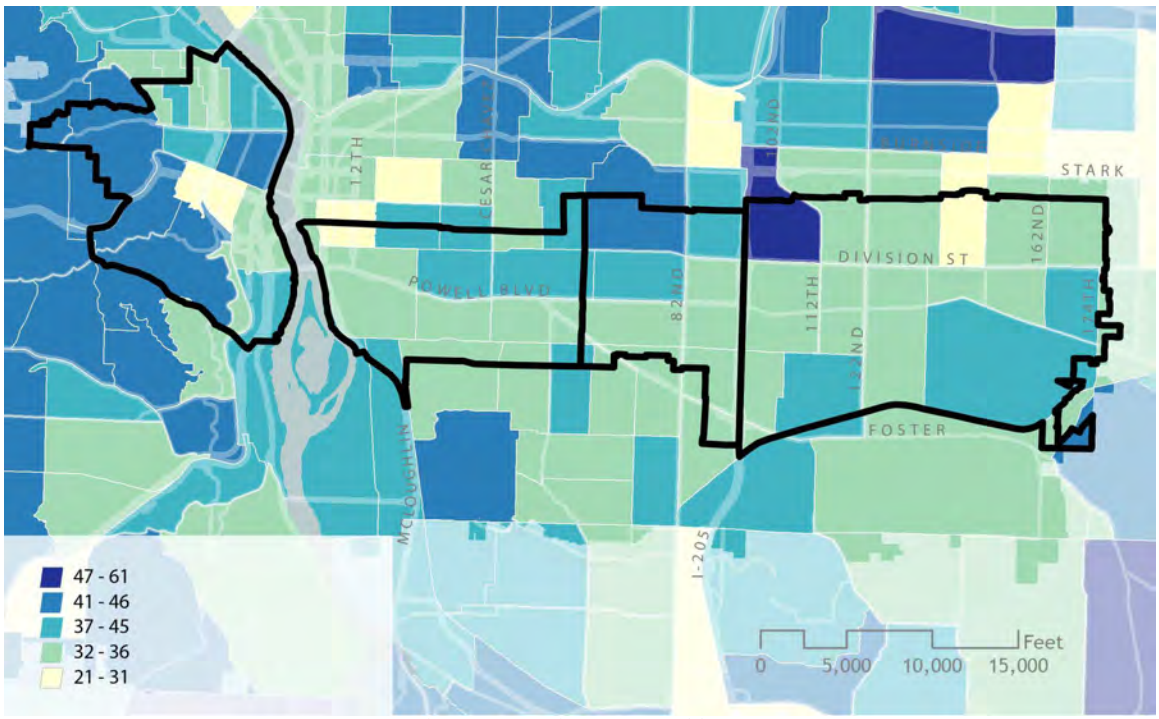
The distribution of different ages varies across the different sub-areas. In the Central City, fewer children and youth make up the population. The youth population continually increases moving eastward through the city. In East Portland, youth make up 30 percent of the sub-area's population, the highest concentration of youth among the sub-areas.

Figure 14. Population by Age

	Study Area		Central City		Inner Portland		Jade District		East Portland	
0-19	34,195	20%	4,222	9%	5,567	17%	5,462	23%	18,943	30%
20-64	116,021	69%	37,969	80%	24,593	75%	15,691	65%	37,769	59%
65+	17,510	10%	5,176	11%	2,713	8%	2,855	12%	6,767	11%

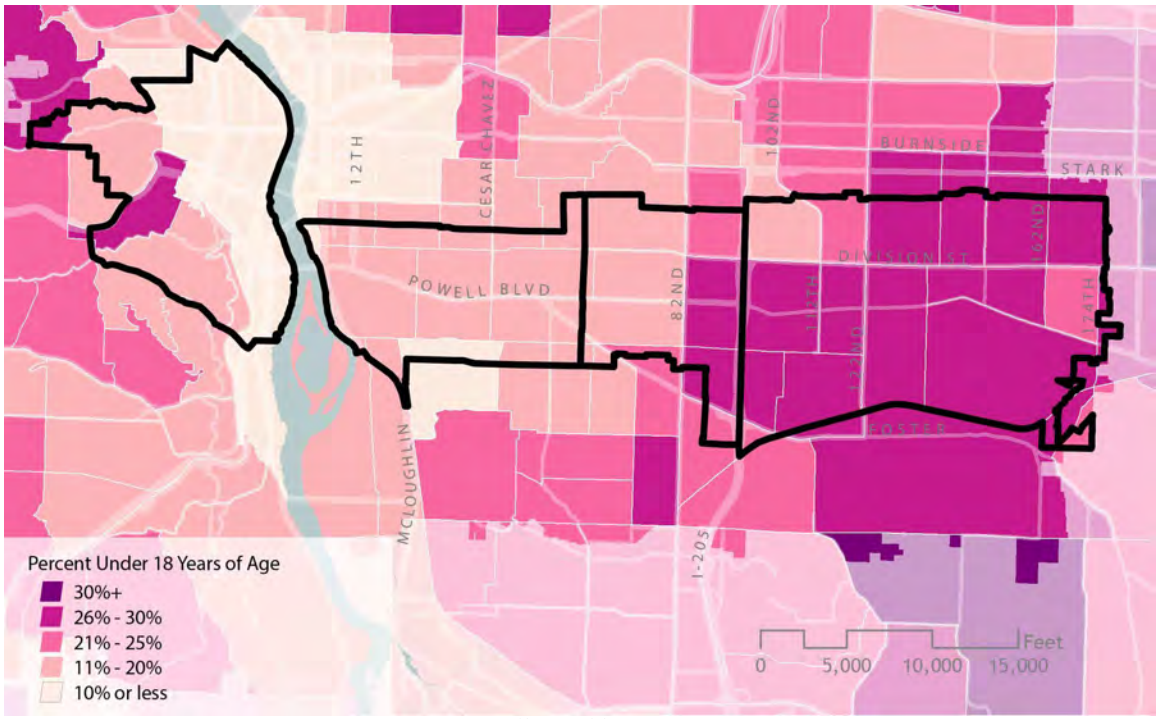
Source: U.S. Census Bureau, Census 2010 Summary File 1.

Figure 15. Median Age



Source: U.S. Census Burea, 2007-2001 American Community Survey, Table S0101.

Figure 16. Youth Population

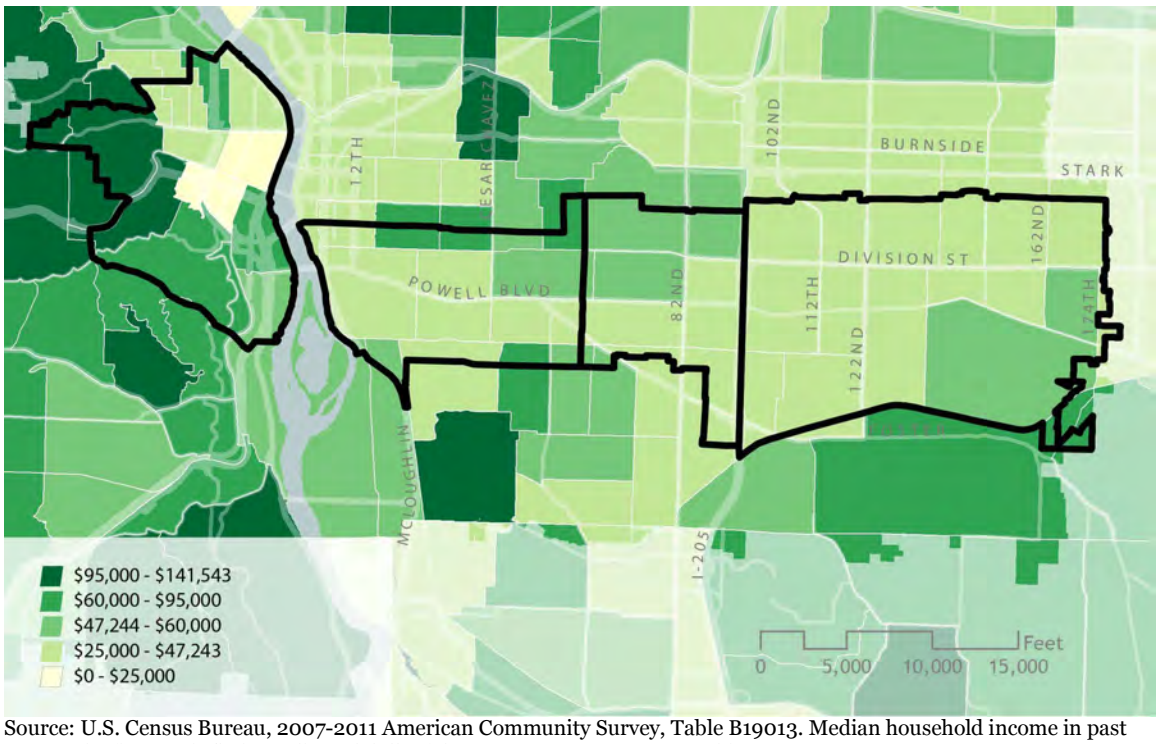


Source: U.S. Census Bureau, 2010 Census, Summary File 1, Table P-12.

Median Household Income

In the study area, the median household income by census tract varies. The highest and lowest income households are both in the Central City part of the study area. Low- to middle-income households make up most of the Inner, Jade District, and East Portland subareas. Figure 17 shows the distribution of median household income by census tract. Following the map, brief descriptions about income distribution are provided by sub-area.

Figure 17. Median Income



Source: U.S. Census Bureau, 2007-2011 American Community Survey, Table B19013. Median household income in past 12-months (in 2011 inflation-adjusted dollars) by 2010 census tract geographies.

Central City

The Central City has the greatest variety of household incomes. Some of the highest income households ($60,000 - $143,543) are located in the West Hills, west northwest and southwest of downtown Portland. Low- to low-middle income ($0-$47,243) households are notably found in the heart of the downtown in the vicinity of Burnside Street.

Inner Portland

Inner Portland has the next overall highest income households, generally north of SE Division Street and west of SE Cesar Chavez Boulevard, although there are groups of higher income households near Mount Tabor and south of Holgate. There are significant areas of lower income households in Inner Portland south of Powell Boulevard.

Jade District

In the Jade District, generally more middle class incomes—$47,000 to $60,000 (light green)—are found in the north and northwest portion of the sub-area. To the south and southeast portion of the sub-area, low-middle to middle incomes, $25,000 to $47,000 (yellow-green) are the norm,

East Portland

Incomes in East Portland tend to be distributed across the low- to middle-income range. From a census tract perspective, in the heart of East of Portland, low-middle to middle incomes are

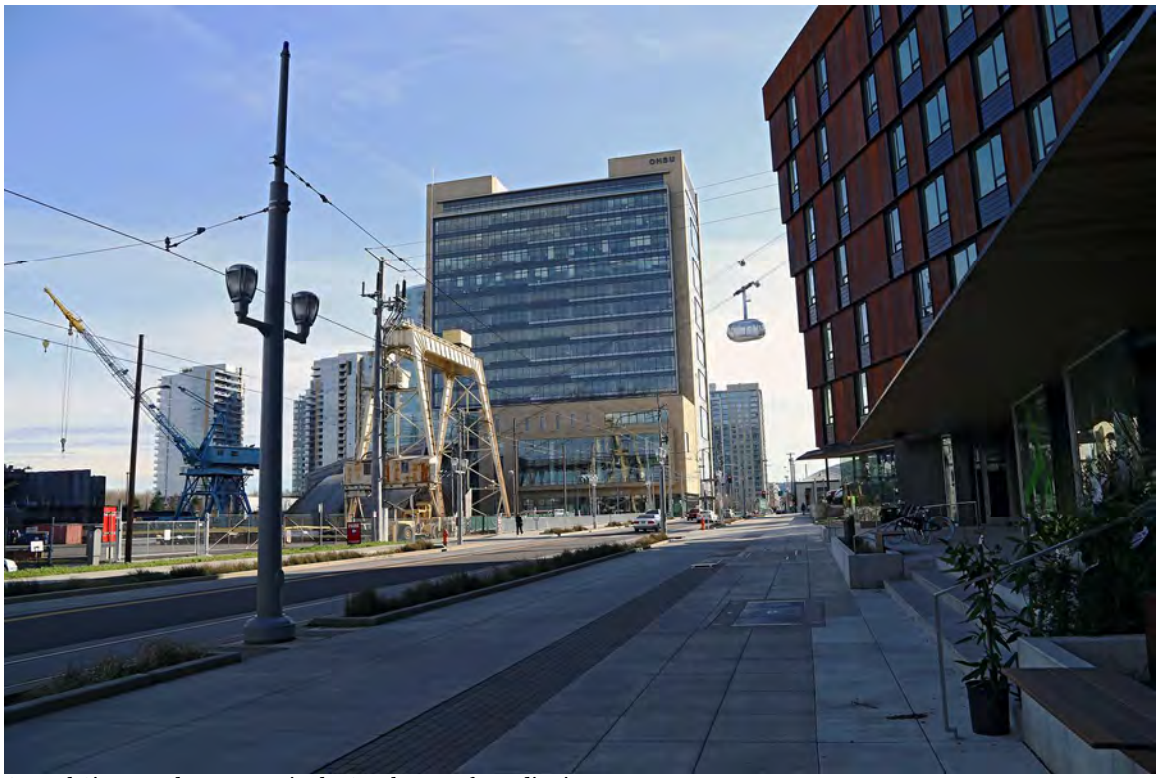
generally evenly distributed. Progressively higher incomes tend to be concentrated in the more southern and southeastern portions of the sub-area.

Housing

The study area contains over 80,000 housing units.

In the study area, from 2000 to 2010, 13,000 housing units were constructed, an increase of nearly 20 percent. Most of that growth occurred in the Central City and East Portland, together, accounting for about 90 percent of new housing units in the study area. New housing units in the Central City accounted for nearly two-thirds and in East Portland, about one quarter.

Over the same period, the Jade District had over 1,000 new housing units built and Inner Portland, about 500. In recent years, however, growth in these areas has become more noticeable, especially in the vicinity of SE 92nd Avenue and on Division Street.



Central City: Development on in the South Waterfront district.

Inner Portland: Development on Division Street.

Jade District: Multi-family housing on SE 92nd Avenue.

East Portland: Recent housing development on R-2 zoned land.

The majority of housing units in the study area are multi-family dwelling units, ranging from attached (duplexes) to dwellings in buildings with 50 or more units. Most of those units—60 percent—are located in the Central City. The remaining forty percent is distributed over the other three sub areas: in Inner Portland, 15 percent; in the Jade District, 7 percent; and in East Portland 18 percent. Among these areas of the study area, over 90 percent of the single-family dwellings are distributed: in Inner Portland, 29 percent; in the Jade District, 20 percent; and in East Portland 42 percent.

The housing pattern varies in of the study area. In Inner Southeast Portland, the majority of homes consist of single-family residences built before 1945. (See Year Built map.) A few pre-WW11 apartment buildings are also are found in Inner Portland. Later-era housing stock is scattered throughout the area, consisting of a mix of single-family residences and low- and mid-rise apartment buildings and courtyard style apartments. They are most noticeable south of Powell Boulevard in the vicinity of Cesar Chavez Boulevard. Newer development notably consists of condominiums and apartments, particularly on Division Street. Some newer and larger apartments have also been built just south of Powell Boulevard in the vicinity of 28th Avenue. Newer single-family homes are also found on infill lots.

Moving eastward in the corridor, the housing stock, while still consisting mostly of single-family residences, increasingly becomes a mix of pre-war, post-war mid-century, and recent-era development. Some apartments can be found in the interior of the neighborhoods, but most apartments and condominiums are located along the major streets, notably along Powell and Division east of 60th Avenue.

In the vicinity of 82nd Avenue and 92nd Avenue, an eclectic mix of older and newer housing types are shaping the evolving character of the area. Notably, between Powell and Division, recent-era multi-family development is mixing in with larger lot pre-war era single-family residences. Here,

the flag-lot development pattern is quite noticeable. This is the transition, as you move eastward through the city, from primarily streetcar-era development to primarily post-war development.

In the corridor through East Portland—east of Interstate 205 to the city limit—the majority of housing was built after 1945. Here, the area is distinctly more auto-oriented than in the corridor west of 82nd Avenue. Post-war single-family homes, many on large lots, make up a large portion of the housing stock. Newer development has tended towards a mix of apartments, rowhouses, narrow-lot single-family homes, and plexes on flag lots. This section of the study also contains the largest concentration of manufactured housing.

Occupancy rate in the study area is about 8 percent. It is lowest in Inner Portland, under five percent. In the Jade District and East Portland, the vacancy rate is between five and six percent. The Central City has a vacancy rate around 13 percent.

The number of owner-occupied and renter-occupied housing units is roughly split 60 percent to 40 percent. In the Central City, renters outnumber owners three to one. Inner Portland and the Jade District have roughly an even ratio. In East Portland, there are owners outnumber renters. There are about four owners for every three renters.

Figure 18. Summary of Housing

Housing Units, 2000 and 2010

	2000	2010	Change	% Change
Study Area	68,503	81,596	13,093	19%
Central City	24,106	32,779	8,673	36%
Inner Portland	15,079	15,613	534	4%
Jade District	9,099	10,152	1,053	12%
East Portland	19,965	23,052	3,087	15%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Occupancy and Vacancy Rate, 2010

	Study Area	Central City	Inner Portland	Jade District	East Portland
Total	81,555	32,707	15,614	10,143	23,092
Occupied	74,823	28,530	14,930	9,616	21,747
Vacant	6,732	4,177	684	527	1,345
Vacancy Rate	8.3%	12.8%	4.4%	5.2%	5.8%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Owners and Renters, 2010

	Study Area	Central City	Inner Portland	Jade District	East Portland
Total	74,823	28,530	14,930	9,616	21,747
Owner-Occupied	31,821	7,159	7,273	5,180	12,208
Avg HH size	2.44	1.83	2.34	2.51	2.84
Renter -Occupied	43,002	21,371	7,657	4,436	9,539
Avg HH size	1.94	1.38	2.03	2.41	2.89

Source: U.S. Census Bureau, Census 2010 Summary File 1.

Housing by Structure Type, 2009

	Study Area	Central City	Inner Portland	Jade District	East Portland
Total	74,715	27,682	15,361	9,489	22,183
1, detached	31,807	2,857	9,086	6,462	13,402
1, attached	2,548	708	433	255	1,152
2	2,885	574	1,208	474	629
3 or 4	4,227	942	1,148	406	1,732
5 to 9	3,701	1,001	1,068	313	1,320
10 to 19	4,694	2,275	943	490	985
20 to 49	7,904	5,983	752	290	879
50 or more	15,536	13,267	698	763	808
Mobile Home	1,379	76	25	37	1,241
Boat, RV, van, etc.	35	0	0	0	35

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Median Home Value and Median Rent, 2009

	Median Home Value	Median Rent
Study Area	N/A	N/A
Central City	N/A	N/A
Inner Portland	$309,107	$679
Jade District	$223,103	N/A
East Portland	$199,900	$671

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Employment

In 2011, over 156,000 people were employed in the study area. The majority of employment—nearly 80 percent—is concentrated in the Central City. Inner Portland contains 16,000 employees, about 10 percent of all employment. The Jade District with 6,000 jobs—about 4 percent—and East Portland with about 11,500 jobs—about 7.5 percent—make up the balance of jobs.

The three largest employment sectors make up 40 percent of the jobs. Educational services employ over 25,000 people, making up 16 percent of all jobs. Professional, Scientific, and Technical Services employ over 19,000 people, about 12 percent of all jobs. Health Care and Social Assistance employ over 17,000, about 11 percent of all jobs in the study area.

The distribution of these sectors varies across the four geographies addressed in this report. In the Central City, the distribution mirrors the overall distribution of jobs. Four industry sectors: Educational Services (17.8 percent or almost 64,000 employees); Professional Scientific and Technical Services (14.9 percent); Finance and Insurance (9.9 percent); and Food and Accommodation (9.6 percent) provide more than half the jobs (52.2 percent) in the Central City. In Inner Portland, one notable difference is the percentage of manufacturing jobs. Although the number of manufacturing jobs in Inner Portland is nearly the same as the number in the Central City, in Inner Portland, manufacturing jobs make up more than 11 percent of jobs. In the Central City, manufacturing accounts for less than one percent of jobs. In the Jade District, more than 20 percent of existing jobs are in retail trade. The largest employment sectors in East Portland are Health Care and Social Assistance (34.5 percent and 4,025 employees); Educational Services (16 percent and 1,865 employees); and Retail Trade (12.3 percent and 1,432 employees).

Figure 19. Employment Data

Number of Jobs and Percent Share of All Jobs within the Study Area, 2011

Study Area		Central City		Inner Portland		Jade District		East Portland	
156,034	100%	122,261	78%	16,044	10%	6,071	4%	11,658	7%

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2011).

Jobs by Industry Sector and Percent Share of All Jobs within Each Area, 2011

	Study Area		Central City		Inner Portland		Jade District		East Portland	
Agriculture, Forestry, Fishing and Hunting	328	0.2%	210	0.2%	25	0.2%	87	1.4%	6	0.1%
Mining, Quarrying, and Oil and Gas Extraction	1	0.0%	0	0.0%	1	0.0%	0	0.0%	0	0.0%
Utilities	970	0.6%	605	0.5%	365	2.3%	0	0.0%	0	0.0%
Construction	4,474	2.9%	2,314	1.9%	1,446	9.0%	221	3.6%	493	4.2%
Manufacturing	3,210	2.1%	1,138	0.9%	1,884	11.7%	63	1.0%	125	1.1%
Wholesale Trade	2,642	1.7%	1,462	1.2%	969	6.0%	52	0.9%	159	1.4%
Retail Trade	10,064	6.4%	6,270	5.1%	1,134	7.1%	1,228	20.2%	1,432	12.3%
Transportation and Warehousing	1,637	1.0%	424	0.3%	379	2.4%	458	7.5%	376	3.2%
Information	5,967	3.8%	5,686	4.7%	141	0.9%	86	1.4%	54	0.5%
Finance and Insurance	12,548	8.0%	12,149	9.9%	84	0.5%	131	2.2%	184	1.6%
Real Estate and Rental and Leasing	3,899	2.5%	3,400	2.8%	222	1.4%	109	1.8%	168	1.4%
Professional, Scientific, and Technical Services	19,282	12.4%	18,229	14.9%	742	4.6%	118	1.9%	193	1.7%
Management of Companies and Enterprises	6,884	4.4%	5,706	4.7%	1,104	6.9%	7	0.1%	67	0.6%
Administration & Support, Waste Management and Remediation	8,270	5.3%	5,877	4.8%	1,551	9.7%	117	1.9%	725	6.2%
Educational Services	25,149	16.1%	21,778	17.8%	691	4.3%	815	13.4%	1,865	16.0%
Health Care and Social Assistance	17,600	11.3%	10,579	8.7%	2,142	13.4%	854	14.1%	4,025	34.5%
Arts, Entertainment, and Recreation	2,897	1.9%	2,380	1.9%	352	2.2%	68	1.1%	97	0.8%
Accommodation and Food Services	15,500	9.9%	11,693	9.6%	1,756	10.9%	1,237	20.4%	814	7.0%
Other Services (excluding Public Administration)	6,248	4.0%	4,486	3.7%	910	5.7%	370	6.1%	482	4.1%
Public Administration	8,464	5.4%	7,875	6.4%	146	0.9%	50	0.8%	393	3.4%

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2011).

The majority of employees—87 percent—working in the study area live outside the area. About 13 percent are both employed and live in the study area.

Of all employed people living in the study area, about 70,000 people, 7 out of 10 people—about 50,000 people—work outside the study area. About 20,000 people both live and work in the study area.

Community Assets

Parks and Community Centers

Portland Parks & Recreation (PP&R) provides care to over 11,000 acres of parks and natural areas, manages the city's community gardens and offers thousands of programs for all ages at its community centers, swim pools, and other recreation facilities. Portland Parks & Recreation currently protects more than 7,700 acres of natural areas. These natural areas are primarily forest and represent the range of forest types naturally occurring in the region including upland Douglas fir stands, ash and cottonwood riparian forests, oak savannah and younger deciduous forest types.

In 2012, the Portland Parks & Recreation system consisted of 203 developed parks, totaling 3,433 acres, 7,762 acres of natural areas, and 221 acres of undeveloped properties. Portland Parks & Recreation's built infrastructure has a replacement value of $984 million (in 2012), and includes five main facility types:

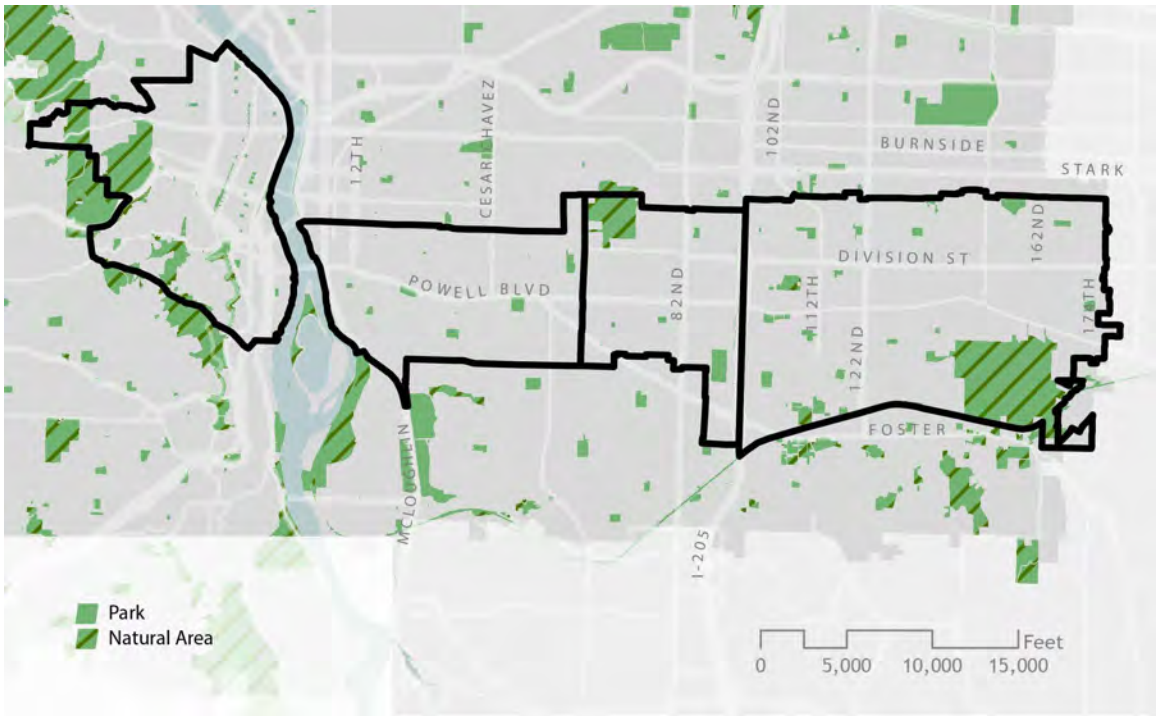
- Developed Parks: 203 Parks on 3,433 Acres
- Natural Areas: 7,762 Acres
- Trails: 152 Miles of Regional Trails
- Community and Arts Centers: 14 Facilities
- Special Facilities: 54 Facilities including Golf courses, Pittock Mansion, Portland International Raceway, Community Gardens, etc.

For a more detailed overview of Portland Parks and Recreation services and facilities, please see the Working Draft Citywide Systems Plan or visit the Portland Parks and Recreation website.

Portland Parks and Recreation website: http://www.portlandoregon.gov/parks/35300

Working Draft Citywide Systems Plan:
https://www.portlandoregon.gov/bps/article/464625

Figure 20. Parks and Natural Areas



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

High Schools and Colleges

A number of high schools and colleges are located in the corridor.

High schools in the corridor include Lincoln HS and St. Mary's HS, in the Central City; Cleveland HS and Franklin HS, in Inner Portland; Marshall HS (closed) in the Jade District; and Centennial

In downtown Portland, OHSU and Portland State are the largest education centers. University of Oregon and Oregon State University have satellite campus facilities in the downtown area. Portland Community College has education centers near OMSI—The CLIMB (Continuous Learning for Individuals, Management and Business) Center for Advancement—and in the Jade District, 82nd Avenue and Division—the Southeast Center. Warner Pacific College is located on SE Division Street at 69th Avenue, at the base of Mt. Tabor.

Institutions

A variety of public, private, and non-profit institutions are located in the corridor. They range from state, county, and local public service, health and social service institutions. These include Catholic Charities, Asian Health Center, Trillium Family Services, Adult and Family Services, Oregon State Vocational Rehabilitation, Department of Motor Vehicles, Human Solutions, OHSU Clinic, and Mid-County Health Clinic.

A fair number of religious institutions are also located throughout the corridor. They represent a wide range of faiths and cultures.

Watersheds and Stormwater Management

The City of Portland sits at the confluence of two of the nations' major river systems: the Columbia River and the Willamette River. Native salmon, steelhead and other fish and wildlife species live within Portland's urban boundary, and also migrate through Portland. The city is divided into five primary watersheds: Willamette River, Johnson Creek, Columbia Slough, Fanno Creek and Tryon Creek.

Maintaining watershed health is critical to both human and broader ecosystem health. Portland uses green streets, ecoroofs, trees, and other green infrastructure—like urban streams and wetlands—to manage stormwater, protect water quality and improve watershed health. Green infrastructure brings nature into the city, which can improve both mental and physical health, increase property value, conserve energy, enhance wildlife habitat and save money on more costly pipe infrastructure.

Details on Portland's Sustainable Stormwater Management program and related activities can be found on the Bureau of Environmental Services website and detailed design options can be found in the Stormwater Management Manual: http://www.portlandoregon.gov/bes/47952. Policy guidance for Portland's watershed health, stormwater management and other green infrastructure practices is found in the Portland Watershed Management Plan: http://www.portlandoregon.gov/bes/38965

The project area is located across two of Portland's five watersheds: the Willamette River watershed and the Johnson Creek watershed, with the majority of the project located within the Willamette River watershed. The Central City, Inner and Jade District portions of the project area are all located within the Willamette River watershed. The East Portland portion of the project area is located in both the Willamette River and Johnson Creek watersheds. The portion of the project area within the Johnson Creek watershed includes the area roughly between SE Powell and SE 100th Avenue and SE Division and SE 120th Avenue, east to the City limits.

West of I-205, much of the stormwater runoff from streets flows into the combined sewer system. The combined sewer system collects stormwater runoff from streets and sewage from buildings in the same pipes. Most of this mixture flows to the treatment plant. But when it rains, some combined sewage overflows to the Willamette River. The frequency of overflows was significantly reduced with the completion of Portland's CSO control program.

Between Caesar Chavez and I-205, stormwater either flows into the combined system or into underground injection control (UIC) facilities or sumps. Sumps are perforated, vertical pipes usually connected to sedimentation manholes which help remove pollutants. Sedimentation manholes collect stormwater, allowing solids to settle to the bottom and trapping oils and greases in the manhole before the treated stormwater flows to the sump and percolates into the ground.

In areas where groundwater is high, the city is redesigning some UIC facilities and replacing others with swales and other green stormwater management facilities to increase the distance between the bottom of the UIC and groundwater. These types of facilities replenish groundwater supplies that feed cool, clean water to rivers and streams.

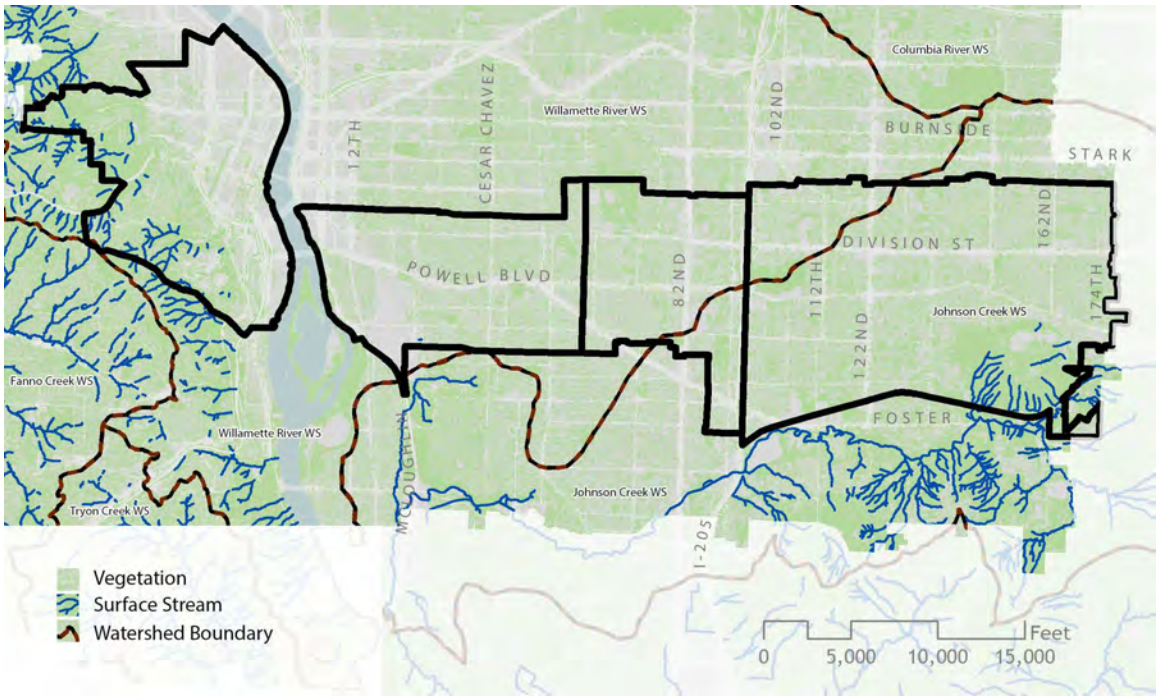
East of 205, stormwater from the streets is managed in UIC facilities or in separated stormwater pipes. In the separated stormwater system, stormwater runoff flows to streams through public and private pipes, drainages, swales and other stormwater conveyances.

There are a few, limited areas within the project boundaries where development could have a greater impact to watershed health because of the presences of natural resources, or hydrology issues, such as steep slopes or poorly infiltrating soils. Further analysis is needed in to determine how development could be accommodated while preventing impacts to watershed health.

The Stormwater Management Manual and other applicable regulations require development to be designed to maintain or improve the effectiveness of stormwater management, with an emphasis on current best management practices, including on-site infiltration, green streets, tree plantings, and eco-roofs, among other tools and approaches.

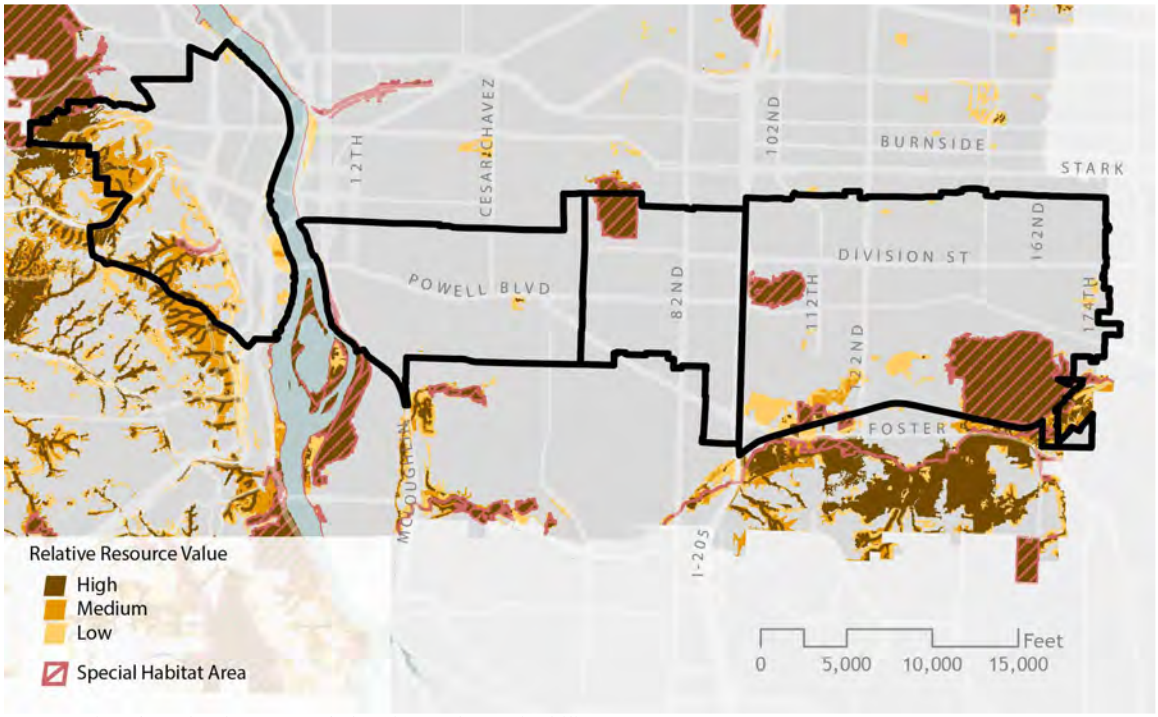
In addition to improving watershed and ecosystem health, sustainable stormwater management facilities, such as bio-swales and trees, also increase the presence of nature in the city. Green streets and tree plantings bring some of the benefits provided by parks and open spaces to other parts of the city and help reduce the urban heat island effect (and its associated health risks), which is increasingly becoming a concern in highly developed parts of Portland.

Figure 21. Watershed Health



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Figure 22. Natural Resources Inventory Combined Relative Resource Value and Special Habitat Areas



Source: City of Portland, Bureau of Planning and Sustainability, GIS, 2014.

Appendix A: Portland Zoning Designation List

Open Space Zone

1. Open Space (OS)

Single-Dwelling Residential Zones

2. Residential Farming (RF)
3–7. Single-Dwelling Residential (R20, R10, R7, R5,R2.5)

Multi-dwelling Residential Zones

8–11. Multi-dwelling residential (R3, R2, R1, RH)
12. Central Residential (RX)

Commercial

13. General Commercial (CG)
14–15. Mixed and Store-front Commercial (CM, CS)
16–17. Neighborhood Commercial (CN1, CN2)
18–19. Office Commercial (CO1, CO2)
20. Central Commercial (CX)

Employment and Industrial

21–23. Employment (EG1, EG2, EX)
24–25. Industrial (IG1, IG2)
26. Heavy Industrial (IH)
27. Institutional Residential (IR)

Powell-Division Transit and Development Project

City of Gresham Existing Conditions Report

1. Introduction

Transit is an important way for people to move around the region and is essential to ensuring people have a variety of travel choices. It also helps reduce traffic congestion by reducing the number of cars on a street.

Frequent, reliable transit also supports the communities and neighborhoods along the bus and rail routes by making existing businesses more accessible and making development of new housing, shopping and jobs more attractive.

Transit provides a way for those persons who do not have personal vehicles to travel to jobs, shops or to visit family and friends. For those who own cars, it provides another way to get around (84 percent of TriMet riders have a car available) and helps reduce vehicle congestion on streets. According to a TriMet survey, 80 percent of the 1.5 million people in its service district ride TriMet, with 43 percent riding a couple of times a month or more.[1]

Powell-Division Transit and Development Project

The Powell-Division Transit and Development Project seeks to bring important transportation and land use investments to Downtown Portland, Southeast Portland, East Portland and Gresham. These investments aim to make it easier for people to get around and to provide more opportunities for shopping, services, and convenient commuting.

The project emanates from the High Capacity Transit (HCT) plan that was adopted by the Metro region in 2010. That plan identified Powell and Division streets within Gresham and Portland as potential corridors for enhanced transit based upon community, environmental, economic and deliverability criteria. The HCT ranked the Powell-Division project as one of three "near-term regional priority corridor." In 2011-2012 the East Metro Connections Plan process reinforced the need for enhanced transit along this corridor.

The scope of the project includes determination of a new type of transit system along the Powell-Division corridor as well as a vision for what the community desires at major transit station areas along the corridor.

Project partners are:

- Metro: Metro will lead a study to determine a preferred route and type of vehicle for a new transit system along the Powell-Division corridor.
- Cities: Gresham and Portland will lead the development of station-area visions. The cities received a grant from Metro for this work.
- Other agencies: TriMet, the Oregon Department of Transportation, Multnomah County and other agencies and groups will participate by providing data, expertise and comments on the project. These include traffic analyses and identification of potential health and equity impacts.

[1] TriMet. TriMet 2010 Customer Profile. June 2011. Web. 27 Dec. 2013. <http://trimet.org/pdfs/publications/customer_profile.pdf>.

Challenges and opportunities

Within the Powell and Division corridors in Gresham and Portland, the No. 4 bus on Division Street is the busiest line in TriMet's system with 9,200 passengers a day. The No. 9 along Powell Boulevard is not far behind at 7,800 passengers a day. These statistics are impressive but also reflect a growing need for additional service. Within Gresham:

- The Division and Powell bus lines are busy and will need more capacity as population increases.
- Some East County destinations (southwest Gresham, Mt. Hood Community College, Gresham Vista Business Park) could be better served by transit.
- North-south transit connections from many parts of Gresham's southern and eastern neighborhoods to the current MAX Blue Line are infrequent or are too far to access for many potential riders.
- There is a need for high-capacity transit that links to northeastern Gresham and the Gresham Vista Business Park, Mt. Hood Community College and Mount Hood Medical Center, where many existing jobs are located and future jobs are anticipated.

In addition to enhanced transit service, people who live and work in Gresham have expressed that they like the land uses in their neighborhoods but see opportunities for improvements, such as:

- More jobs in or near their neighborhoods.
- Additional retail shops, such as grocery stores, that are close to where they live.
- More sidewalks and safer crosswalks so they can get to their destinations, including transit.
- Better transit stops with paved waiting areas and shelter from the wind and rain.

Project outcomes

The Powell-Division Transit and Development Project is designed to study transit and land-use enhancements that can address the challenges and fulfill neighborhood needs/desires.

The project will:

- Recommend a transit solution that effectively serves an area where there is high transit demand. This Metro-led portion of the project will result in:
    - A preferred transit route, and
    - A preferred vehicle type (such as light rail, bus rapid transit/express bus, streetcar, etc.).

  Gresham is a partner in this effort and will advocate for a route and vehicle type that works well for Gresham. Determining what works for Gresham will include extensive public outreach.
- Result in a strategy that identifies potential land use enhancements along the preferred transit route. The enhancements will aim to provide the opportunity for new services desired by the neighborhoods and stimulate economic development. Gresham will lead the portion of the study focused on land use, urban design and neighborhood improvement within Gresham.
- Engage the community in all phases. This has already begun. Two community forums were held in December 2013 and January 2014 to discuss existing conditions with people who live and work in Gresham.

Existing conditions

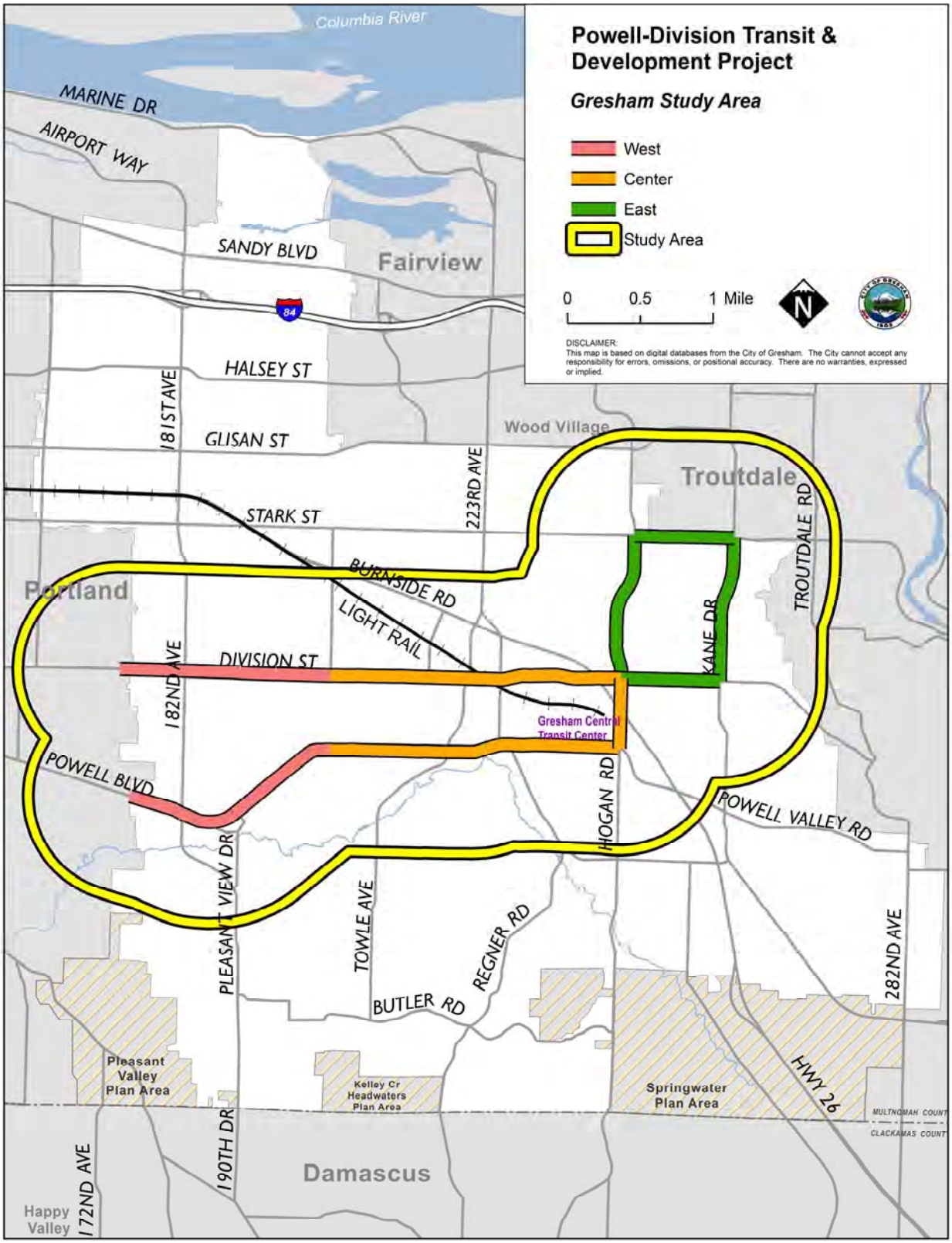
This report describes the existing conditions in the study area, as seen in Figure 1. Understanding how transportation, land use and neighborhoods are working now provides important information as the project considers alternative transit and land-use options.

The existing conditions report is organized into the following sections:

1. Introduction
2. Demographics
3. Land Use and Zoning
4. Housing
5. Business & Market Conditions
6. Environment
7. Community Assets and Safety

Appendix A: Gresham Public Input Summary

Figure 1: Study area for Gresham existing conditions report



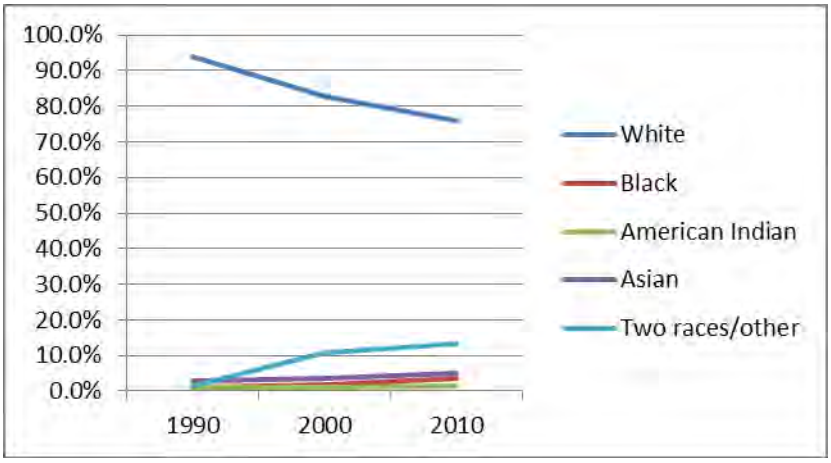
2. Demographics

Demographic information presented in this section is reflective of Gresham in its entirety since the project will ultimately serve the transportation needs of all of Gresham. Data used in this section of the report is derived from the U.S. Census and the American Community Survey.

Demographic information

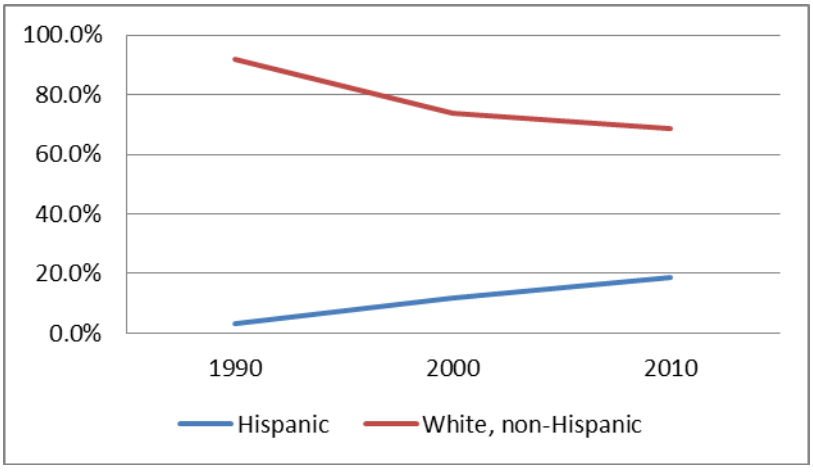
Gresham has seen many changes in its demographic composition over the past 20 years. Its population grew from 68,235 in 1990 to 106,180 as of July 1, 2013; a 55.6 percent increase. It has become more diverse, with the Hispanic and Latino population increasing from 3.3 percent in 1990 to 18.9 percent in 2010. During this same time period, the percentage of the population identifying themselves as White declined from 93.8 percent to 76.0 percent. Figure 2 and Figure 3 illustrate the racial and ethnic demographic trends in Gresham over the last 20 years.

Figure 2: Demographic Trends, Race (1990 to 2010)



Source: US Census

Figure 3: Demographic Trends in Gresham, Ethnicity (1990 to 2010)



Source: US Census

Also, Gresham's percentage of foreign-born people - whose households tend to be poorer and of larger size - increased from 13 percent in 2000 to 17 percent in 2010. As a point of comparison, the population of foreign-born people in the Portland/Vancouver Metropolitan Statistical Area is 12.5 percent. Table 1 provides additional information on Gresham's foreign born population in 2000 and 2010.

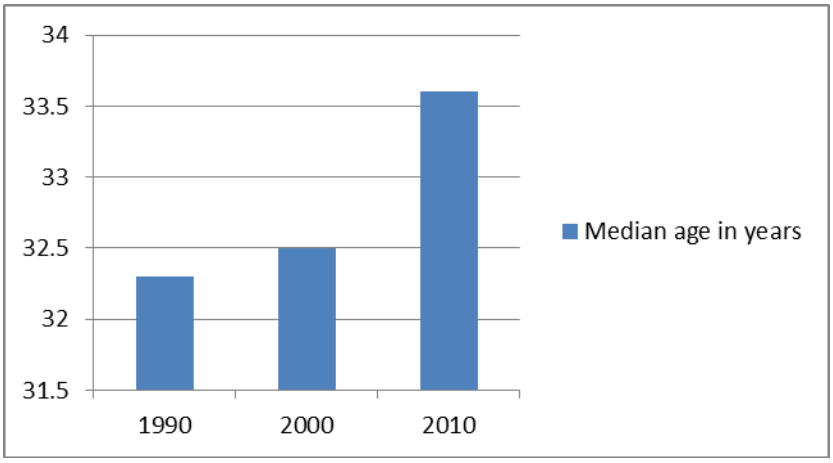
Table 1: Gresham demographics: Foreign-born population (2000 to 2010)

	2000		2010		Growth	
	Number	Share	Number	Share	Number	Growth
Foreign-born population	11,828		16,856		5,028	43%
Europe	2,061	17%	2,746	16%	685	33%
Asia	2,240	19%	3,267	19%	1,027	46%
Africa	177	1%	176	1%	-1	-1%
Oceania	154	1%	206	1%	52	34%
Latin America	6,688	57%	10,044	60%	3,356	50%
Northern America	508	4%	417	2%	-91	-18%

* Latin America includes Mexico, Caribbean, Central and South America. Northern America includes Canada and Greenland

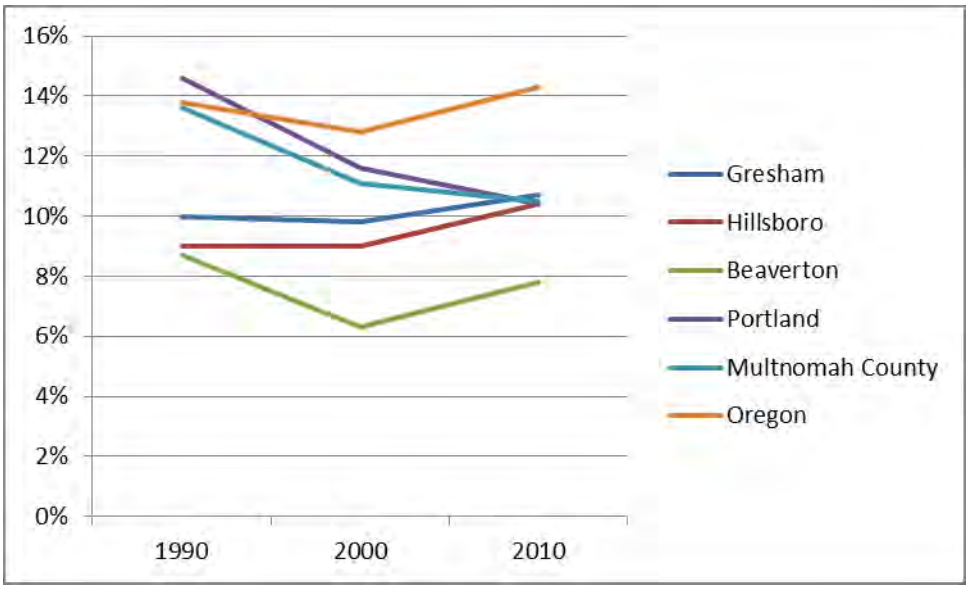
SOURCE: US Census, Johnson Reid LLC

Along with other communities in the Portland metropolitan area, Gresham's population is aging. The median age in Gresham in 2000 was 32.6, increasing to 33.6 in 2010. According to the 2010 US Census, 10.7 percent of Gresham residents are over the age of 65. However, between 2000 and 2010, the under-18 population in Gresham grew from 25 percent to 26.4 percent, with most of this cohort located in the Rockwood neighborhood. This trend is dissimilar to the downward trend in the under-18 population seen in other parts of the Portland metropolitan area. Median age trends in Gresham are depicted in Figure 4. Figure 5 and Figure 6 illustrate comparative data for the under-18 and over-65 populations in select cities in the Metro area, Multnomah County and Oregon.Figure 4: Demographic trends in Gresham: Median age



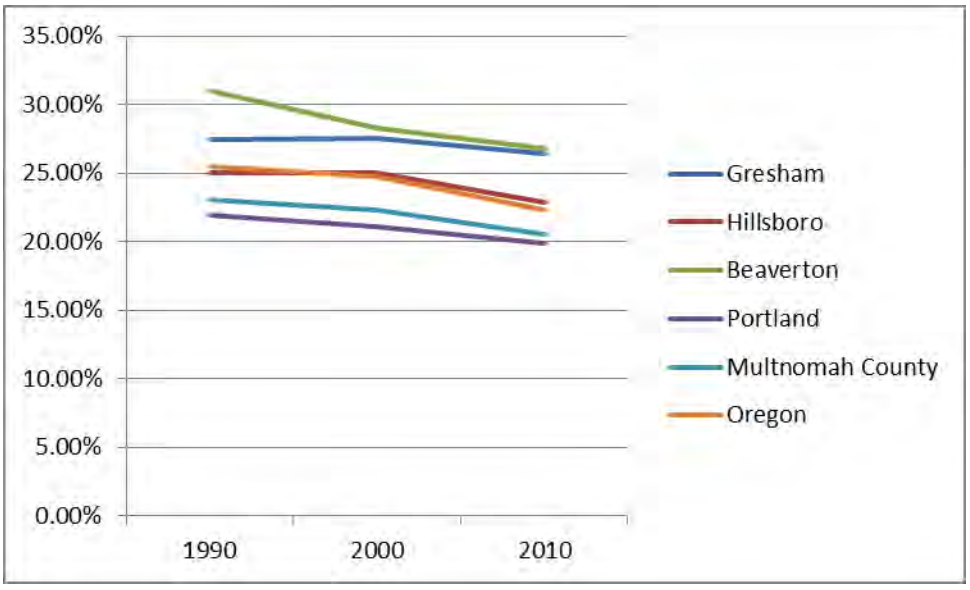
Source: US Census

Figure 5: Demographic trends in Gresham: People over 65



Source: US Census

Figure 6: Demographic trends in Gresham: People under 18



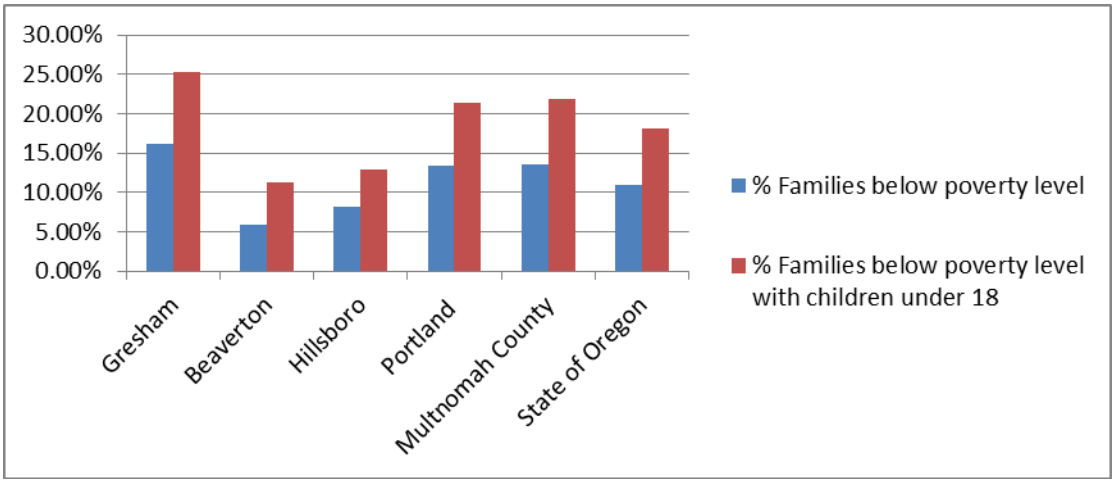
Source: US Census

Gresham's population is demonstrating an upward trend in household size. In 1990, the average household size was 2.62 persons. This increased to 2.69 persons in 2010. Although this demonstrates only a slight increase in size, other metro area communities experienced a decrease in household size.

Gresham's median family income in 2010 was $47,154, which is similar to median family incomes in Portland, Multnomah County and the State of Oregon. However, this figure is less than those found within other Metro area jurisdictions such as Beaverton ($54,885) and Hillsboro ($63,618). The level of poverty and need for public assistance in Gresham is relatively high. In 2010, 16.2 percent of Gresham

families and 25.3 percent of families with children under the age of 18 were living below the poverty level. Information on levels of poverty in the Metro area, the county, and the state is found in the chart below.

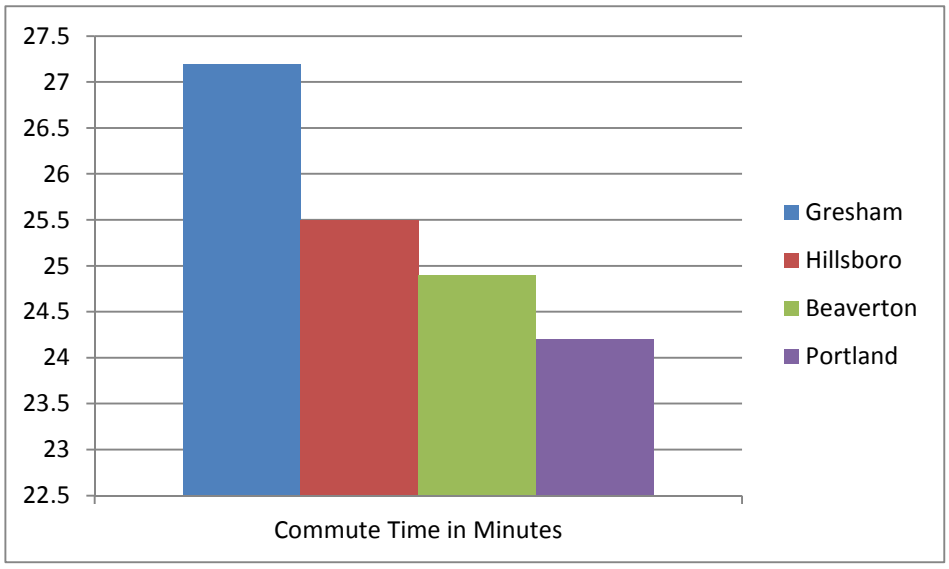
Figure 7: Gresham demographics: Families below poverty



Source: American Community Survey

In 2010, Gresham's workforce had a slightly longer commute time than those experienced by residents of Beaverton, Hillsboro and Portland.[2] This information is shown in Figure 8.

Figure 8: Gresham demographics: Commute time to work 2012



Source: American Community Survey 2012, one-year estimate

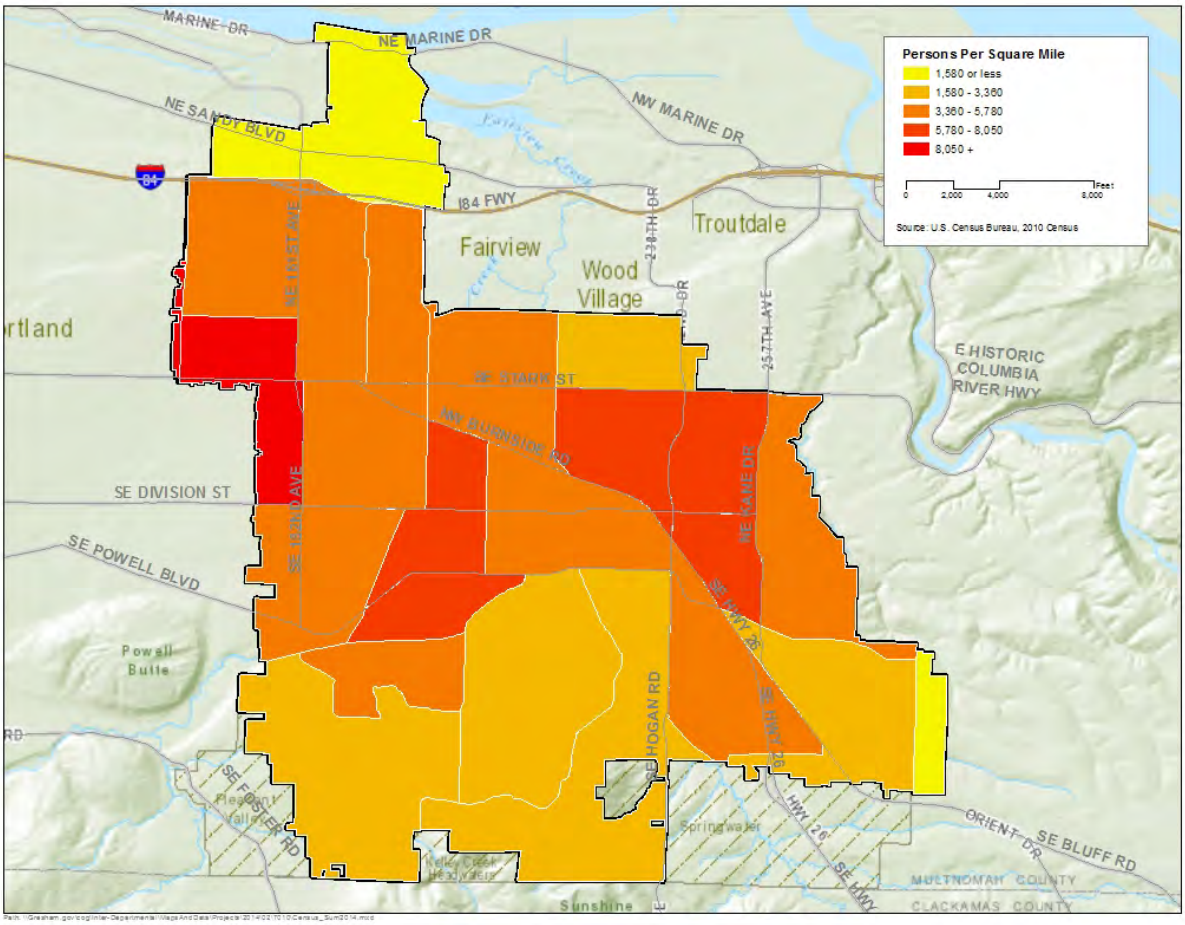
Of those persons traveling to work, approximately 8.3 percent used public transportation[3]; in contrast, 6.2 percent of Beaverton residents and 7.0 percent of Hillsboro residents used this mode of transportation to their place of employment. Roughly 12.8 percent of Gresham households had no access to a vehicle at

[2] American Community Survey, 2010, 1 Year Estimates.
[3] American Community Survey, 2012, 1-Year Estimates

their places of residence, while 8.6 percent of Beaverton and 8.0 percent of Hillsboro residents had no access to a vehicle at their places of residence.[4]

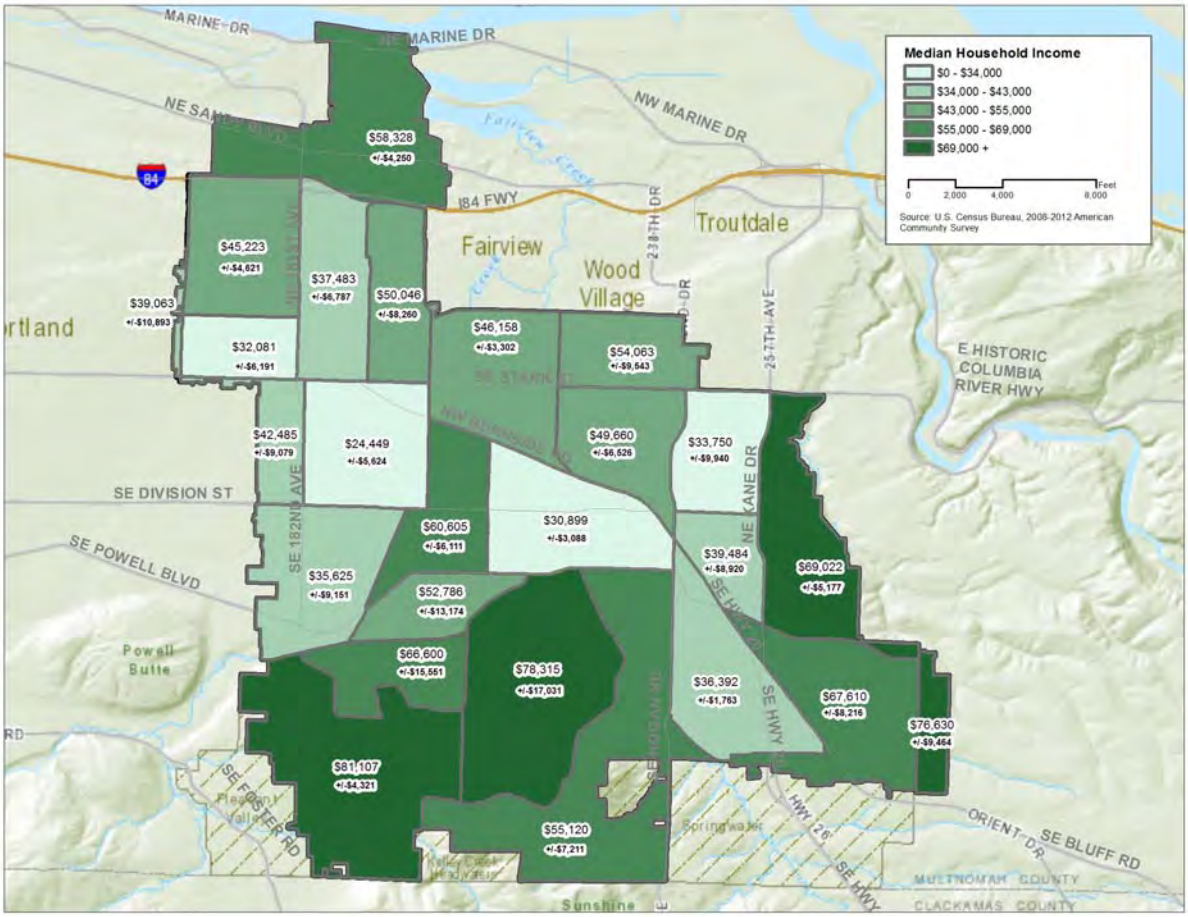
The following maps also provide demographic information tied to locations in Gresham.

Figure 9: Gresham population density



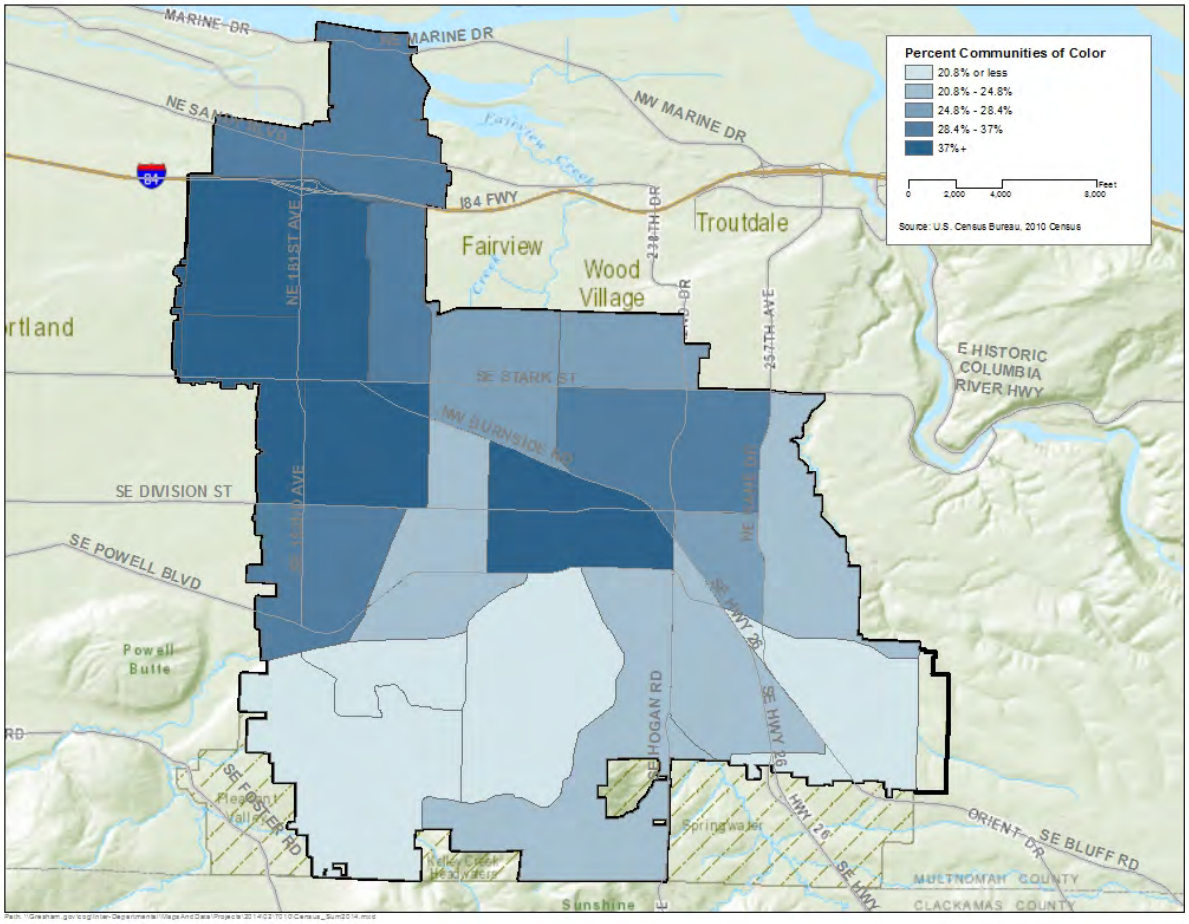
[4] American Community Survey, 2012, 1-Year Estimates

Figure 10: Median household income



The "+/-" number indicates the margin of error. For example, "$55,120 +/- $7,211" means the actual median income is likely somewhere in the range of $47,909 and $62,331.

Figure 11: Communities of color



This map shows, by census tract, the percent of the population in the census tract self-identifying as a member of a racial group that is not white.

Summary:

Gresham's demographic is typified by a population that is becoming more diverse with more foreign-born people. Family size is increasing, and the percentage of both persons under the age of 18 and over the age of 65 is increasing. Gresham also has a lower median household income than other similarly sized cities in the metropolitan area, and a higher rate of poverty. Commute times are longer and there is more of a need and desire for access to public transportation.

3. Land Use and Zoning

Gresham's zoning and land use patterns will help inform the Powell-Division Transit and Development Project and will be a critical element in determining the transit route and preferred type of transit vehicle. Evaluating existing land use also helps identify potential land use enhancements along the preferred transit route. The enhancements will aim to provide the opportunity for new services desired by the neighborhoods and stimulate economic development.

This chapter will briefly describe the land use zoning that apply within the study. It will then look at Gresham study sub-areas to provide a greater understanding of the land uses, unique features, and vacant lands within those areas. There are three sub-areas: Gresham West, Gresham Regional Center, and Gresham East.

Gresham overview

Gresham began as a small farming town that was incorporated into a city in 1905. Most of its physical expansion took place between the 1960s through the 1980s with a significant annexation of lands incorporated into West Gresham during the 1980s. Gresham's population growth has been noteworthy over the last 30 years, but increases have varied from a large increase between 1990 and 2000, to a more moderate growth between 2000 and 2010. As of July 1, 2013, Gresham's population has been certified at 106,180.

Aside from the annexation of 521 acres of rural lands in Pleasant Valley in 2006, that trend has not continued. The only expected significant annexations would be in the Springwater, Pleasant Valley and Kelley Creek Headwaters areas as those currently unincorporated areas become more primed for development.

The City of Gresham is the fourth largest city in Oregon. It is east of and adjacent to the City of Portland and is the second largest city in Multnomah County. Much of the area is characterized by residential development – both low density and multi-family developments. Downtown Gresham is identified as a Regional Center in the Metro Region 2040 Growth Concept Plan. The Rockwood neighborhood is identified as a Town Center, which is slightly smaller than a Regional Center. In addition to these two Centers, the Plan Areas of Pleasant Valley and Springwater also include Town Centers. These designations imply areas of increased growth and intensity of retail, services and housing in the future.

Interstate 84 runs east-west in the northern portion of the city; U.S. 26 (Powell Boulevard) runs east-west in the central portion of the city. The MAX light rail "blue line" generally follows Burnside Road and serves Rockwood, Civic Neighborhood, and Downtown Gresham. In addition to Max, there are 9 TriMet bus lines that serve Gresham, with Route 4 on Division providing frequent service (15-minute wait times between buses). Gresham Central Transit Center is the terminus for many bus routes and is located in Downtown Gresham.

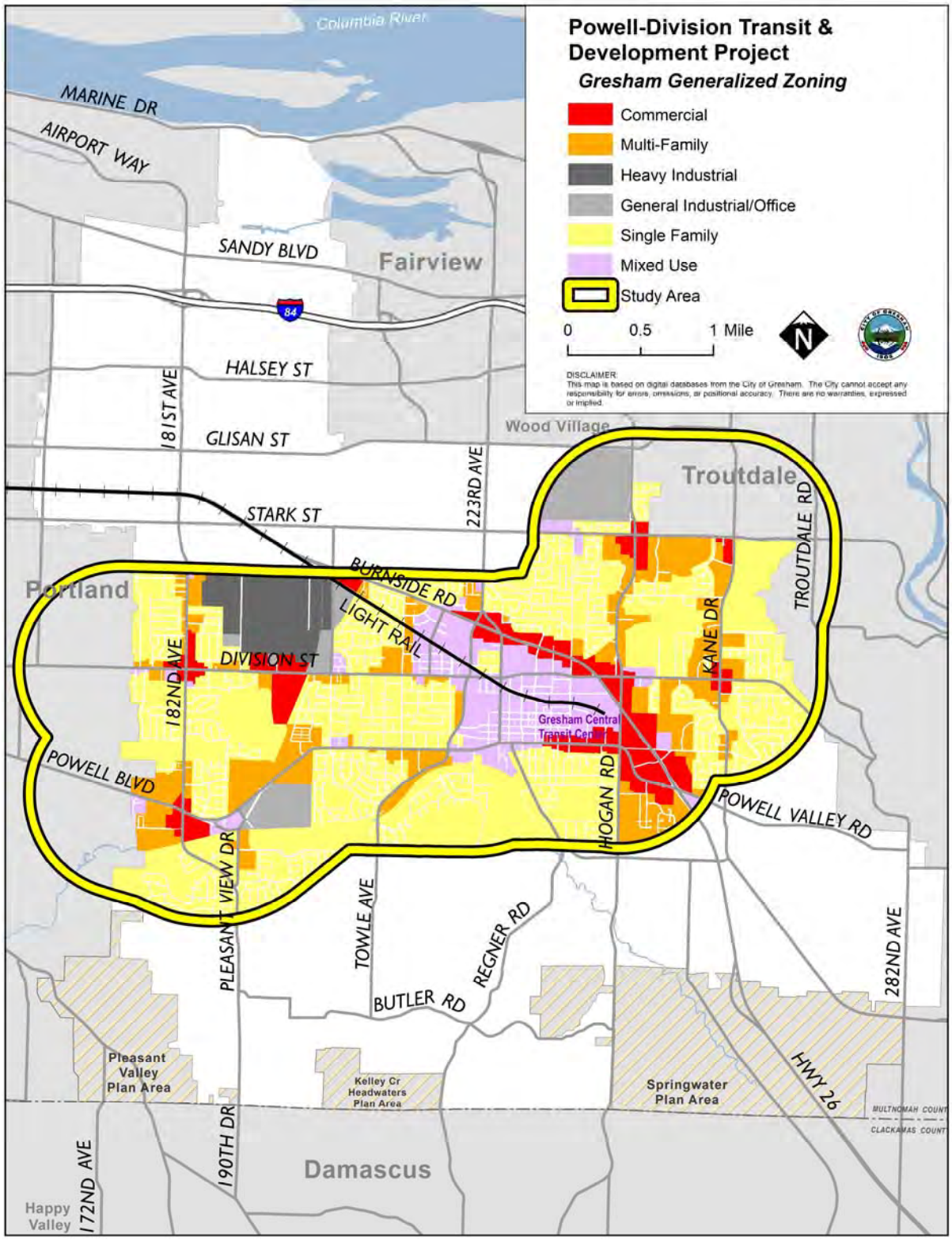
Zoning

Gresham's zoning includes residential, commercial, industrial and mixed-use land use districts. Standards apply in different zones to implement the unique characteristics of that zone. Standards include building height, residential density, commercial intensity, and required setbacks. Additionally, different types of uses are permitted in different land use districts. Gresham's Land Use Districts are explained in detail on the web at: www.greshamoregon.gov/developmentcode.

Zoning could be conceived of in six general categories (shown in Figure 12):

1. **Single-family:** Areas where low-density single-family detached housing is allowed. Features in these zones typically include separate ownership of property and units, generous yard space and auto parking, and less activity. In general, these produce fewer transit riders than more intense districts. In the study area, this includes the LDR-GB, LDR-7, LDR-5, DRL-1, and TR districts.
2. **Multi-family:** Areas where multi-family is allowed, including row houses, apartments, and condominiums. These land use districts are usually located close to activity centers and major transportation/transit corridors. Other development standards, such as maximum building heights and minimum parking requirements affect the potential scale for development of these areas. In the study area, this includes the TLDR, MDR-12, CMF, MDR-24, MDR-C, and HDR-C districts.
3. **Commercial:** Areas where commercial uses are allowed, including more auto-oriented establishments. Commercial areas are located at major transportation nodes such as 182nd Avenue and Division and along corridors such as Burnside Road. The development standards and guidelines for these districts require that future development be more compatible with transit goals. In the study area, this includes the CC, MC and DCL districts.
4. **Mixed-use:** Areas where a mix of multi-family and commercial uses is allowed. They include transit-oriented development standards and allow more intensity. In the study area, this includes the OFR, DRL-2, CMU, SC, TDM-C, SC-RJ, TDH-C, DEM, DCC, DTM, and DMU districts.
5. **General Industrial:** Manufacturing, information services, and other light industrial uses are allowed. In the study area, this includes the GI district.
6. **Heavy Industrial:** Aggregate, raw material, and other heavy industrial uses are allowed. In the study area, this includes the HI district.

Figure 12: Gresham generalized zoning



Areas with more intense, mixed-use zoning that could benefit from and provide riders for enhanced transit and encourage station area development are located in the following locations:

- 182nd and Division
- 182nd and Powell
- Portions of Division between 182nd Avenue and Birdsdale
- In the Gresham Regional Center
    - Roughly from Wallula to Hogan on Division
    - Roughly from Eastman Parkway to Hogan on Powell
- On most of the Division/Kane/Stark/Hogan loop with a few lower-intensity residential pockets.

The Regional Center land-use districts allow for the most intense mixed-use development in the study area. In addition, the Gresham Vista Business Park bordered by 223rd Avenue, Stark Street, Hogan Road and Glisan Street is zoned for industrial uses and is a future job center.

Design Districts

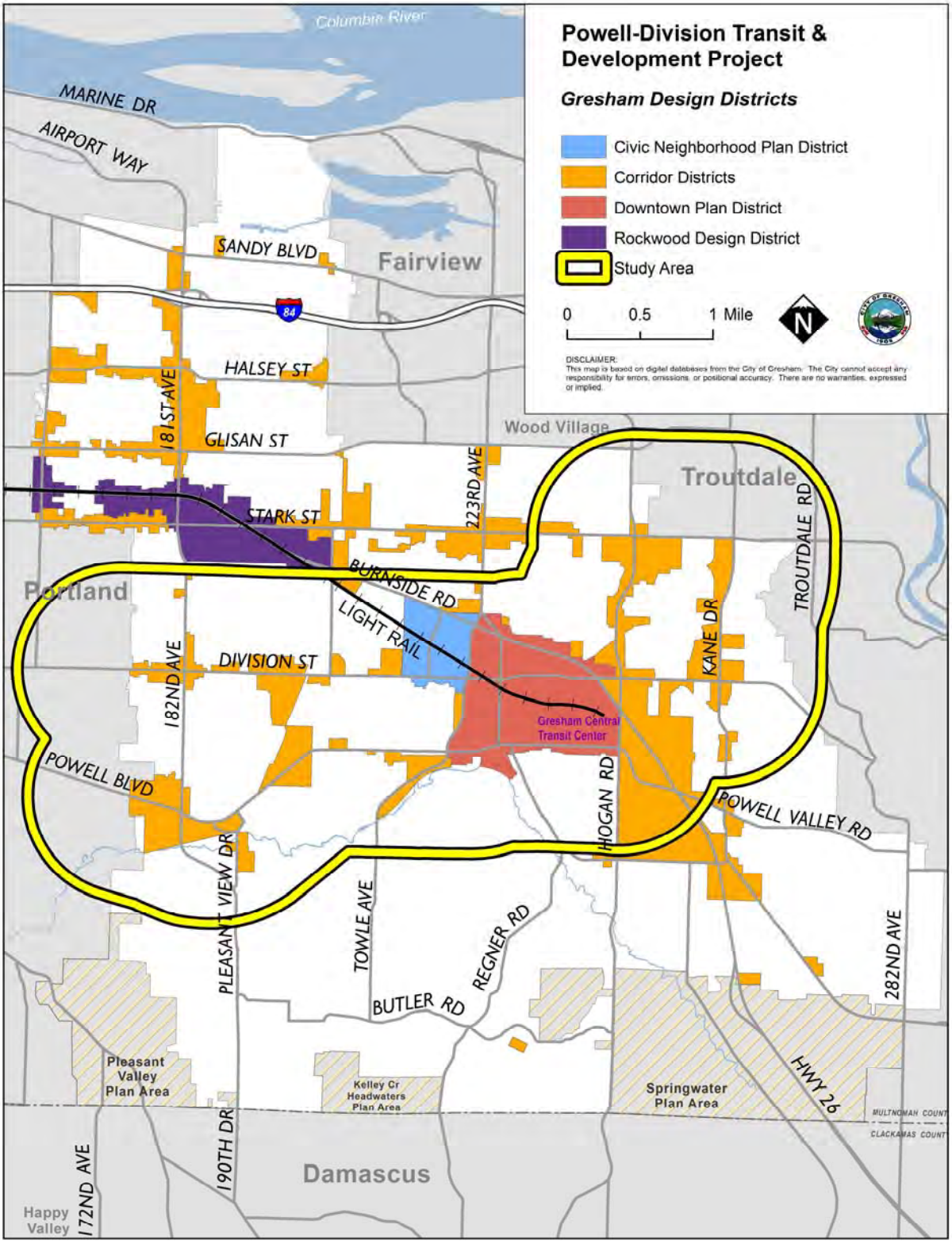
Gresham's design districts, shown in Figure 13 , provide guidelines and standards for development to promote quality site design and building designs that result in pedestrian-friendly environments that support successful developments and a variety of travel modes, including transit. The standards and guidelines promote higher quality new development in potential transit station areas.

There are multiple design districts in the study area: Downtown, Rockwood, Corridor Commercial, and Multi-family. The Civic Neighborhood is designated as a Design District, but guidelines and standards have yet to be created for the area.

Site design standards encourage buildings to be placed near the street, incorporate good pedestrian connections, and apply appropriate landscaping for each use. Building design standards encourage quality buildings with doors facing major streets, window transparency that facilitates interactions between the public and private realm, and durable, attractive materials.

Design standards and guidelines apply to most multi-family and commercial locations in the Powell-Division study area (with the exception of commercial properties in Civic Neighborhood) and promote a pedestrian- and transit-friendly environment. New development and major alterations in design districts require a public hearing before the Design Commission.

Figure 13: Gresham Design Districts



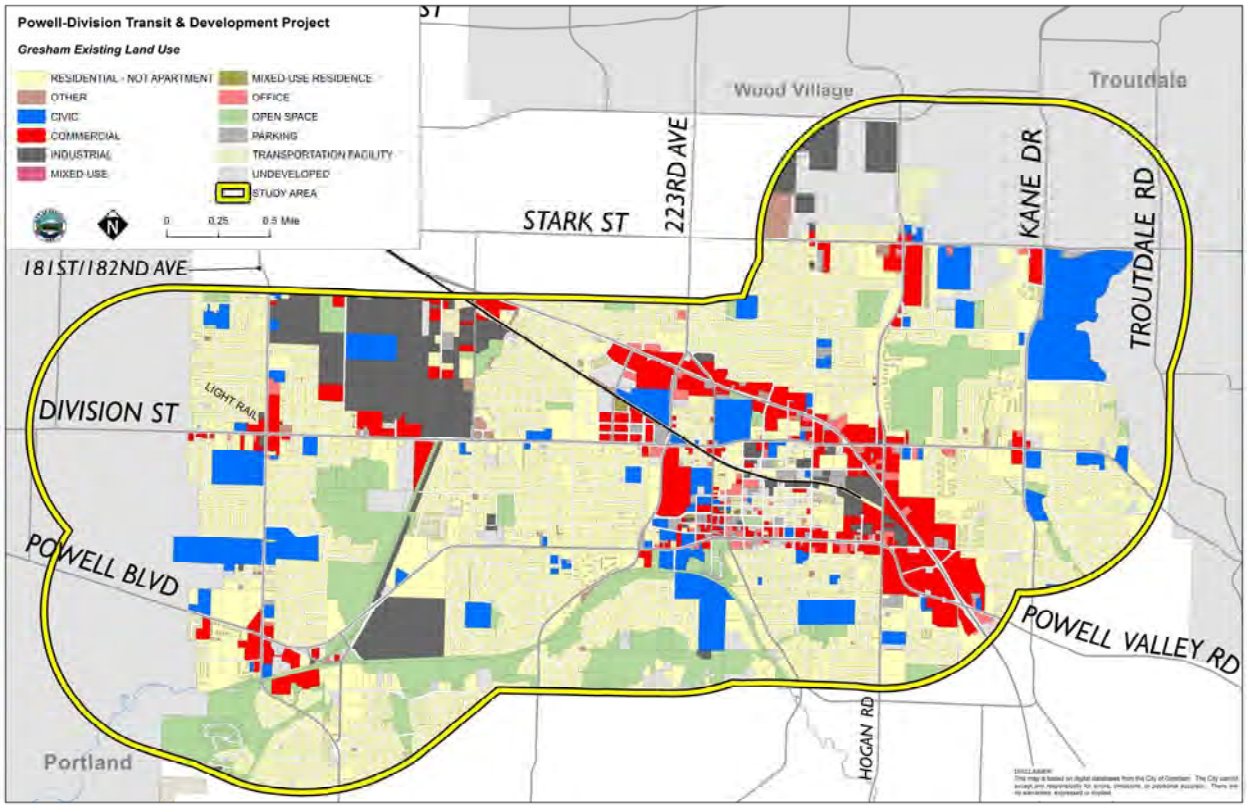
Land use

The Gresham portion of the Powell-Division Transit and Development Project study area may be considered as three areas.

- Gresham West: Western city limits to Birdsdale Avenue
- Gresham Regional Center: Birdsdale to Hogan, including Downtown Gresham and Civic Neighborhood
- Gresham East: A loop to Mt. Hood Community College from Downtown Gresham that includes Division, Kane, Stark and Hogan.

Each of these geographies is described below in terms of general land use composition, unique features, and transit. The current land uses are shown in Figure 14.

Figure 14: Existing land uses



Gresham West

The western portion of the Study Area contains large areas of one- to two-story single-family-detached residential homes. Multi-family developments are located mostly along arterials and at major intersections, such as on Powell and Division near 182nd Avenue.

Commercial uses exist along the major arterials of Division and Powell where they intersect 182nd. Several commercial uses also are found on Division between 190th and Birdsdale.

Industrial uses are found on the north side of Division between 190th and Birdsdale, with a large heavy industrial area with a history of aggregate extraction in this area. On Powell, an industrial area dominated by a Portland General Electric facility is found east of West Powell Loop.

Institutional uses in the Gresham West area include Centennial High School, Portland Lutheran High School, Centennial Middle School, Eastside Christian School, Centennial Learning Center, Lynch Meadows Elementary School, Hollydale Elementary School, and Portland Adventist Elementary School.

Vacant lands along Division include an 8-acre parcel zoned GI just northwest of the Birdsdale/Division intersection. Vacant land in the Powell corridor includes several parcels owned by Walmart in the 182nd and Division area.

Gresham Regional Center

This area contains some of Gresham's most active areas and is served by light rail and several bus lines. Buildings in Downtown and Civic Neighborhood are one to five stories.

Civic Neighborhood between Wallula and Eastman Parkway features City Hall, large retailers like Best Buy, smaller businesses and offices and a range of residential uses. Downtown (between Eastman and Hogan) is Gresham's historical center and includes both inline shopping centers with national retailers (along arterials) and historic Downtown which has many small businesses and restaurants and several three- or four-story mixed-use buildings in pedestrian-friendly areas with narrower streets and small blocks. The segment is largely residential besides, and the neighborhoods around the Regional Center are some of the oldest in Gresham.

Institutional uses in the Gresham Regional Center area include Gresham High School, Alpha High School, Center for Advanced Learning, Dexter McCarty Middle School, West Gresham Elementary School, and East Gresham Elementary School. There are a number of governmental uses including Gresham City Hall, Multnomah County facilities and state offices.

The Regional Center has numerous vacant or underdeveloped properties of varying sizes that provide significant development or redevelopment opportunities.

Gresham East

This segment includes mostly multi-family, commercial and institutional uses facing the arterials, with occasional pockets of single-family residential or manufactured home parks. This loop also includes several large/campus uses, which are Gresham Golf Course, Mt. Hood Community College, Legacy Mount Hood Medical Center and Gresham Vista Business Park (on Hogan just north of Stark). The college, hospital and business park are or will be major travel destinations and provide valuable jobs, education and medical care to the community.

Commercial nodes exist at the four intersections: Division, Hogan, Kane and Stark. They generally have apartments near the commercial areas. Gresham Vista Business Park is larger than 200 acres and is anticipated to have more than 2,500 jobs.

Institutional uses in this area include Mount Hood Medical Center, Mt. Hood Community College, Gordon Russell Middle School, Powell Valley Elementary School, and Hall Elementary School. The Gresham Golf Course provides the largest area of open green space in this segment of the study area.

Conclusions

Existing land use patterns and allowed development in Gresham's land-use districts provide the following opportunities:

- Gresham West: Division has the largest potential for development and/or redevelopment at 182nd. It also has potential between 182nd and Birdsdale.

  On Powell, the 182nd intersection provides some opportunities. Powell from 182nd to Downtown has larger areas of single-family neighborhoods that present fewer potential for development/redevelopment and in general produce fewer transit riders.
- Gresham Regional Center: On both Division and Powell, this segment has significant potential for more intense development of housing, jobs and commercial activity. The allowed uses and intensities in this area are some of the highest in Gresham and it contains transit, commercial availability and road access to support additional activity.
- Gresham East: The campuses in this area provide significant potential for job growth, with Mt. Hood Community College and Legacy Mount Hood Medical Center having plans and room for growth. The Gresham Vista Business Park is poised to fill 200 acres with new industrial/business park development that can accommodate more than 2,500 new jobs. Some more limited opportunities are available elsewhere on the loop formed by Division, Kane, Stark and Hogan.
- Nodes of higher density residential areas near key transportation nodes – while already developed – may accommodate additional capacity. There are some vacant as well as underdeveloped parcels throughout the study area.

4. Housing

This section generally describes overall housing conditions and trends in Gresham. Data used in this section of the report is derived from the U.S. Census, the American Community Survey, and the December 2012 City of Gresham Housing Study.[5]

Housing

Tenure

According to the 2010 U.S. Census, Gresham's housing units are currently 52.5 percent owner occupied and 47.5 percent rentals. This represents a decrease in home ownership from 58.4 percent in 1990. One explanation for this decrease in home ownership is that in the 1990s and earlier, there were many new multiple-family developments constructed in Gresham that provided numerous opportunities for occupancy in multiple-family residential developments. The recent economic recession also has bearing upon these numbers because home ownership was less attainable, with some residents who were former home owners changing over to becoming renters. The following chart indicates the trending in housing tenure since 1990. Table 2 also shows a breakdown of owner occupied vs. rental units for the years 2000 and 2010.

Table 2: Gresham housing tenure: Growth rate 2000 to 2010

			Growth	
	2000	2010	Units	%
Occupied Units:	33,327	38,704	5,377	16%
Owner-Occupied:	18,282	20,320	2,038	11%
Renter-Occupied:	15,045	18,384	3,339	22%

SOURCE: US Census, Johnson Reid LLC

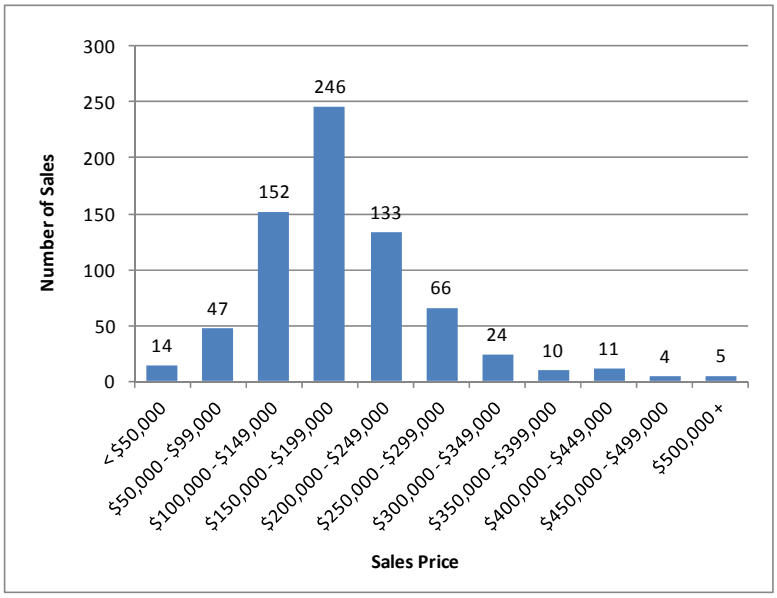
The December 2012 City of Gresham Housing Study noted that a reversal of this trend is expected over the next 20 years, with roughly 54 percent of residences to be expected to be owner occupied by 2032. Part of the reason for this change is the fact that the Gresham demographic is aging, and older residents in the Baby Boom generation tend towards home ownership. The Millennials, currently roughly 30 percent of Gresham's population, will be expected to gravitate towards urban core areas characterized by mixed-use development with access to transit and other amenities.

Housing price and rental rates

In 2012, the median price of a single-family home in Gresham was $190,000. This is slightly lower than that for the overall Portland metropolitan area. This has been the trend since the early 2000s. Gresham housing prices rose through 2008, and then experienced a decline that continued through the recession. This trend is just now seeing a reversal. Figure 15 shows housing sales by price in 2010.

[5] http://greshamoregon.gov/housingpolicy

Figure 15: Gresham housing sale prices, 2010



Source: RMLS, JOHNSON REID LLC

Rental prices bottomed out during mid-2009 and have continued to rise from that time. The average rent within the city is roughly $ 0.90 per square foot. Older rentals in the Downtown are on par with that of the rest of the city, but newer developments such as Central Point and 3rd Central are achieving rents as much as 20 percent higher. Average rents in the Civic Neighborhood are estimated at roughly $1.06 per square foot, with the Crossings at Gresham Station, Columbia Trails and Springwater Crossings (near the Civic Neighborhood) achieving some of the highest rent levels of Gresham apartments.[6]

The overall Gresham housing vacancy rate in December 2012 was estimated at 5.5 percent. This is expected to decrease in the future.

Housing needs: [7]

Like most jurisdictions, lower cost rentals will continue to be needed in Gresham. Units with a rent of up to $380 per month represent 20 percent of needed rental units by 2032. However, the greatest percentage of needed rental units will fall in the range of $870 to $1060 for monthly rent, representing 22.4 percent of needed rental units in 2032.

It expected that the need for owner occupied housing will increase by 2032. Based on current trends, it is expected that there will primarily be a need for more owner occupied housing in the price range of $270,000 to $410,000 by 2032.

Conclusion

With the general aging of the population, access to transit will become a necessity for an increasing number of Gresham residents; additionally, the younger Millennial generation will actively seek out the urban core areas of the city where access to transit is more readily available. Both trends point to the need for more and better options for public transportation.

[6] City of Gresham, OR Housing Study, December 2012.
[7] All price and rental costs are noted in 2012 dollars.

5. Business and Market Conditions

Gresham includes a diverse job base, and the city is seeking additional jobs to ensure employment for its growing population. According to the 2010 U.S. Census, nearly 56,000 Gresham residents are employed. There are approximately 31,000 workers in the city. This demonstrates that many Gresham residents work outside the city. With the jobs in the city, many positions are held by Gresham residents, and many are held by people who live in other communities; 24 percent of people who work in Gresham live in Portland, while 20 percent of people who work in Gresham also live in Gresham. Generally, Gresham's workforce has a slightly longer commute than other cities – commute time is approximately 26 minutes. The average commute time in Oregon is 22 minutes, and it is 24 minutes for Portland and Multnomah County.

Gresham job and employee characteristics

Gresham remains a manufacturing city, with 20 percent of jobs in the city's privately owned businesses being manufacturing jobs.[8] These businesses make such things as airplane parts; eyeglass lenses; refrigeration units; polyurethane foam; metal frames and windows; hydraulic equipment, micro controllers; semiconductors and food products.

Manufacturing is the largest employment sector, followed by health care, retail trade, and accommodation and food services.

The following are the top industry categories for workers within Gresham:[9]

- Education services, health care and social assistance: 19.8 percent
- Retail trade: 13.8 percent
- Manufacturing: 10.9 percent
- Arts, entertainment, recreation, accommodation and food services: 10.4 percent

Gresham workers have a slightly longer commute than some other cities in the region, with the mean travel time to work in Gresham at 26.9 minutes compared with 24.2 minutes in Portland and 24.7 minutes in Hillsboro.[10] This reinforces the need for additional jobs in Gresham to provide opportunities for Gresham's workers. It also points to the need for quality transit to provide options for workers to get to their jobs.

Economic development goals

Gresham's economic development efforts focus on retaining and attracting traded sector jobs to Gresham and the Portland region. Traded sector jobs are jobs in companies that export goods or services out of the region. These sectors are important because they bring wealth back into the community and create additional "spin off" jobs for suppliers and the service sector (such as medicine, education, retail and dining).

Traded-sector efforts are focused on:

---

[8] Source: WorkSource Oregon Quarterly census of Employment and Wages 2010 Annual Data.
[9] Source: U.S. Census Bureau, 2008-2012 American Community Survey. The margin of error ranges from 1 percent to 1.4 percent.
[10] Source: U.S. Census Bureau, 2008-2012 American Community Survey. The margin of error is 0.9 minutes for Gresham, 0.3 minutes for Portland and .08 minutes for Hillsboro.

- **Manufacturing:** Strengthen and grow Gresham's existing manufacturing sector, retain existing family wage jobs, and create new family wage jobs through expansion of existing companies and recruitment of new companies.
- **Clean Technology:** Further Gresham's position as a preferred location for clean technology companies, including support industries. Expand focus to include clean technology sub-sectors like electric vehicles, battery storage, smart grid technology, and wind, wave and solar manufacturing.
- **Professional Services:** Encourage job creation and new investment in Gresham's industrial and regional centers. Focus on professional service companies which fit into the industrial uses allowed by Gresham's Development Code.

Gresham works with its regional and local partners (such as the Port of Portland, Greater Portland Inc., the Metropolitan Export Institute and Mt. Hood Community College) on these efforts.

Development and job-growth incentives

Gresham and its partners provide economic development incentives to bring jobs and additional economic activity to Gresham. These include a variety of methods, including incentives for industrial jobs and housing and reducing the cost of doing business in Gresham.

Incentives include:

- **Enterprise Zone** is a public/private partnership program which provides three to five year property tax abatement on new investments in exchange for meeting job creation and other requirements aimed at business creation.
- **GREAT Business Program** offers free assistance in environmental conservation, with awards and publicity for businesses that go above and beyond.
- **Green Practice Incentives** are offered by local, state, and national organizations. The programs provide financial incentives and how-to support for businesses that implement green practices.
- **Gresham Strategic Investment Zone** (SIZ) covers approximately 500 acres of industrial land in the Columbia River Corridor, within which new qualifying traded-sector business investments are eligible for a 15-year partial property tax abatement.
- **Oregon Strategic Investment Program** (SIP) has similar criteria to the SIZ and is available statewide for eligible projects.
- **Commercial Stormwater Fee Reduction Program** provides stormwater utility fee adjustment information and application materials for commercial, industrial, multi-family and institutional customers. Fee reductions are possible for qualified stormwater design projects that lessen the impact to Gresham’s stormwater system. This program supports the use of "green" stormwater development designs.
- **System Development Charges Financing Program** allows deferring payment of SDCs until occupancy, or financing SDCs over a period of up to 10 years.
- **Vertical Housing Development Zone** allows eligible mixed-use projects to receive 10 years of up to 80 percent property tax abatement for buildings that include residential and commercial space.
- **Workforce Training** connects businesses with a dynamic network of partners who have established a comprehensive system designed to provide a trained workforce.

Growth opportunities

Job growth opportunities exist throughout the study area. Larger-scale growth opportunities in the study area include:

- **Regional Center:** Gresham's Regional Center, which includes both Downtown Gresham and Civic Neighborhood, has vacant and underdeveloped land and redevelopment opportunities that could accommodate additional jobs. For example, Metro owns lands along Civic Drive near the MAX line in the Civic Neighborhood that are currently vacant.
    - The Kmart site at Eastman Parkway and Burnside Road is underutilized and includes a large amount of square footage currently designated as a surface parking lot.
    - The Town Fair Shopping Center provides redevelopment opportunities that are both adjacent to Downtown Gresham and highly visible from Division and Eastman Parkway.
- **Gresham Vista Business Park:** This state-certified 220-acre business park is owned and marketed by the Port of Portland. It is located in northern Gresham and is bounded by 223rd Avenue, Glisan Street, Hogan Road and Stark Street. This site is expected to accommodate more than 2,500 predominantly industrial jobs at build-out.
- **Mt. Hood Community College:** Gresham's college campus full-time equivalent enrollment was 9,801 for the 2012-13 academic year.[11] The college has a master plan that anticipates future growth.
- **Mount Hood Medical Center:** Legacy Health has a medical campus on Stark Street between Hogan Road and Kane Road with a full-service hospital and associated medical office buildings. It has land available for expansion.
- **Other opportunities:** Smaller job growth opportunities can be found along Powell, Division, Kane, Stark and Hogan streets in the study area. Vacant land and redevelopment opportunities also are described in Chapter 3.

Conclusion

With key employment sectors and economic development goals to grow the jobs base in Gresham, transportation to Gresham, to employment areas, and connecting where people live to where they work becomes increasingly important. This includes connections to industrial areas north of I-84, the Gresham Vista Business Park, and key employers like Mount Hood Medical Center and Mt. Hood Community College.

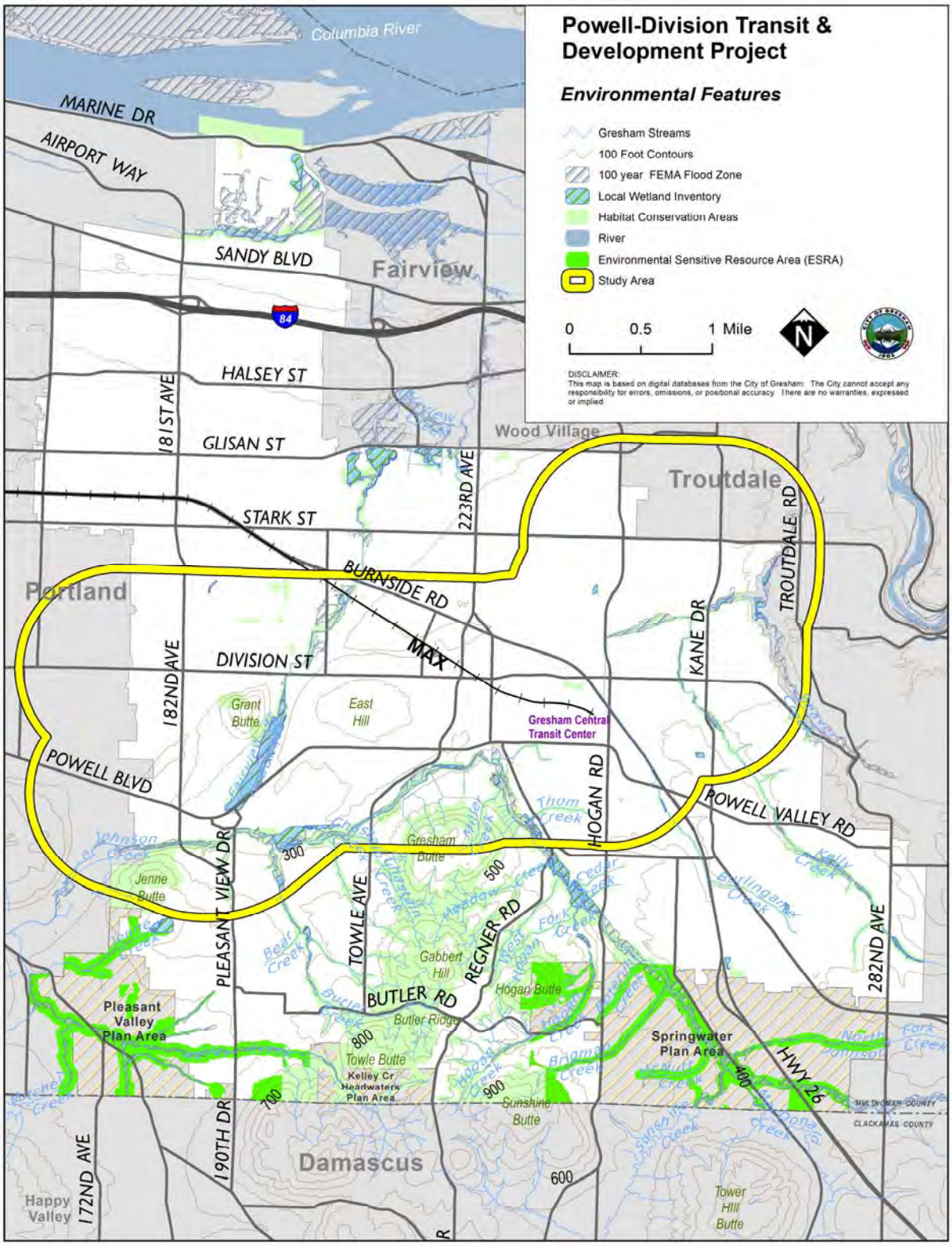
[11] "Recent Enrollment Trends." www.mhcc.edu. Mt. Hood Community College, 29 Aug. 2013. Web. 24 Dec. 2013. <http://www.mhcc.edu/docs/Research/enrollment_trends.pdf>.

6. Environment

Environmental assets such as streams, wetlands, buttes and forests provide important ecological services to Gresham, including stormwater management and habitat. They also provide natural beauty to the city, which is something valued by Gresham's residents. Because these features are an important asset, rules are in place to protect them. These rules include limits on development that may affect the feasibility of some Powell-Division Transit and Development Project alternatives.

This chapter details some of the natural features in the study area and describes their potential constraints on transit options or development/redevelopment opportunities. Figure 16 shows where key natural and urban features are located.

Figure 16: Environmental features



Natural features

Streams and wetlands

Gresham West: The western portion of the Gresham study area between the city boundary and Eastman Parkway has one significant stream and wetland complex along Fairview Creek. Fairview Creek is fed by over 100 acres of groundwater-supported wetlands adjacent to Powell Boulevard near 10th Street and continuing north to Division, around the base of Grant Butte. These wetlands provide habitat to state-protected amphibians and reptiles. Powell Boulevard is four lanes to the west but narrows to two lanes as it proceeds east under the pedestrian bridge that carries the Gresham/Fairview Trail over Powell Boulevard. The wetlands may constrain street widening and adjacent development in this location.

Fairview Creek continues north and goes under Division Street. The creek crossing area also limits development potential along Division. Division is five lanes wide throughout this section.

Gresham Regional Center: Further east in Gresham's Regional Center (Downtown and Civic Neighborhood), Thompson Creek and Johnson Creek run just south of Powell Boulevard and somewhat limit development potential between Main Avenue and Cleveland. Otherwise, stream and wetland constraints on development are not common in the Regional Center.

Gresham East: The eastern portion of the study area in Gresham contains Burlingame Creek and Kelly Creek. Burlingame Creek runs through Gresham Golf Course, and Kelly Creek is surrounded by residential homes, the Gresham Golf Course, and Mt. Hood Community College. Some wetland areas are found upstream of the golf course at Hogan Road and on the Mt. Hood Community College campus. The creeks and wetlands in those locations would provide some constraints. The arterials in the area are at least five lanes wide.

Uplands/buttes

Upland areas enrich the urban environment by providing a landscape of natural features when viewed from more developed, urban points in Gresham. They also serve important natural functions by providing:

- Habitat for wildlife and birds
- Nesting, cover and feeding sites for over 100 bird species
- Wildlife migration corridors
- Forest cover that cools streams, which makes the streams healthier for fish as well as residents

Upland areas in Gresham include: Grant Butte in west Gresham between Division and Powell; Jenne Butte in southwest Gresham south of Powell; and Gresham Butte just south of Downtown Gresham.

Development constraints

City rules provide protection for natural features and wildlife habitat as well as require developments to take stormwater quality measures. These also have a foundation in state and regional regulations that seek to protect natural resources and water quality.

Habitat Conservation Areas

Habitat Conservation Areas are overlays in Gresham's Development Code designed to:

- Protect and improve the following functions and values that contribute to fish and wildlife habitat in urban streamside areas and upland areas that influence water quality:

- Microclimate and shade;
- Stream-flow moderation and water storage;
- Bank stabilization, sediment and pollution control;
- Large wood recruitment and retention and channel dynamics; and
- Organic material sources.

Habitat Conservation Areas rules typically require mitigation of the habitat area disturbed by development. Rules are applied to areas near streams, wetlands and on upland areas, including buttes.

Gresham West: In the western portion of Gresham's study area, Habitat Conservation Areas are found along Fairview Creek and Grant Butte, starting at Powell, moving northeast across Division and north to Burnside.

Gresham Regional Center: In the Regional Center portion of Gresham's study area, Habitat Conservation Areas are found south of Powell along Johnson and Thompson Creeks. They are also found on Gresham Butte.

Gresham East: In the eastern portion of the Gresham study area, Habitat Conservation Areas are found in narrow areas along Kelly and Burlingame Creeks. The conservation areas are wider in the Gresham Golf Course area between Hogan and Kane.

Floodplain Areas

Floodplains are areas susceptible to being inundated by flood waters from any source. Additional regulations are in place for these areas to minimize damage caused by flooding.

In the study area, floodplains are generally coterminous with the habitat conservation areas associated with the stream.

Gresham West: In the western portion of Gresham's study area, floodplains are designated along Fairview Creek and Johnson Creek

Gresham Regional Center: In the Regional Center portion of Gresham's study area, Floodplain Areas are along Johnson and Thompson Creeks.

Gresham East: In the eastern portion of the Gresham study area, Floodplain Areas are found along Kelly and Burlingame Creeks.

Stormwater quality

Gresham requires development that adds significant impervious surface to address the quality and quantity of runoff generated from that new development. Stormwater rules promote on-site management of stormwater where possible, which can include swales, ponds, vaults or marshes. These requirements improve water quality and reduce runoff quantity from a site. Some solutions may reduce the amount of developable land available.

Conclusion

Natural features provide important benefits for ecosystem health and residents' quality of life in Gresham, and City policies and rules are designed to protect these resources. Considerations for enhanced transit and land-use development/redevelopment include potential impacts to buttes, streams, wetlands, and

associated wildlife in the study area. As described above, these protected resources present more constraints along Powell Boulevard on Gresham's west side and along Kelly and Burlingame creeks on the eastern portion of the study areas near Gresham Golf Course and Mt. Hood Community College. Otherwise, the study area typifies an area largely urban in character with ample opportunity for enhanced transit and development/redevelopment of select locations to accommodate new uses such as jobs, housing and shops.

7. Community Assets and Safety

Places to play, enjoy nature and engage in physical activity are an important part of full-service neighborhoods. Having a safe, secure community where people can comfortably live, work and play also is essential to a successful city. This chapter provides a summary of:

- Community services, such as libraries and post offices;
- Parks, natural areas and trails; and
- An overview of public safety and security conditions.

Community services

Community services uses provide services available to the general public. They typically provide services of a social need, such as libraries and post offices. Some of the community services located in the study area include:

Gresham West: A Multnomah County Health Department clinic along 182nd Avenue and My Father's House on Powell Boulevard.

Gresham Regional Center: Community services in this area include Gresham City Hall, the Gresham branch of the Multnomah County Library, Multnomah County Offices, and a US Post Office. Other social service agencies in this vicinity include El Programa Hispano and Zarephath Kitchen.

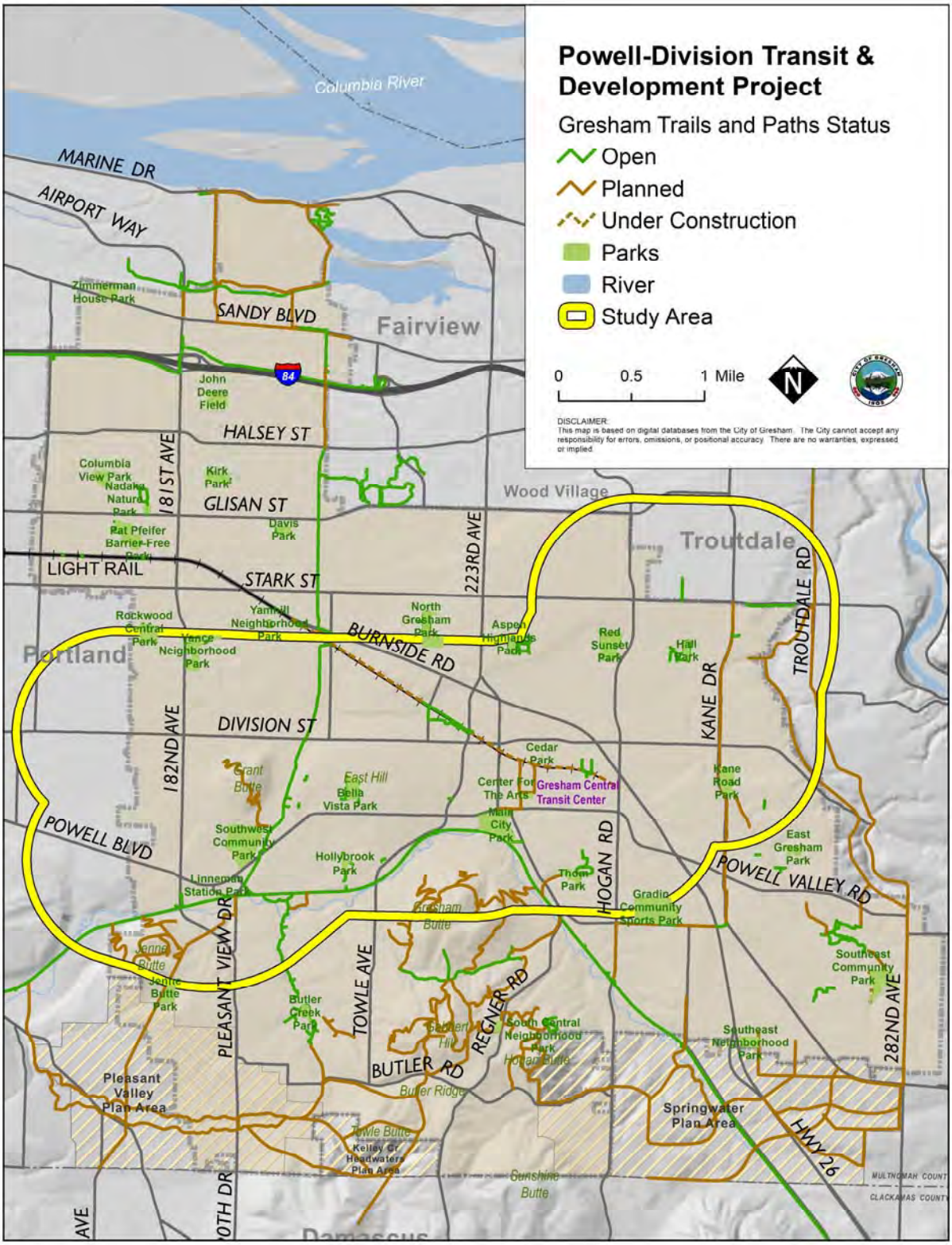
Gresham East: Mount Hood Medical Center and associated clinics.

Parks, natural areas and trails

Parks

Gresham's portion of the study area has 24 parks, natural areas and trails that provide a variety of amenities including multi-use trails, sports fields, picnic areas, playgrounds and green spaces. Table 3 and Table 4 provide a list of these parks, natural areas and trails, which are shown in Figure 17. Additional parks and natural areas are provided by other government agencies, schools and private property owners in the study area.

Figure 17: Parks, open space, trails and paths



Gresham's 2009 Parks & Recreation, Trails and Natural Areas Master Plan provided a summary of existing parks and their conditions. Because of limited funding for parks, Gresham parks are, on average, in fair condition, and several remain undeveloped. The Master Plan calls for the development of undeveloped parks, acquisition of new parkland in unserved and underserved areas (including new growth areas) and additional recreation programming in existing parks if additional funding becomes available.

Gresham West: Parks – developed and undeveloped - in this area include: Rockwood Central Park, Vance Park, Bella Vista Park, Hollybrook Park, Linneman Station Park, Jenne Butte Park, Butler Creek Park and Southwest Community Park.

Gresham Regional Center: Parks in this area include: Main City Park, the Center for the Arts Plaza, Aspen Highlands Park, Thom Park, and Cedar Park.

Gresham East: Parks in this area include: Gradin Community Sports Park, East Gresham Park, Red Sunset Park, Kane Road Park, and Hall Park.

Natural areas

Natural areas include outdoor recreation areas, buttes, and greenways. Outdoor recreation areas are permanent, undeveloped green spaces that are managed for their natural value as well as for recreational use. They provide opportunities for such things as nature-based recreation, such as bird watching or environmental education, and may preserve or protect environmentally sensitive areas.

The study area includes buttes, including Grant Butte and Gresham Butte, that provide upland habitat with a dense tree canopy. The buttes are prominent in view from both Powell Boulevard and Division Street.

The study area includes at least part of two Gresham greenways along Butler Creek and Kelly Creek. These greenways also provide a throughway for the movement of wildlife.

Trails

The study area includes two paved, multi-use trails.

- The Springwater Trail runs from Downtown Portland to Boring. In Gresham, it runs just south of Powell Boulevard before taking a southerly turn after Downtown Gresham.
- The Gresham/Fairview Trail intersects with the Springwater Trail at about 190th Avenue and runs north, crossing Division and eventually ending at Halsey. It is planned to connect with the Marine Drive Trail along the Columbia River.

The study area also includes the Butler Creek Greenway Trail, which runs south from the Springwater Trail (and Johnson Creek Trail) at about 195th Avenue. This provides an out-and-back trail experience through a natural area.

The MAX path is a planned trail that will run from Downtown Gresham to the Ruby Junction area of Rockwood and will intersect with the Gresham/Fairview Trail. It is anticipated to be constructed by the end of 2014.

The study area's west side is well served by existing and planned trails. Other portions of the study area are served by smaller walking paths within neighborhood or community parks.

Table 3: Study area park and recreation facilities

Park Name	Acres[12]	Park Type	Amenities
Gresham West			
Bella Vista Park	8.1	Neighborhood	Basketball, picnic area, playground
Hollybrook Park	2.5	Neighborhood	Baseball, soccer, picnic area, playground
Jenne Butte Park	6.7	Neighborhood	Undeveloped
Linneman Station Park	0.5	Special Use Area	Restroom
Rockwood Central Park	9.4	Community	Soccer, softball, basketball, disc golf, picnic area, playground, restroom
Southwest Community Park	34.1	Community	Undeveloped
Gresham Regional Center			
Aspen Highlands Park	3.7	Neighborhood	Basketball, picnic area, playground
Cedar Park	0.3	Neighborhood	Picnic area
Center For The Arts	2.0	Special Use Area	Plaza, restroom, play fountain planned for 2014
Main City Park	21.6	Community	Baseball, basketball, picnic area, horseshoe courts, playground, restroom
Thom Park	5.5	Neighborhood	Picnic area, playground
Gresham East			
Gradin Community Sports Park	31.5	Special Use Area	Baseball, soccer, picnic area, playground
Hall Park	3.9	Neighborhood	Soccer, softball
Kane Road Park	10.3	Neighborhood	Picnic area, playground
Red Sunset Park	14.2	Community	Soccer, softball, basketball, picnic area, playground, restroom
Vance Neighborhood Park	14.5	Neighborhood	Soccer, softball, community garden, disc golf, picnic area, playground, restroom

Table 4: Natural areas, greenways and trails

Name	Acres[13]	Type
Springwater Trail	N/A	Trail
Gresham West		
Butler Creek Greenway	31.0	Greenway
Butler Creek Greenway Trail	N/A	Trail
Grant Butte	41.2	Outdoor recreation area
Gresham/Fairview Trail	N/A	Trail
Jenne Butte	120.5	Outdoor recreation area

[12] Study area might not include entire acreage
[13] Study area might not include entire acreage

Gresham Regional Center		
Gresham Butte	320.4	Outdoor recreation area
Gresham East		
Kelly Creek Greenway	51.2	Greenway

Community safety/security

Long-term trends show property crime rates dropping in Gresham. As seen in Figure 18, the property crime rate has dropped since 1990, from about 4,900 crimes per 100,000 people to about 4,500 crimes per 100,000 people in 2010. Property crimes include burglary, larceny-theft, motor vehicle theft, and arson.

The rate of crimes against people has risen slightly over the same period, from about 325 crimes per 100,000 people in 1990 to about 450 crimes per 100,000 people in 2010. This rate has fallen over the last 10 years, including falling about 20 percent since its peak in 2006.[14] Crimes against people include murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault.

This long-term downward trend has occurred despite the Gresham Police Department having 1.12 sworn police officers per 1,000 population for the 2012/13 fiscal year, below the 1.5 officers per 1,000 recommended by the International Association of Chiefs of Police.

Figure 18: Gresham crimes per 1,000 population, 1990 to 2012[15]

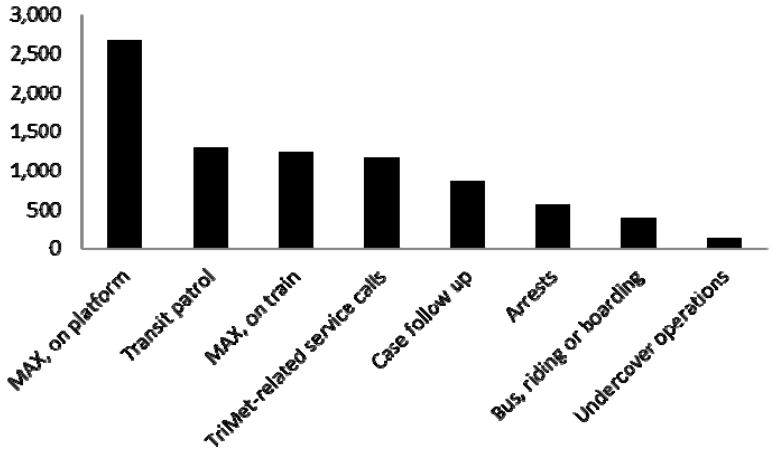
[14] FBI, Uniform Crime Reports, prepared by the National Archive of Criminal Justice Data
[15] FBI, Uniform Crime Reports, prepared by the National Archive of Criminal Justice Data.

Transit enforcement

Gresham works with TriMet and other police agencies to patrol the transit system. Transit police patrol the TriMet system daily. The Gresham Police Department has six officers assigned to the TriMet Transit Police Division; other transit officers are employed by TriMet. Officers not assigned to the Transit Police also respond to incidents as needed. Gresham City Hall, which is in the study area near the intersection of Division Street and Eastman Parkway, is home to the transit unit's east precinct.[16]

Figure 19 shows the hours of transit-related work done by the Gresham Police Department in 2012, the latest year for which complete numbers are available.

Figure 19: 2012 hours of transit-related police work[17]



Community organizations

Gresham has an active collection of neighborhood associations that are involved with civic matters. Neighborhood associations in the study area include: Rockwood, Centennial, Southwest, Hollybrook, Northwest, Central City, ASERT, Mt. Hood, Kelly Creek, Powell Valley, Northeast, and North Central.

Conclusion

A variety of community services draw people to this area, increasing the need for reliable, timely, and safe transit options in the Powell-Division corridor. Other community assets including the parks and trails system also draw people. Given the demographic trends described earlier in this report, the growing diversity in ages and socioeconomic status will result in even more demand for community services and for parks usage.

[16] Junginger, Craig. 2012 Annual Report: Year in Review. Rep. City of Gresham Police Department, n.d. Web. 31 Dec. 2013. <www.greshamoregon.gov>.
[17] Junginger, Craig. 2012 Annual Report: Year in Review. Rep. City of Gresham Police Department, n.d. Web. 31 Dec. 2013. <www.greshamoregon.gov>.

POWELL-DIVISION
TRANSIT and DEVELOPMENT PROJECT

Gresham Existing Conditions Report
APPENDIX A: PUBLIC INPUT SUMMARY

DECEMBER 16, 2013
6:30-8:00 P.M.
CENTENNIAL MIDDLE SCHOOL

JANUARY 9, 2014
6:30-8:00 P.M.
MT. HOOD COMMUNITY COLLEGE

Staff Contacts:

Brian Martin
Senior Comprehensive Planner
Brian.Martin@greshamoregon.gov
503-618-2266

Katherine Kelly,
Transportation Planning Manager
Katherine.Kelly@greshamoregon.gov
503-618-2110

Table of Contents

Executive summary

This report provides a compilation of public comments that were received during two community forums for the Powell-Division Transit and Development Project (PDTDP). The purpose of the forums was to receive input from residents and interested stakeholders about the PDTDP.

The community forums were held from 6:30 to 8:00 PM on:

- Monday, December 16, 2013 at the Centennial Middle School, 17650 SE Brooklyn St. Approximately 30 people attended, including staff from Gresham, Metro and TriMet.
- Thursday, January 9, 2014 at Mt. Hood Community College, 2600 SE Stark St.
- Approximately 20 people attended, including staff from Gresham, Metro and TriMet.

A variety of outreach efforts were used to raise awareness of these events. This included:

- Approximately 11,000 postcards mailed to all property owners and renters within ¼ mile of Division St, Powell Blvd and the Kane Dr/Glisan St/Hogan Dr loop
- Email to the Gresham Neighborhood Association presidents and land-use chairs
- Announcement to the TriMet riders club
- Announcement via Metro project webpage
- Gresham online updates at GreshamOregon.gov
- Gresham Facebook and Twitter posts
- Articles in Gresham's Neighborhood Connections

Community forum organization and description

The purpose of the community forum was to facilitate a conversation with the community on existing conditions within the Powell Blvd. and Division St. corridors.

This community forum included a brief open house period followed by a presentation, table discussions, and finally a reporting out period. The open house period provided participants the opportunity to gain familiarity with the meeting materials. Staff then presented an overview of the project and explained the purpose of the forum was to hear about the existing conditions along the Division St. and Powell Blvd. corridors.

Table discussions focused on the issues from the presentation, with a recorder selected from each table. Table discussion facilitators asked the following questions:

1. **Neighborhood**
    a. Is there a good mix of businesses (shops, offices, restaurants) and institutions (schools, churches, medical facilities) near where you live so you can get needed good and services? What is missing?
    b. How do you get around? Is it easy to drive, bike, walk?
2. **Change vs. stability**
    a. If a corridor gets enhanced transit, what changes would you most like to see along the route in Gresham (Division, Powell, Kane, Stark, Hogan), either in the road or on adjacent land? What would you like to see stay the same?
    b. If the corridor gets enhanced transit, what changes would you be most concerned about along the route in Gresham, either in the road or on the adjacent land?
3. **Areas of change**
    1. If enhanced transit made it possible for more intense housing, shops and jobs, what locations would be most appropriate for that increased intensity?

During the reporting out period, each table presented to the room the top three comments they discussed. All comments were recorded for this document.

Copies of materials from the community forums are included at the end of this appendix:

- PowerPoint slides
- Table discussion questions
- Maps

Public input themes

The following themes were noted during public comments, and many of these were described as one of the top three comments from individual tables:

<u>Neighborhoods & destinations</u>

- Most participants felt Gresham neighborhoods along the route provided a good mix of uses, including shops and services. Many were interested in additional grocery options and more jobs.
- Major intersections provide opportunities for new development or redevelopment.
- New development should respect existing residential areas, especially single-family homes, such as through transitions and other compatibility measures.
- Connecting people to educational institutions and jobs is desirable.

<u>Transit</u>

- In Gresham, participants generally favored Division over Powell for the route and bus rapid transit over light rail for the vehicle.
- More and more frequent north-south transit connections are needed.

- Participants were interested in the cost of enhanced transit and ensuring funding can be sustained.

Transportation – car, transit, bike ped

- Faster transit and better connections among destinations is desired, but many participants are concerned about how that will affect other travel modes, such as automobile traffic.
- Pedestrian and bike improvements are needed, such as:
    - Safe, comfortable bike routes.
    - A complete sidewalk network, especially sidewalks to transit.
    - Safe pedestrian crossings, including ones with flashing lights that can be activated by pedestrians.

Comments

Neighborhood destinations

- Near the Regional Center, the mix of businesses and services is good. It is easy to reach many destinations on foot, and the MAX is close.
- Many segments along the corridor have a good mix of businesses. Some areas have too few places to walk to and commercial vacancies.
- Start with what makes the neighborhood good and build on the strengths of the neighborhood. Consider small businesses. Improvements should maintain the neighborhood character or build it where there is none.
- A positive addition would be a state park or activities park.
- The corridors are missing places to stay overnight, such as hotels.
- Rockwood Plaza Shopping Center at the northeast corner of 182nd and Division has received some recent upgrades and new tenants, including Planet Fitness. Other participants said the area still has vacancies and business types that are repeated in more than one building (pizza, Chinese food).
- Parking is crowded at MHCC, and transit could help people get to campus.
- Cultivating opportunities for tourism and specialty shops would be a benefit.
- Destinations that are important to serve with transit:
    - Human Solutions
    - Future Friends of the Children facility at Pat Pfieffer Park.
    - Future Boys and Girls Club at 165th and Stark.
    - Gradin Sports Park on Palmquist between Hogan and U.S. 26.
- There are a few places to walk to at 162nd and Powell. North-south transit is not adequate at 122nd and 182nd.
- Participants said the following are desired along the corridors in Gresham:
    - A “green” dry cleaners.
    - Costco.
    - A more robust farmer market, like Beaverton’s, would be great. Gresham benefits from a lot of surrounding agriculture that could be better utilized at a farmer market.

Grocery stores

- The Grocery Outlet on Division is a good amenity. More grocery stores are needed. Closure of the Safeway and Albertsons hurt area communities and left dead shopping centers (particularly the Albertsons closure in Rockwood).

- Additional grocery options would be welcome in southwest Gresham. A new grocery store is planned at the Eastman Parkway and Burnside Road intersection, which will help serve the Regional Center.
- A food store sized between a full grocery store and a convenience store would be good. Examples are Trader Joes and Fresh and Easy (found in California).
- Short drives to places, such as grocery stores, are desirable.
- Participants expressed a desire for a full-service grocery store in Downtown Gresham.

Neighborhood/transit infrastructure (Traffic, pedestrian, bike, transit stops)

- Walkability is great downtown Gresham. It is easy to walk and there are a lot of sidewalks.
- Planning should focus on creating places where people have the option of living and working so they can have no commute or a very short commute.
- Would like to see walkability in Gresham downtown cloned along the corridors. Communities and neighborhoods in which people are able to walk to daily errands are healthier and safer. Knowing neighbors and having sidewalks creates a safer environment. Landscape strips between sidewalks and the street are good.
- Concern regarding HCT: make sure there are good connections to the development and have sidewalks to the transit to people can easily access it. Pedestrian preferred signals would be good.
- It is harder to get around in areas with missing sidewalks. More sidewalks are needed.
- Pedestrian and bicycle improvements are desired.
- Biking on arterials can be intimidating.
- Some crosswalks are in the wrong place.
- Mid-block crossings are hard to see.
- At MHCC southbound bus, no signals at crossings and jaywalkers are hard to see. Buses use to pull in but there it not a traffic light and it is hard for car access with buses.
- There are not good amenities at many stops near MHCC, except at entrance.
- Sidewalks and access for people with disabilities are important along the corridor.

Bus stops

- Bus stops need protection from wind and rain.
- Some bus stops along Powell and Division lack concrete pads, shelters, lighting and other amenities, which make it less comfortable and safe to wait at those stops. This discourages transit use.
- There are more shelters westbound than eastbound.
- Litter at bus stops, particularly those with shelters, is a problem.
- New shelters should have consistent, quality construction. Maintenance and garbage pickup also are important.

Powell

- Traffic and pedestrian safety are issues on Powell, specifically near the Powell and Towle intersection because of traffic volumes and speeds as well as difficult site lines with hills.
- Pedestrian safety improvements are needed, especially along Powell – primarily in the City of Portland portion.
- Many places along Powell do not have sidewalks and have only 5' bike lanes. These comments were in reference to the portion of Powell within the City of Portland.
- Walking on Powell is not safe – people making turns and has wide intersections.
- Area around Safeway at Powell/182nd is nice for walking.

Division

- Kids don't look at High School on Division when crossing.
- Some said the Division and Eastman intersection is nice for walking; others said it is difficult in part because of the MAX crossing.

Hogan

- Hogan needs sidewalks in some areas.
- Walking is not great once past Hogan towards Orient.

Neighborhood change and transit change

- A more walkable, intense, transit-supportive environment would be welcome around the station areas.
- Areas where more people live without a car or only one car would benefit from high-capacity transit and also from more and more frequent north-south bus routes.
- Ensuring new development has quality design and construction will be important anywhere on the corridor.
- Job growth is desirable.
- Concerns arose regarding high density as it transitions to quite residential neighborhoods and what that transition may bring. Where will the high density nodes be? Will they be single family residential nodes?
- Some are concerned that increased density would bring increased noise.
- The redevelopment of the Fred Meyer site is a positive.
- There are quasi-industrial areas (the gravel pits, etc.) that are underdeveloped. What happens to these vacuums of space? Keep those areas heavy industrial or change to some other use?
- Single-family residential areas in the area are built out and there is not a lot of room for changes or new development.
- Livability is important. Residents along Powell are concerned about the current noise levels from traffic and are concerned about the possibility for additional livability concerns if a train were routed along that street.
- There are concerns that if increased transit reduces automobile capacity on a street, that traffic will be diverted to other streets and worsen congestion there. (Staff note: This project includes traffic analysis that will evaluate traffic on other streets for various transit options.)
- The area along Division from 82nd Avenue to 122nd Avenue could accommodate new development, particularly housing and more specifically senior housing. It is close to transportation, shopping and a hospital.
- How would high-capacity transit affect existing transit lines?
- High-capacity transit could promote more economic development.
- Access to Gresham's downtown will help area events such as the art walk and foundation for arts and will enhance Gresham's livability and viability.
- Mixed use development is desirable at the nodes.
- Some types of density do not serve families (i.e. micro apartments).
- Development would be welcome at the triangle site in Rockwood (the former Fred Meyer location at 185th and Stark.
- One resident who lives near 122nd and Powell noted that the areas has development opportunities and would benefit from:
    - Additional shopping opportunities.
    - Better pedestrian crossings and sidewalk connectivity.

- Buildings in better condition.
- Safer biking infrastructure/conditions.

Potential transit stops/nodes mentioned

- 82nd and Division (Portland Community College southeast campus)
- 182nd and Division
- Eastman and Division
- Powell and 122nd
- Mt. Hood Community College at Stark and Kane
- Division/Powell and 122nd, 148th, 174th
- Downtown Gresham
- Division and Kane

Transit needs/comments

- North/south transit routes and frequency needs to be better, particularly south of Powell.
- There is only one bus line serving the industrial area in north Gresham off of 181st. People going there need to drive or walk many blocks to the bus stop.
- A desire for enhanced transit on Foster Road was expressed.
- Frequency and reliability of transit is important.
- For people in north Gresham, it takes a significant amount of time go anywhere by transit due to bad connections and infrequent service. (One participant said it takes at least an hour to go anywhere.)
- Infrequent service and difficult connections, in general, hinder transit use.
- Enhanced connections between educational campuses would be great and very positive for Gresham.
- Detailed travel information at each bus stop is needed.
- Route 9 (Powell) has infrequent service in East County.
- Route 87 (Downtown Gresham to Gateway via south Gresham neighborhoods, 182nd/181st, Airport Way and 102nd) is inconsistent and not frequent.
- 182nd has one hour service only, could be better north/south.
- Travel time on transit between Gresham and Portland is too long.
- Fare evasion is a problem.
- Transit from Gresham to Portland State University could be faster.
- Better transit access from southeast Gresham to Gresham's center is desired.
- MAX is hard for people in the south part of Gresham to use.
- Line 4 (Division) is great.
- Need better connections to Mt. Hood Community College, Legacy Mt. Hood Medical Center, the hospital and Fred Meyer on Burnside.

Transit route

- Many expressed that Division may be the better route for high-capacity transit because:
  - It has more commercial and multi-family development and less single-family residential development than Powell, so the line would serve a lot of people and commercial destinations.
  - It has many opportunities for additional jobs, housing, shops and services.
  - It has a fairly uniform five-lane character, which provides room for transit enhancements.

- One participant asked if a bus could be run on I-84 and then a south. (Staff note: Reviewing an I-84 bus is outside the scope of this project.).
- Enhanced transit service on Powell would be difficult without widening Powell east of I-205.
- The transit route should have lanes of adequate width to handle transit. Hawthorne in inner southeast Portland, for example, has narrow lanes.
- The study should include whether adding north-south routes to the MAX on Burnside would be more effective than adding high-capacity transit on Division or Powell. Participants also discussed whether both were possible considering funding. (Staff note: Adding north-south routes will be considered as part of the Eastside Transit Service Enhancement Plan.)
- Past plans have called for high-capacity transit on Roberts Avenue south of Powell. Participants said that is not an appropriate location because of the narrow conditions and historic homes.
- Building transit of Powell will be more of a challenge.
- Part of Powell Boulevard between 174th and 182nd is only three lanes (two travel lanes and a center turn lane) and is sometimes missing curbs and sidewalks. They also said:
    1. Currently, there appears to be inadequate right of way in some places for high-capacity transit, especially transit that would require a dedicated lane.
    2. The areas that lack sidewalks and curbs do not provide safe pedestrian travel options.
- Much of Powell Boulevard has low-density residential uses along it, particularly the area between 182nd and Eastman Parkway. This makes it less favorable for high-capacity transit because:
    1. There are fewer development and redevelopment opportunities.
    2. Light-rail-style transit (similar to the MAX line on Burnside which allows fewer street crossings) could provide a barrier between neighborhoods on the north side of Powell and those on the south.
    3. Significant right-of-way acquisition might be necessary to have adequate right-of-way width.
    4. Concern or opposition has already been expressed from residents and some real-estate professionals.
- Division is the better fit as a major transit corridor because it has a consistent 5-lane profile, more redevelopment/development opportunities around potential station areas and more major destinations to serve.

Transit type

- Some commented that light rail is not the desired vehicle for this study area.
    - Light rail/fixed rail does not make sense along Powell because the street is not wide enough.
    - Buses on Powell (within Gresham) will slow down traffic.
    - Within Gresham, Division to Hogan is better route than Powell.
- Some thought light rail would not be appropriate on Division.
- A participant suggested that taking the bus or MAX is not convenient when getting groceries or for other trips to get many items.
- A participant asked if using smaller (shorter) buses would save costs. (Staff note: TriMet representatives answered that fuel savings for smaller buses are relatively small and large buses accommodate more riders. But short buses sometimes are used in certain situations.)
- Buses provide flexibility because they are not limited to rail locations.
- Having dedicated lanes for transit on Division is a concern because rush-hour automobile traffic still needs adequate capacity along that street.
- A participant suggested bus rapid transit might be more viable than a light rail but wondered if it will be competitive regarding speed of the trip.
- Children and the elderly need improved ability to get around in Gresham.

Safety

- Crosswalks that are marked with flashing lights that are activated by a push button (rapid rectangular flashing beacons) are effective in creating safe crossings. Participants said the flashing devices should be installed at more locations. One could be used on 181st Ave. where there are long distances between lights. (Staff note: The beacons can only be implemented mid-block and not at intersections.)
- Powell and Division have seen numerous pedestrian injuries and deaths in recent years.
- Drivers, including distracted drivers, would benefit from education about how to operate vehicles around pedestrians and people who use bicycles.
- Pedestrians sometimes fail to use crosswalks and make unsafe crossings in the middle of the block.
- Vegetation should not be planted in ways that block visibility at crosswalks. Drivers need to be able to see the pedestrians. Example: Trees block visibility at Powell and Roberts in Downtown Gresham.
- Lighting of bus stops and crosswalks could help safety.
- Some participants expressed concerns about crime and perceived that there is more crime around train stops than bus stops.

Miscellaneous

- Participants asked about project funding. (Staff note: Gresham's portion of the project is funded through a Metro Community Planning and Development Grant to prepare land in the urban growth boundary for development.)
- Some participants were interested in the cost of enhanced transit and ensuring funding can be sustained.
- Participants asked about LIFT paratransit service. (Staff note: LIFT service provides a safety net for people with disabilities and are unable to use the bus and MAX. Federal law requires transit operators to provide such service.)
- One participant said Portland's Hollywood District is nice.
- One participant said bus rapid transit might encourage people to go to major destinations like the convention center.

Community Forum Written Responses

Using the map and questions shown below, attendees were surveyed to understand where they live, work and frequent in order to gain a sense of the origins and destinations along the corridors. Of the 17 submitted surveys, responses focused on where attendees live and frequent but not where they work. The following is a summary of responses received.

Locations where forum attendees live:

1. Powell Blvd. and 181st/182nd Ave.
2. Downtown Gresham
3. Southeast Gresham
    a. south of Roberts Dr. and west of Hogan Rd.
    b. Orient and 282nd Ave.
4. Division and 181st/182nd Ave.
5. Powell Blvd. and 160th Ave. (in Portland)

Attendee's most frequented destinations:

1. Grocery store (particularly area Safeway and Fred Meyer)
2. Church
3. School (high schools and colleges)
4. Downtown Gresham/City Hall
5. Downtown Portland
6. Springwater Corridor Trail
7. Main City Park

Is transit a good option for these trips?

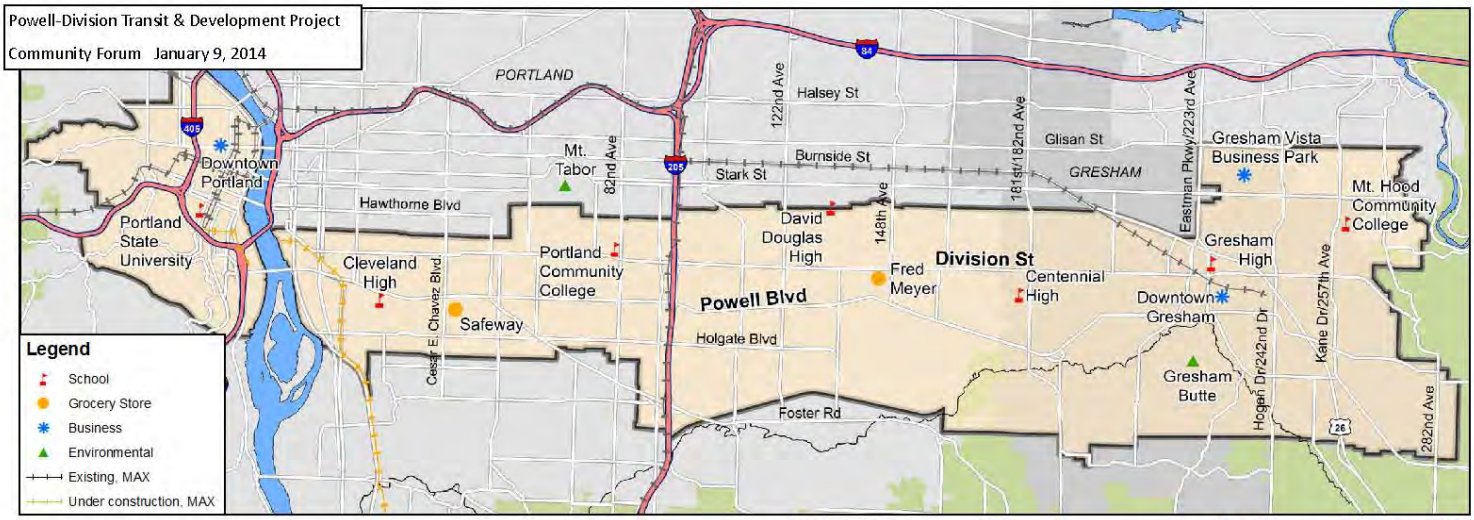
- The majority of responses stated that transit was not a good options for the following reasons:
    - Unable to carry groceries on a bus or MAX.
    - Hilly terrain to and from transit stops.
    - Takes too much time to get a bus and transfer to destination.
    - Infrequent service.
    - Able to walk instead of take transit.
    - Live too far from a transit stop.
    - East/west trips could be an option but north/south trips are not due to infrequent transit service.
- The minority of responses stated that transit is a good option for the following reasons:
    - Transit provides access for more people.
    - Transit is the only option for long trips for those who do not have a car.
    - MAX is a good option to get to downtown Gresham.

Examples given for the option to use transit for trips are:

- Attendees who live around 181st/182nd Ave. and Powell Blvd. and shop for groceries at the Safeway in the same area yet do not feel transit is a good option for this trip because they are not able to carry groceries on a bus.
- Attendees who live in downtown Gresham find it is easier to walk to their destination or to take transit as needed because they do not have a car.

Additional comments received on the surveys and on comment cards are:

- A transit option to MHCC would be great.
- Freight mobility should be addressed as part of the study.
- Businesses have closed along transit corridors, such as the Blue and Yellow lines, so ensuring businesses can continue is important. If it hurts businesses, Gresham cannot afford another high capacity transit corridor through it.



1. *If you live or work in the corridor, mark where.*
2. *Mark the three places you most frequently visit.*
3. *Is transit a good option for these trips? Why or why not?*

Bonus Questions:

1. *What is the mileage distance between Division at 181st and Burnside at 181st?*
2. *What is the mileage distance from Division at 181st to Burnside at 181st?*
3. *What is the bus travel time between the Gresham Transit Center and Portland State University?*
4. *What is the bus travel time between the Gresham Transit Center and Mt. Hood Community College?*

Community Forum Materials

Postcard sent to addresses in the corridor
Email invitations
PowerPoints from forums

Powell-Division Transit & Development Project
Making a Vibrant Corridor

What type of development and transit do you want along Powell and Division? **Your input is valuable** because you live, work or own property in the project area. Please bring your ideas to an upcoming forum.

Gresham, Portland, Metro and TriMet are studying potential improvements for development and transit along Powell and Division between Gresham and Downtown Portland. Visit the website to receive email updates as the project looks at alternatives in 2014:
http://www.oregonmetro.gov/powelldivision

Upcoming community forums:

Monday, Dec. 16, 2013; 6:30 to 8:30 p.m.
Centennial Middle School
17650 S.E. Brooklyn, Portland

Thursday, Jan. 9, 2014; 6:30 to 8:30 p.m.
Mt. Hood Community College
26000 S.E. Stark, Gresham

Contact: Brian Martin, Land Use Planner
503-618-2266, Brian.Martin@GreshamOregon.gov
Katherine Kelly, Transportation Planner
503-618-2110, Katherine.Kelly@GreshamOregon.gov

¿Está interesado en cómo mejorar el transporte público y su vecindario? Llame al 503-618-2532 para aprender más.

Martin, Brian

From: PowellDivision <PowellDivision@oregonmetro.gov>
Sent: Friday, December 06, 2013 2:11 PM
To: PowellDivision
Subject: Powell-Division update: Community forums in Gresham Dec 16 and Jan 9

Greetings,

Gresham community forums
Do you live, work or go to school in Gresham? What type of transit and development would make your community even better? The first community conversations as a part of the Powell-Division Transit and Development Project are happening on December 16 and January 9. For more information, contact Brian Martin (brian.martin@greshamoregon.gov) or Katherine Kelly (katherine.kelly@greshamoregon.gov).

Dec. 16, 2013, 6:30 to 8:30 p.m.
Centennial Middle School, 17650 SE Brooklyn St.

Jan. 9, 2014, 6:30 to 8:30 p.m.
Mt. Hood Community College, Town and Gown room, 26000 SE Stark St.

How do you want to be involved?
Help shape public engagement for the Powell-Division Transit and Development Project by letting us know what works for you! Take a quick survey.

**You are receiving this email because you signed up for Powell-Division Transit Project updates. If you would like to be removed from this list, please email powelldivision@oregonmetro.gov.

Powell-Division Transit Project
www.oregonmetro.gov/powelldivision
powelldivision@oregonmetro.gov
503-797-7535

Metro | Making a great place

Stay in touch with news, stories and things to do.
www.oregonmetro.gov/connect

Martin, Brian

From: Martin, Brian
Sent: Monday, December 09, 2013 3:47 PM
To: Brian Martin (Brian.Martin@greshamoregon.gov)
Cc: Kelly, Katherine; Clarke, Kelly
Subject: Powell-Division Transit & Development events

Dear Neighborhood Presidents and Land Use Chairs:

The City of Gresham, the City of Portland, TriMet and Metro are collaborating to study enhanced transit in Gresham and Portland, including what opportunities that might present for Gresham neighborhoods.

The focus areas are along Powell and Division and on Kane, Stark and Hogan on a loop that would include Mt. Hood Community College.

The first community conversations as a part of the Powell-Division Transit and Development Project are happening on Dec. 16 and Jan. 9.

Meeting details:
6:30 to 8:30 p.m. Dec. 16
Centennial Middle School, 17650 S.E. Brooklyn St.

6:30 to 8:30 p.m. Jan. 9
Mt. Hood Community College, Town and Gown Room, 26000 S.E. Stark St.

For more info:
Website: www.oregonmetro.gov/powelldivision.
To sign up for email updates, visit https://www.surveymonkey.com/s/signupforpowelldivision.

Contact information:
Brian Martin, 503-618-2266 brian.martin@greshamoregon.gov
Katherine Kelly, 503-618-2110 katherine.kelly@greshamoregon.gov

Thank you.

Brian Martin, AICP, LEED AP | City of Gresham Senior Planner
503-618-2266 | Brian.Martin@GreshamOregon.gov | www.greshamoregon.gov/udp
1333 N.W. Eastman Parkway | Gresham, OR 97030

Martin, Brian

From: PowellDivision <PowellDivision@oregonmetro.gov>
Sent: Monday, January 06, 2014 8:55 AM
To: PowellDivision
Subject: Powell-Division update: Gresham forum Jan 9 and other opportunities to be involved

Greetings,

Gresham community forum
Jan. 9, 2014, 6:30 to 8:30 p.m.
Mt. Hood Community College, Town and Gown Room, 26000 SE Stark St.
campus map: http://www.mhcc.edu/images/ac_upper.jpg

Do you live, work or go to school in Gresham? What type of transit and development would make your community even better? The first community conversations as a part of the Powell-Division Transit are happening in Gresham. At the first forum on December 16, people told us where they would like to see more restaurants and shops to walk to and where they would like the community character to stay the same. We also heard a preference for better bus service over light rail. Add your voice to the conversation and join us this Thursday, January 9. For more information about the forum, contact Brian Martin (brian.martin@greshamoregon.gov) or Katherine Kelly (katherine.kelly@greshamoregon.gov).

Metro Council
The Metro Council will discuss the Powell-Division Transit and Development Project at two upcoming meetings. You are invited to listen in and share your thoughts during the public comment portions of the meetings, both of which take place at Metro Regional Center, 600 NE Grand Avenue in Portland.

Metro Council work session, 2 to 4:30 p.m. on January 14
Metro Council meeting, 2 to 4:30 p.m. on January 16

How do you want to be involved?
Have you told us what would make it easy for you to be involved in the project? Help shape public engagement for the Powell-Division Transit and Development Project by letting us know what works for you! Take a quick survey. Here is what people have said already.

"I think timeliness is the biggest thing here. We need a plan and action fast but we need it to be quality work. Our region is growing fast but our mass transit and freeways are not."

"Work with community groups to identify times and locations that are accessible for residents. Encourage/recruit citizen advisors - formally or informally Use community gate keepers - let the general community flow information through a few gatekeepers from community groups or organizations - many citizens are unsure or their ability to comment, what to say, how to say it, etc."

**You are receiving this email because you signed up for Powell-Division Transit Project updates. If you would like to be removed from this list, please email powelldivision@oregonmetro.gov.

Powell-Division Transit Project
www.oregonmetro.gov/powelldivision
powelldivision@oregonmetro.gov

POWELL - DIVISION TRANSIT & DEVELOPMENT PROJECT

TRANSIT SERVICE ENHANCEMENT PLAN

Community Forum – Existing Conditions

Dec. 16, 2013

POWELL - DIVISION
TRANSIT & DEVELOPMENT PROJECT

TRANSIT SERVICE
ENHANCEMENT PLAN

Agenda – Existing conditions

1. Short presentation (15-20 minutes)
2. Table conversations (40-45 minutes)
3. Each table reports their top discussion comments

Powell - Division

- Powell - Division Transit & Development Project
  - Downtown Portland to East Portland to Gresham (and vice versa)
  - Roughly along Powell and Division corridors

Powell - Division

- Why are we here?
  - Busy buses
  - Obstacles to transit access
  - What happens along with enhanced transit
    - What should change
    - What should stay the same
  - Public conversation about future of transit and land use

Powell - Division

- Why this corridor?
  - Corridor part of regional transit system plan
  - Potential for:
    - Growing ridership
    - Good links with rest of transit system
    - More jobs and economic vitality
    - More vital neighborhoods

Powell - Division

- What are the goals?
  - Improved transportation
    - Transit, driving, biking, walking
  - Great places
    - Housing, jobs, shops, services
  - Thriving places
    - Jobs, access to jobs

Powell - Division

- Powell - Division Transit & Development Project
  - Metro
    - Transit route
    - Transit type/vehicle



Powell - Division

- Powell-Division Transit & Development Project
  - Metro
    - Transit route
    - Transit type/vehicle
  - Gresham & Portland
    - Station Area Planning
      - Station look/feel/function
      - Adjacent uses/buildings/ public spaces
      - Market for new jobs, housing




Transit Service Enhancement Plan

- TriMet
  - Improve existing
    - Service
    - Stops
    - Crossings
  - Potentially add bus routes
  - Enhance access to high-capacity transit
  - Long-term vision for service that supports current and future needs

Transit Service Enhancement Plan

- Study area
  - East Portland
  - Fairview
  - Gresham
  - Troutdale
  - Wood Village

Process

- How do we get there?
  - Powell - Division Transit & Development Project
    - Phase 1: Existing Conditions — Now - Feb.
    - Phase 2: Alternatives — March - Sept.
      - Transit route and vehicle
      - Station area vision
      - Traffic analysis
      - Economic analysis
    - Phase 3: Draft Corridor Vision — Sept. - Dec.
    - Phase 4: Corridor Vision — Jan – March 2015
  - Public input at each phase

Process

- How do we get there?
  - Transit Service Enhancement Plan
    - Outreach/engagement — Now - Spring
    - Draft Vision — Spring
    - Outreach/refinement — Spring - Summer
    - Outreach — Fall
    - Finalize vision — Winter (early 2015)

Process

- Who decides?
  - Powell - Division Transit & Development Project
    - Steering Committee recommends Action Plan
      - Elected leaders
      - Institutions
      - Residents
      - Business leaders
      - Organizations (bus riders, social service)
    - Local Governments
      - May endorse Action Plan
    - Metro Council votes on approval
    - Ongoing implementation
  - Transit Service Enhancement Plan
    - TriMet Board approves Annual Service Plans

Action Plan:
- Route
- Vehicle type
- Station locations
- Supportive actions, such as:
  - Sidewalk improvements
  - Redevelopment efforts
  - Zoning changes

Discussions

- Conversation at the tables
- Each table reports to entire room
  - Top 3 comments
- All comments
  - Included in existing conditions report
  - Considered as projects look at transportation and land-use alternatives

POWELL - DIVISION TRANSIT & DEVELOPMENT PROJECT

TRANSIT SERVICE ENHANCEMENT PLAN

Thank you.

POWELL - DIVISION TRANSIT & DEVELOPMENT PROJECT

Metro
CITY OF GRESHAM
City of Portland
TRI MET

TRANSIT SERVICE ENHANCEMENT PLAN

Community Forum – Existing Conditions

Jan. 9, 2014

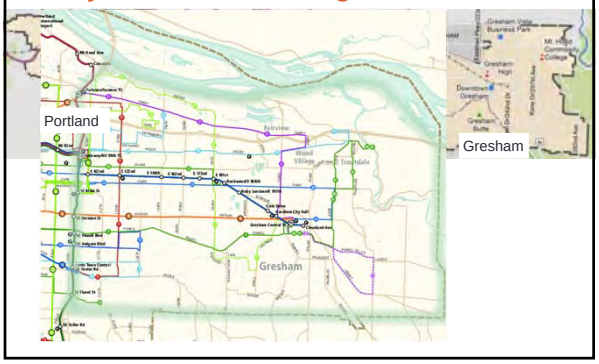
POWELL - DIVISION
TRANSIT & DEVELOPMENT PROJECT

TRANSIT SERVICE
ENHANCEMENT PLAN

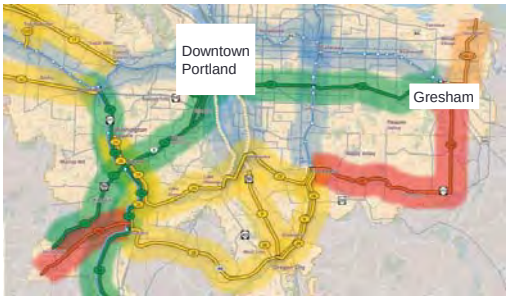
Agenda – Existing conditions

1. Presentation (15 minutes)
2. Table conversations (40 minutes)
3. Table reports (10 minutes)

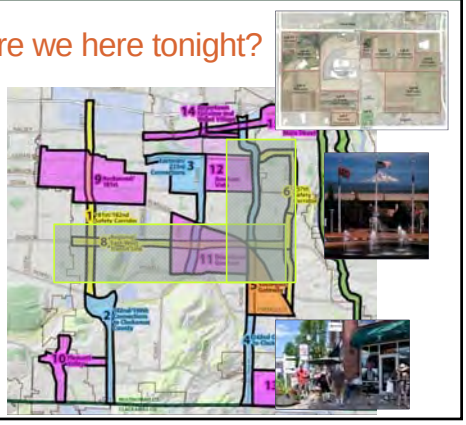
Why are we here tonight?



Why are we here tonight?



Why are we here tonight?



Why are we here tonight?

Why are we here tonight?

- Even better neighborhoods

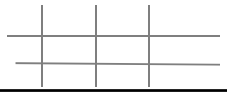




Project descriptions

- Powell - Division Transit & Development Project
  - Transit route & vehicle
  - Station area visions


- TriMet Eastside Transit Service Enhancement Plan
  - Improved service east of I-205



Powell - Division

What is high-capacity transit?

Bus Rapid Transit


Light rail

Other


BRT

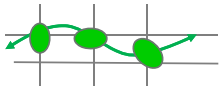
Station areas

- Neighborhood improvements
  - Housing, jobs, shops, services
  - Sidewalks, crosswalks, transit shelters, lighting





Transit Service Enhancement Plan



Improve existing service

- Long-term vision for service that supports current and future needs
- Improve
  - Service
    - Bus routes
    - Access to high-capacity transit
  - Stops
  - Crossings

Process

- Powell - Division Transit & Development Project

Process

- Transit Service Enhancement Plan
  1. Outreach — Now - Spring
  2. Draft Vision — Spring
  3. Refinement — Spring/Summer
  4. Final vision — Early 2015

Process

- Decisions & Results?
  - Powell - Division Transit & Development Project
    1. Steering Committee
    2. Action Plan
  - TriMet Transit Service Enhancement Plan
    1. TriMet Board
    2. Enhancement Plan
    3. Annual Service Plan updates

CITY OF GRESHAM
multco.us Multnomah County, Oregon
Oregon Department of Transportation
SE Uplift
East Portland
Portland Community College
Catholic Charities
East Metro Economic Alliance
Mt Hood Community College
Gresham Area
MIDWAY
TRIMET
Metro
Coalition of Gresham Neighborhood Associations

Discussions

- Table conversations
  - Existing conditions
- Each table reports to entire room
  - Top 3 comments
- All comments
  - Included in existing conditions report
  - Considered as projects look at transportation and land-use alternatives

Next Steps

- Powell - Division Transit & Development Project
  1. Existing Conditions Reports
  2. Meet with Steering Committee
  3. Develop & study alternatives

- TriMet Transit Service Enhancement Plan
  1. Outreach

POWELL - DIVISION TRANSIT & DEVELOPMENT PROJECT

TRANSIT SERVICE ENHANCEMENT PLAN

Thank you.

CITY OF GRESHAM Metro TRIMET

Powell-Division

Transit and Development Project

Transportation

Existing Conditions

February 28, 2014

DRAFT

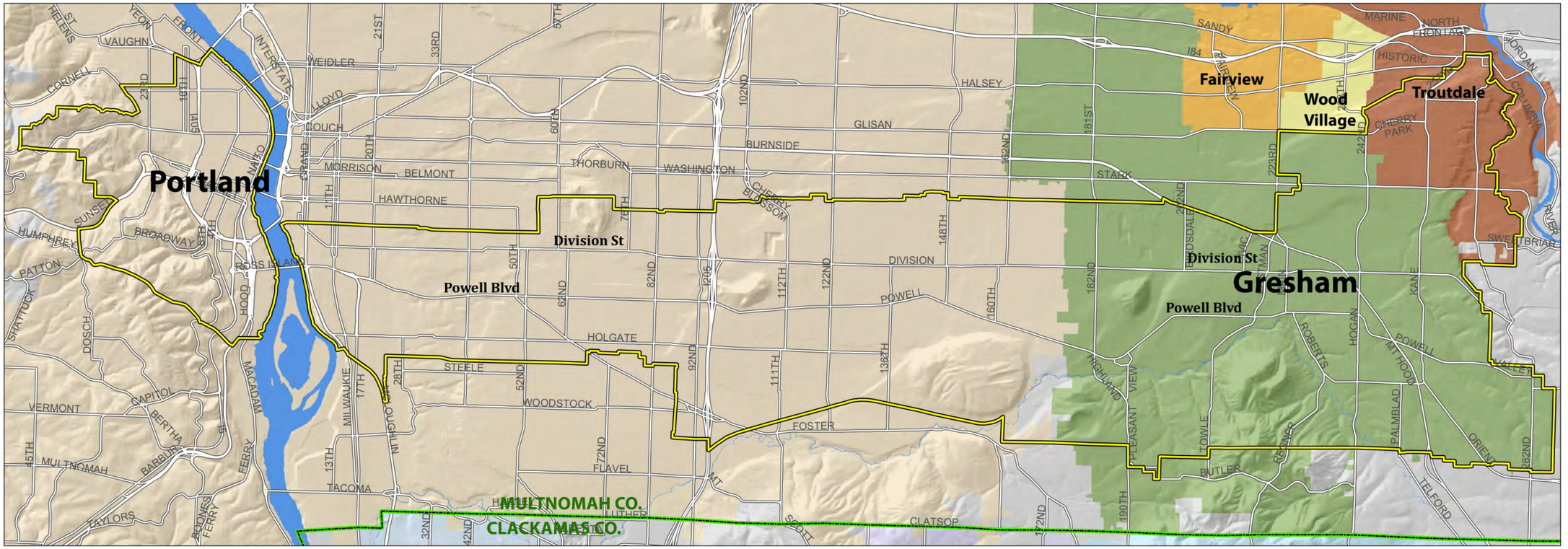
Table of Contents

Figures

Tables

Signature Page

Figure 1-1. Powell-Division study area



Chapter 1: Powell-Division Transit and Development Project and Report Overview

1.1 Transit and Development Project purpose and outcomes

The purpose of the Powell-Division Transit and Development project is to determine the best options for high capacity transit and develop a plan that will create a transit project and desired development in the Powell-Division corridor in Gresham and SE Portland. Transit in the corridor needs to meet future travel demand and leverage other transportation and land use investments. The project will identify the transit mode, alignment and station locations and create a development strategy for key places in the corridor. Working with the communities, the project will identify the places, including station locations, where transit can serve the community and promote economic development that supports existing plans and community visions for the corridor.

The cities of Gresham and Portland, Metro, TriMet, ODOT and Multnomah County will work with the community to develop a near-term transit project for the corridor that serves existing and future high ridership, is coordinated with related pedestrian and bicycle investments, and recognizes limited capital and operational funding. The project will produce an action plan that identifies timing and funding for physical improvements as well as land use and related policy changes.

1.2 Project background

The 2040 Growth Concept, the region's 50-year land use plan, and the Regional Transportation Plan (RTP) call for high capacity transit to serve areas identified for compact urban development. As part of the 2035 RTP update, the region undertook a comprehensive assessment of the existing and potential future high capacity transit network. The High Capacity Transit System Plan completed in 2009 and adopted as an element of the 2035 RTP identified priorities for HCT in the region. The Metro Council adopted the Powell-Division corridor as the second highest regional priority for an HCT investment out of 55 corridors in the region based on high travel demand, limited transportation capacity, and potential for high ridership. The highest priority corridor, the Southwest Corridor, is currently in a refinement phase in preparation for entering into a National Environmental Policy Act (NEPA) process in 2014. The HCT plan priority corridors are shown in Figure 1-2.

An-depth study of 26 mobility corridors conducted as part of the 2035 RTP update, identified the following specific needs for this corridor:

- Better east-west (15 minute) transit service
- High capacity transit with a potential link to Mt Hood Community College

Study of the Powell-Division corridor is also supported by the allocation of funding sources in 2010 by JPACT and Metro Council Resolution 10-4119 which authorized corridor refinement planning in the East Metro area to address the multimodal needs in East Multnomah County. The East Metro Connection Plan, which studied BRT in the corridor recognized the need for a regional east and recommended projects to improve east-west transit that connects Mt Hood Community College,downtown Gresham, Portland and South Waterfront's Innovation Quadrant. Projects include enhanced bus/bus rapid transit and safety, and pedestrian and bike improvements (sidewalks, medians, crossings, access management) to make Division a great corridor for transit and walking. Gresham will continue street improvements for sidewalks and other features to make walking and access to transit easier. A transit alternatives analysis for the Powell-Division corridor was recommended as a catalyst project. See Figure 1.3 EMCP recommendations.

1.3 Purpose of this report

The purpose of the Powell-Division Existing Conditions Report is to document the current conditions in the corridor and how it can be expected to change over the next 20 years based on current policy and expected trends. When tradeoffs and decisions about where to invest public money are made, policy-based decisions must be based on a generally shared understanding of the situation and potential impacts of actions.

This report is designed to help decision-makers and the public understand how transportation conditions and other relevant factors in the corridor affect economic vitality and livability today and how those conditions affect opportunities for all.

1.4 Study area

The study area, shown in Figure 1.1, a corridor that generally encompasses several blocks to the south of Powell and north of Division. It includes downtown Portland, most of the southern portion of Gresham and a part of the city of Troutdale. The corridor boundary is based on transportation analysis zones (TAZ), which are the geographic area typically used to study and understand travel. Transportation is not the only area of study in the corridor and the boundary may not apply to all areas of analysis or interest.

1.5 Recent plans and studies

There has been a significant amount of interest and planning for transportation improvements in the corridor. Figure 1.3 shows these plans and studies, which include:

- Inner Powell Boulevard Streetscape
- Outer Powell
- Outer Powell Safety Project
- Division Green Street Plan and improvements
- Foster Road Streetscape Plan
- East Portland in Motion
- East Metro Connections Plan
- TriMet Pedestrian Network Analysis
- TriMet Service Enhancement Improvements

Figure 1-2. HCT Plan priority corridors

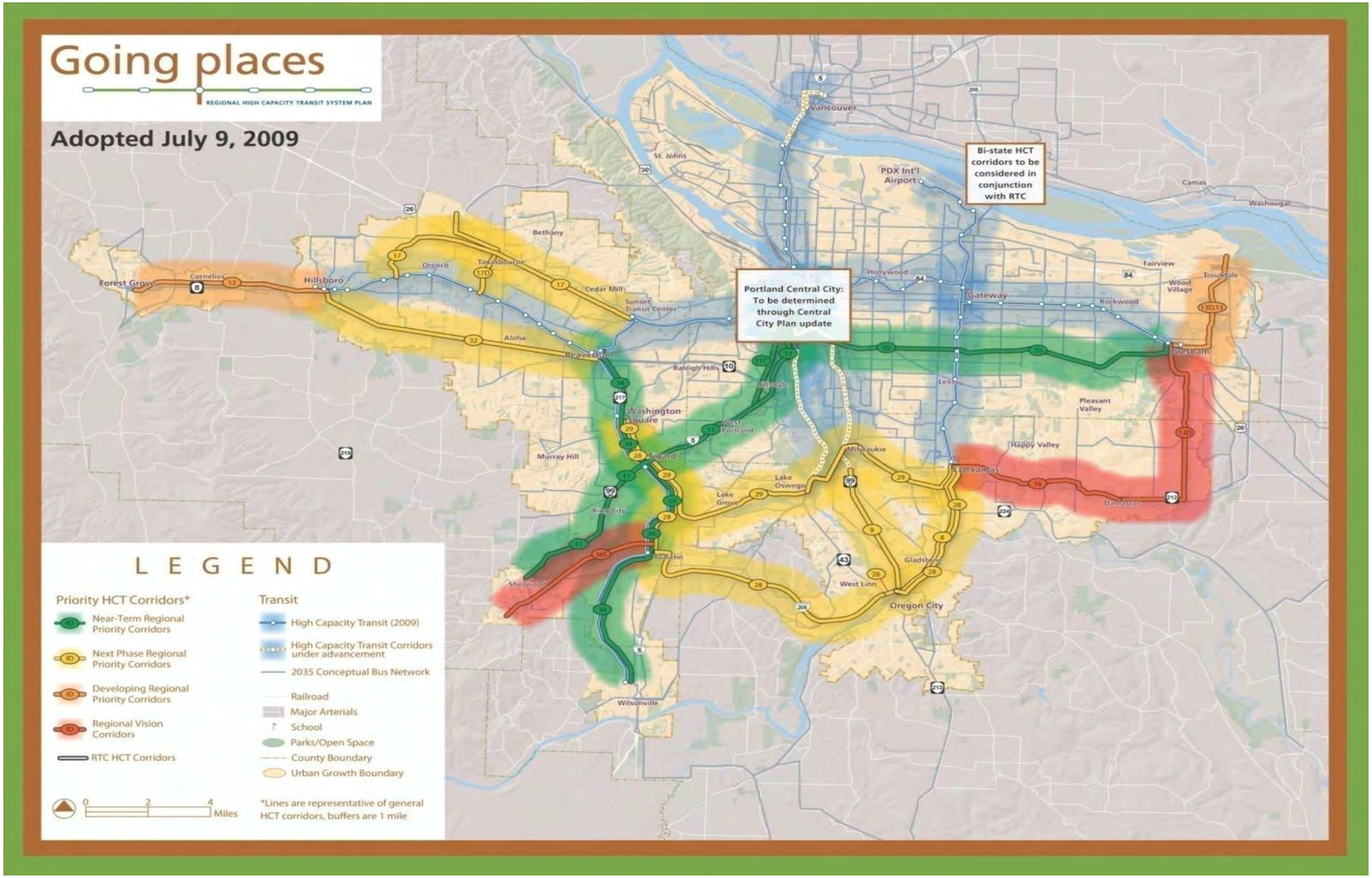
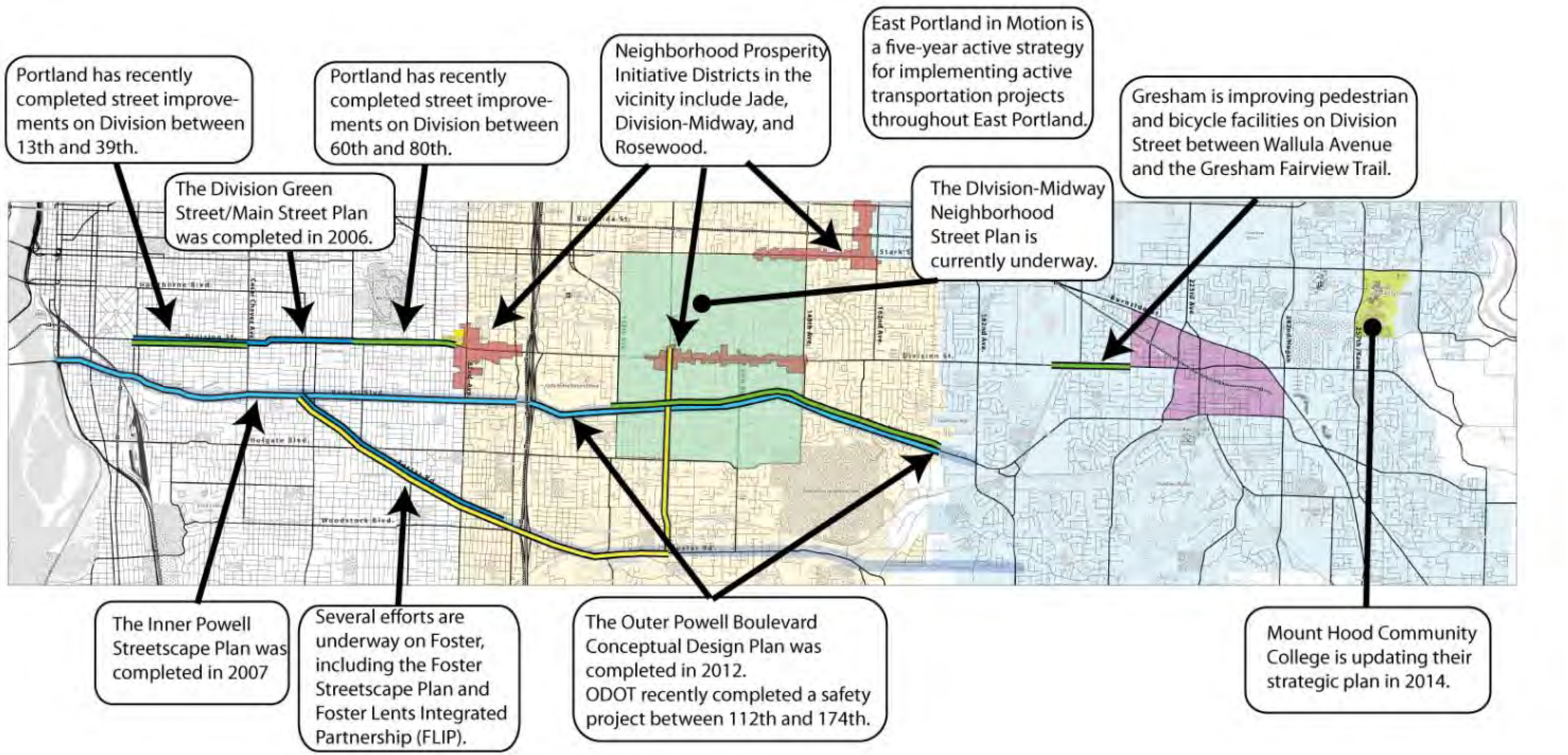


Figure 1-3. Recent projects in the corridor



Chapter 2: Transportation

2.1 Introduction

This chapter describes the existing transportation system in the corridor focusing on roads, transit, and active transportation and discusses current plans for projects and improvements. Decisions on future transportation system development in the corridor are guided by the Oregon Department of Transportation (ODOT), the Oregon Transportation Plan (OTP), the Regional Transportation System Plan (RTP), and local Transportation System Plans (TSPs) in Multnomah County, and the cities of Gresham and Portland. Local Transportation System Plans maintain conformance with the RTP and with local comprehensive plans to guide the maintenance, development and operation of the local transportation system. Gresham completed its TSP in December, 2013 and the city of Portland is expected to adopt its in 2014. The 2035 RTP was completed in 2010.

2.1.1 Overview of transportation system in the corridor

This section provides an overview of the major transportation facilities in the corridor. The following sections provide more detailed descriptions of the following:

- Roadway
- Transit
- Active transportation
- Freight and goods movement
- Managing the transportation system
- Safety

Powell Boulevard and Division are the major east-west arterials in the corridor. Numerous north-south arterials cross the corridor. The network of sidewalks, bike lanes, bike paths, and trails that comprise the bicycle and pedestrian systems are key components of the transportation system and are a critical component of the transit system. On street facilities such as bike lanes and sidewalks are generally managed by the owner of the road. Trails and off-street facility owners include local park providers as well as Metro Regional Government and Oregon State Parks.

Roadways in the corridor are owned and operated by the cities of Portland and Gresham or the Oregon Department of Transportation (ODOT). The Oregon Department of Transportation (ODOT) owns the following facilities:

- Powell Boulevard (US 26) within the city of Portland, but not Gresham
- Grand/Martin Luther King, Jr. (MLK)/McLoughlin (OR 99-E) from the MLK viaduct south
- 82nd Avenue (OR-213)
- Interstate 205

The cities of Gresham and Portland own and operate all other public roadways in their jurisdictions. Multnomah County operates the public arterial roads in Fairview and Troutdale.

2.2 How does the roadway system perform?

2.2.1 Functional Designations

Federal, regional and local policy define how roadways function in the transportation system and as urban infrastructure. The federal functional classification system groups roads into functional systems according to the type of service and amount of traffic the facility carries. These designations are used to determine design standards of roads and federal aid funding eligibility. The Federal Functional Classification is assigned to all public roads using federal guidelines. MAP-21, the most recent federal transportation bill, expanded the National Highway System (NHS) Route system to include all urban and rural principle arterials. All of SE Powell Boulevard and outer Division in Portland and Gresham are now designated as NHS Routes. All highways on the NHS, including those segments added by MAP-21, must comply with applicable Federal regulations. These requirements include design standards, contract administration, State-FHWA oversight procedures, Highway Performance Monitoring System reporting, National Bridge Inventory reporting, national performance measures data collection, and outdoor advertisement/junkyard control.

Regional and local functional designations are included in regional and local transportation plans. The RTP shifts the emphasis from moving vehicles to moving people and goods and connecting people and places. This integrated system provides for the movement of people by private vehicle, public transit, ridesharing, walking and biking as well as the movement of freight by roads, air, water and rail. The RTP defines a multimodal regional transportation network of facilities and services both functionally and geographically by the following eight components:

- Regional Throughway and Street Network, which includes the National Highway System (NHS) and State highways
- Regional Transit Network
- Regional Bicycle Network
- Regional Pedestrian Network
- Regional Freight Network
- Regional Design System
- System Management
- Demand Management.

Together, these facilities constitute an integrated and interconnected system to support desired land use as well as all modes of travel for people and goods movement. The concepts and policies emphasize safety, access, mobility and reliability. The Regional Throughway and Street Network is shown in Figure 2-1 and the Regional Design System is shown in Figure2-2.

Figure2-1. Regional Transportation Plan Roadway Network

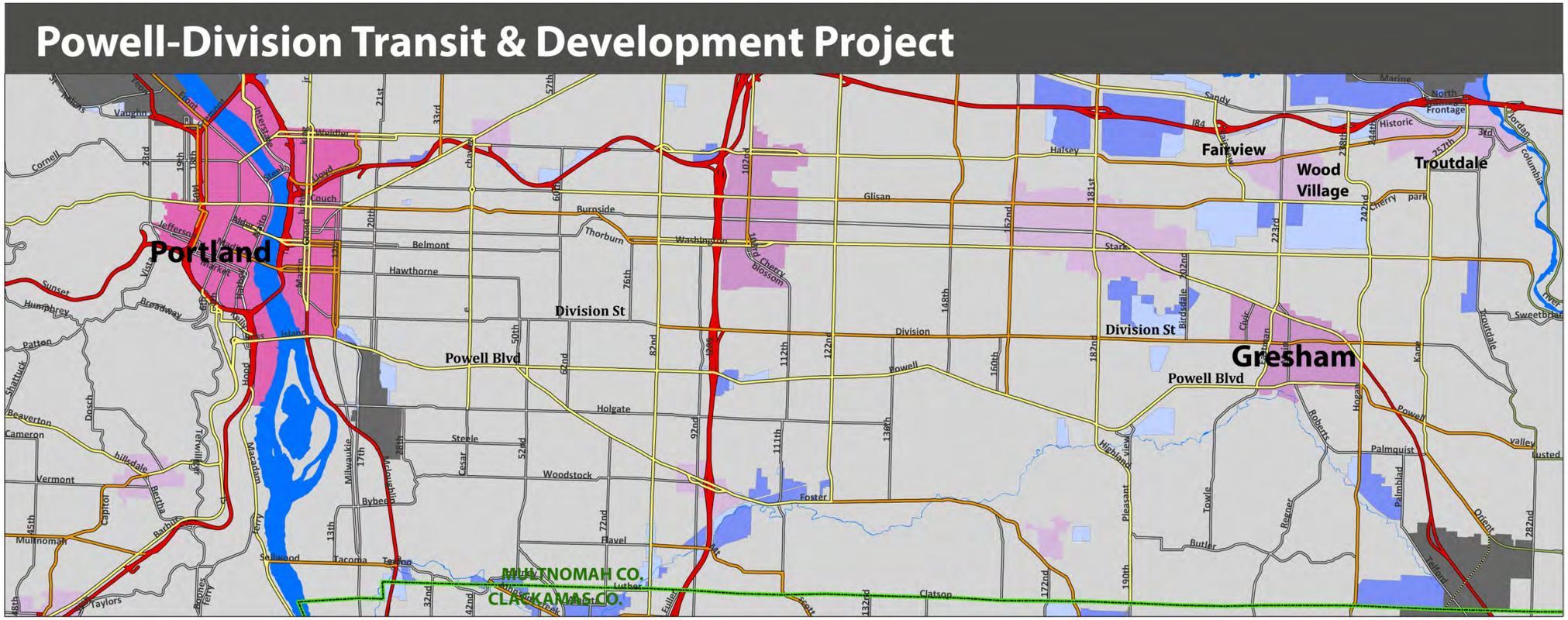
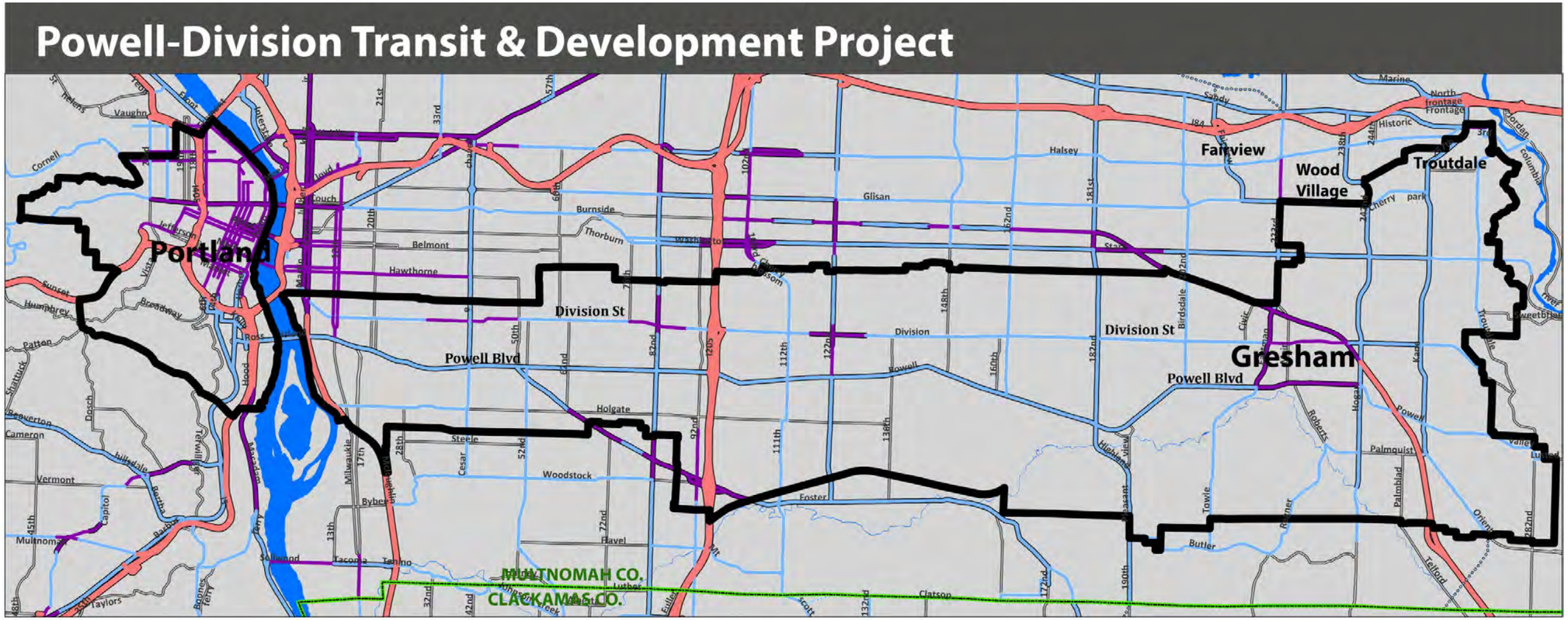


Figure2-2 Regional Transportation Plan System Design Classifications



The cities of Portland and Gresham operate and maintain roads within their borders. In addition to I-84, I-205, and I-5, the Oregon Department of Transportation (ODOT) operates and maintains US 26 (Powell Boulevard) and OR 213 (82nd Avenue) within Portland. The area is entirely within Multnomah County, and Multnomah County is responsible for arterial roads in Fairview, Troutdale, and Wood Village. It is approximately fifteen miles between Mount Hood Community College and downtown Portland.

Additionally, the local jurisdictions have classification descriptions that describe the types of traffic, trip and land uses appropriate for each street and define the requirements and characteristics for each classification.

North/south arterials include:

Portland:

- Milwaukie/McLoughlin (OR 99-E)
- 20th
- Cesar Chavez
- 82nd
- 52nd
- 111th/112th
- 122nd
- 136th
- 148th
- 160th

Gresham:

- 181st/182nd
- Eastman Parkway
- 242nd/Hogan
- 257th
- 223rd/Eastman Parkway

2.2.2 Vehicle Volumes, travel times and congestion measures

This section reports data for some of the common measures of performance on the roadway system.

2.2.2.1 Portland Volumes

Average Daily Traffic volumes (ADT) for Portland are shown in Table 2-1 below. The volumes are the yearly average number of vehicles daily.

Table 2-1 Portland vehicle volumes

	AM 2-Hour Peak		PM 2-Hour Peak	
	EB	WB	EB	WB
SE Division St W of 136th Ave	1,483	2,801	3,106	2,510
SE Division St W of 55th Ave	683	1,051	1,527	962
SE Division St W of 45th Ave	490	1,072	1,312	780
SE Division St W of 33rd Ave	432	1,198	1,182	796

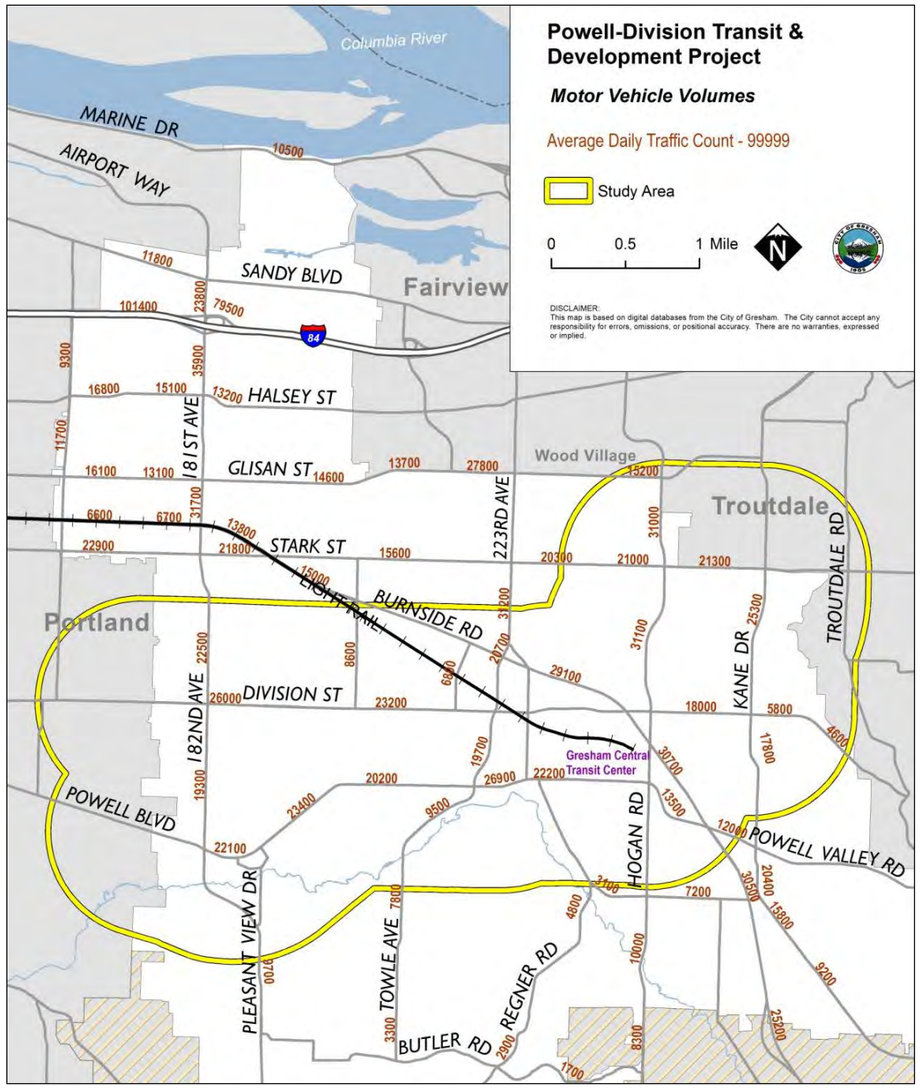
Table 2-1 Portland vehicle volumes

	AM 2-Hour Peak		PM 2-Hour Peak	
	EB	WB	EB	WB
SE Division St E of 10th Ave / Division Pl	446	1,060	1,256	373
SE Division St W of 41st Ave	557	1,060	1,353	824
SE Division St W of SE 171st Ave		1,306		2,314
SE Division St E of 68th Ave	892		1,863	
SE Division St W of 50th Ave	498		1,342	
SE Division St E of 50th Ave	576		1,540	
SE Division St W of 52nd Ave	562	1,545	1,396	1,728
SE Division St E of 52nd Ave	683	1,762	1,476	2,353
SE Division St W of 174th Ave		1,748		1,953
SE Division St W of 122nd Ave	1,262		2,803	
SE Division St W of 174th Ave		1,642		2,019
SE Division St W of 117th Ave	1,686		2,911	
SE Division St W of 122nd Ave	2,845		2,477	
SE Division St E of 68th Ave	1,476		1,187	
SE Powell Blvd W of 136th Ave	880		1,839	
SE Powell Blvd W of 54th Ave	1,039	2,137	2,698	1,747
SE Powell Blvd W of 54th Ave	1,204	2,330	2,628	1,888
SE Powell Blvd E of 164th Ave	910	1,476	1,981	1,382
SE Powell Blvd W of 112th Ave	694	1,403	1,509	1,243
SE Powell Blvd E of 136th Ave	916		2,015	
SE Powell Blvd W of 157th Ave	847	1,249	1,761	1,330
SE Powell Blvd E of SE 28th Ave	1,386	3,230	3,671	2,387
SE Powell Blvd E of 25th Ave		3,069		0
SE Powell Blvd E of 25th Ave	1,365		3,610	
SE Powell Blvd E of 118th Ave		665		1,257
SE Powell Blvd W of 130th Ave	673		1,652	
SE Powell Blvd E of 118th Ave		1,342		1,215
SE Powell Blvd E of 118th Ave	701		1,529	

2.2.2.2 Gresham Volumes

The City of Gresham collected average daily traffic volumes (ADT) at 241 locations throughout the city in 2010 and 2011. Figure 2-3 displays ADT throughout the Gresham study area. The data shows the arterials and collectors within Gresham are carrying expected volumes without any one street experiencing an overburden.

Figure2-3 Gresham vehicle volumes



2.2.2.3 Gresham Travel times

Gresham collects travel time data each January to generate a "Community Indicator" for the city. This "Community Indicator" is a measure of how arterial streets are performing in terms of traffic congestion. It compares the average time it takes motorists to drive a corridor to a nationally recognized performance benchmark for congestion levels. Data is collected on five of the city's arterials: Powell Blvd., 181st/182nd Ave., Burnside Rd., Stark St. and Kane Dr. A Community Indicator over 1.0 means the arterial performance does not meet the national accepted benchmark and thus indicates traffic congestion beyond the national average. For 2013, Gresham's arterials had a combined CI of 0.655, with none exceeding the 1.0 indicator.

Table 2-2 shows the 2013 travel times for each of the 5 arterials measured. For purposes of comparing performance annually, the change in travel time from 2012 and 2011 is also shown. Overall, travel times along the select corridors increased from 2012 to 2013. Table 2-1 also shows the CI rating for each corridor segment. While Division Street is not included in the travel time analysis, Powell Boulevard has a CI rating well within the national accepted benchmark.

Table 2-2 Gresham travel times

Arterial	From	To	2013 Average Travel Time (minutes)	Change In Travel Time from 2012	Change In Travel Time from 2011	2013 Community Indicator (CI)
Powell	SE 181st Avenue	Burnside Road	10:03	-0.30%	-0.40%	0.627
	Burnside Road	SE 181st Avenue	10:35	14.30%	0.20%	0.661
181st/182nd	I-84 westbound ramps	W Powell Boulevard	10:00	0.10%	-8.80%	0.742
	W Powell Boulevard	I-84 westbound ramps	8:45	-7.00%	-6.20%	0.649
Burnside	NW Eastman Parkway	E Powell Boulevard	5:28	7.10%	-2.50%	0.68
	E Powell Boulevard	NW Eastman Parkway	5:35	9.30%	-8.00%	0.694
SE Stark	SE 181st Avenue	NE Kane Drive	11:12	2.70%	8.30%	0.656
	NE Kane Drive	SE 181st Avenue	11:10	8.60%	8.30%	0.654
Kane	SE Stark Street	SE Palmquist Road	4:57	1.30%	-15.00%	0.517
	SE Palmquist Road	SE Stark Street	5:52	3.80%	1.80%	0.613

2.2.2.4 Gresham Congestion

Gresham evaluates and monitors levels of congestion at street intersections. The measure of congestion used is called volume to capacity (V/C) ratio. It measures the amount of traffic in a given intersection in relation to the amount of traffic the intersection was designed to handle. The level of traffic congestion experienced at an intersection as measured by the V/C ratio is described in Table 2-3 below. Table 2-4 is an inventory of the volume to capacity ratio for intersections within the study area.

Table 2-3 Volume to capacity ratio

V/C Ratio	Congestion Level
V/C <= 0.8	No/Low congestion
V/C >0.8 and <=0.90	Moderate congestion
V/C > 0.90 and <= 1.0	High congestion
V/C > 1.0	Severe congestion

Currently, none of the intersections monitored within the study area are operating at a severe congestion level.

Table 2-4 Intersection volume to capacity ratio

Intersection	Signalized	2013 V/C	Intersection	Signalized	2013 V/C
NE Burnside Rd & NE Division St	Y	0.75	NE Williams Ave & SE Division Dr	N	0.15
NE Hogan Dr & NE Burnside Division St	Y	0.87	SW Highland Dr/SE 182nd Ave & W Powell Blvd	Y	0.68
NE Hogan Dr & NE Burnside Rd	Y	0.87	E Powell Loop & W Powell Blvd	Y	0.59
Mt Hood Hwy/SE Burnside Rd & E Powell Blvd/SE Powell Valley Rd	Y	0.71	SW Birdsdale Dr/NW Birdsdale Ave & W Powell Blvd	Y	0.65
Mt Hood Hwy & SE Palmquist St	Y	0.95	SW Towle Ave/Towle Ave & W Powell Blvd	Y	0.59
NE Hogan Dr & SE Stark St	Y	0.87	SW Eastman Pkwy/NW Eastman Pkwy & W Powell Blvd	Y	0.72
NE Kane Dr/SW 257th Ave & SE Stark St	Y	0.83	SE Walters Dr & W Powell Blvd	Y	0.38
SE 182nd Ave & SE Division St	Y	0.85	Main Ave & W Powell Blvd/E Powell Blvd	Y	0.61
SE 190th Ave & SE Division St	Y	0.55	Hood Ave & E Powell Blvd	Y	0.57
NW Birdsdale Ave & SE Division St/NW Division St	Y	0.71	Cleveland Ave & E Powell Blvd	Y	0.51
NW Wallula Ave & NW Division St	Y	0.41	SE Hogan Rd/NE Hogan Dr & E Powell Blvd	Y	0.83
NW Civic Dr & NW Division St	Y	0.51	Rene Ave & E Powell Blvd	Y	0.44
NW Eastman Pkwy & NW Division St	Y	0.81	SE Kane Dr/NE Kane Dr & SE Powell Valley Rd	Y	0.59
NW Division St/NE Division St & Main Ave	Y	0.54	SE Barnes Rd/SE Barnes Ave & SE Powell Valley Rd	N	0.56
NE Kelly Ave & NE Division St	Y	0.53	SE 282nd Ave & SE Powell Valley Rd	N	0.56
NE Cleveland Ave & NE Division St	Y	0.7	SE Hogan Rd & SE Cleveland Dr	N	0.31
NE Hogan Dr & NE Division St	Y	0.72	NE Kane Dr & NE 29th St/Mt Hood Hwy (US 26)	Y	0.59
NE Kane Dr & NE Division St	Y	0.81			

2.2.2.5 Portland Congestion

Table 2-5 shows the V/C ratio for intersections on Powell in Portland.

Intersection	2012 V/C
50th & Powell Blvd.	1.01
82nd & Powell Blvd.	0.79
104th & Powell Blvd.	: 0.73
112nd & Powell Blvd.	0.70
122nd & Powell Blvd.	0.85
136th & Powell Blvd.	0.85
148th & Powell Blvd.	0.74
162nd & Powell Blvd.	0.89

2.2.3 Street Geometry

The roadway varies throughout the corridor. Refer to Figure 2-4 for an overview of the street geometry along Powell and Division.

2.2.3.1 Portland Street Geometry

DIVISION – CENTRAL EASTSIDE TO 82ND AVE

Much of inner Division, which runs from 3rd Ave to 82nd Ave is a typical "main street" with mixed-use buildings, pedestrian activity and neighborhood serving retail uses. However, closer to the river, Division runs through a primarily industrial area; east of 50th Division is more residential with institutional uses present.

West of 60th Ave, where Division is typically one travel lane in each direction with on-street parking (36-feet) and continuous sidewalks, the roadway carries an average of 13,000 to 18,000 vehicles per day. East of 60th Ave, Division widens to 44 feet and there is no on-street parking. The posted speed is 25 mph to 82nd Ave.

DIVISION – 82ND AVE TO GRESHAM

At 80th Ave, Division widens to approximately 76 feet. As the road widens and reaches 82nd Ave, the character of the street and adjacent development changes. Although some sections of Division between 82nd and the Portland boundary with Gresham have clumped or nodal commercial areas and others have more linear or strip commercial areas, the scale of development (one to two stories) and the road characteristics from 82nd to Gresham are relatively consistent. East of 122nd Ave, Division carries and average of 48,000 vehicles per day, with a posted speed of to 40 mph. There are two travel lanes in each direction, a center turn lane, bike lanes and on-street parking.

POWELL – CENTRAL EASTSIDE TO 82ND AVE

Between Milwaukie and the Foster-Powell intersection, development is typically set back from the street, behind off-street parking. Development is a mix of commercial, industrial and institutional with a small amount of residential development. East of the Foster-Powell intersection, the proportion of residential development increases and there is intermittent commercial development. Between the mid-50s and mid-70s, ODOT owns intermittent right-of-way parcels that are currently used for business and neighborhood access and parking. These parcels could provide opportunities for transit stations, queue jump lanes or open space.

The roadway has two travel lanes in each direction, with a center turn lane or median islands. Near Ross Island Bridge Powell carries and average of 40,000 vehicles per day. The intersections at 7th, Cesar Chavez (39th), and 82nd Ave are all considered high crash locations. The roadway width is generally 60 feet.

POWELL – 82ND AVE TO GRESHAM

As Powell heads east from 82nd, toward the I-205 overpass, it retains its character as a major Portland boulevard with four travel lanes, a shared median and center turn lane and abundant street streets. As it moves under I-205, it begins its transition to a two land rural-feeling highway. While there are still commercial and industrial uses along Powell heading east, there are more residential uses few, if any, sidewalks. Pedestrian access is provided on the road shoulder. Development is primarily residential, with intermittent commercial development and commercial uses at intersections, such as 136th and 148th Aves.

82ND AVENUE

This section of 82nd Ave is commonly referred to as the Jade District, in recognition of the prevalence of Asian-American owned and operated businesses along this half-mile stretch. There is currently a Neighborhood Prosperity Initiative, which is a joint public/private partnership between PDC and APANO (Asian Pacific American Network of Oregon) to improve economic prosperity in the area.

On the north side of this stretch, the PCC Southeast Center Campus, which is located on the northwest corner of Division and 82nd Ave is a local and regional anchor, serving 11,000 students from around the region. Fubonn Supermarket and smaller businesses within the shopping center provide a retail anchor, drawing a wide range of customers. To the south at Powell, 82nd provides access to many local and national businesses.

122ND AVENUE

122nd Ave is a major north-south connector route with four travel lanes, a center turn lane, striped bike lanes and curb-tight sidewalks. Along 122nd Ave, commercial businesses are primarily located at the intersections with Powell and Division. Development here is often set back from the street. On the south end at Powell, there is a Safeway, Walgreens and Department of Human Services office and Human Solutions is nearby. At the north end at Division, there is the Crunch Gym and other local services and businesses. 122nd Avenue is also within the Division-Midway Alliance NPI area.

2.2.3.2 Gresham Street Geometry

This section discusses the street geometry within the study area in Gresham. Pedestrian and bicycle facilities within the transportation corridors are discussed in modal specific sections below. The transportation corridors of Division from west city limits to Kane, Powell from west city limits to Hogan, Stark from Hogan to Kane and Kane from Stark to Division are all classified as standard arterials by the City's Transportation System Plan (TSP). The standard arterial cross-section includes a 96' wide right-of-way (ROW) and a 66' wide curb-to-curb distance, with two travel lanes (one 10' and one 11') in each direction, a 12' center lane than can be used as a turn lane or for a median or other identified purpose, and 6' bike lanes, 8' landscape strips and a 6' sidewalks on each side.

Hogan is classified as a major arterial. The major arterial standards are a 104' ROW and a 74' cross section, with two 12' travel lanes in each direction, a 14' center lane, and 6' bike lanes, 8' landscape strips and 6' sidewalks on each side.

The TSP also designates Division between Wallula and Cleveland Avenues, and Powell between Walters and Hogan as boulevard streets. The boulevard design is intended to create an enhanced pedestrian environment within Gresham's city centers of Rockwood, Civic Neighborhood and Downtown. Sidewalks on boulevard streets are to be 10' wide and on-street parking is to be provided as ROW and development/redevelopment allows.

ROW and curb to curb dimensions for all of the transportation corridors vary throughout the study area based upon tax lot configuration and existing land use build out. The remainder of this section summarizes the existing street geometry per street:

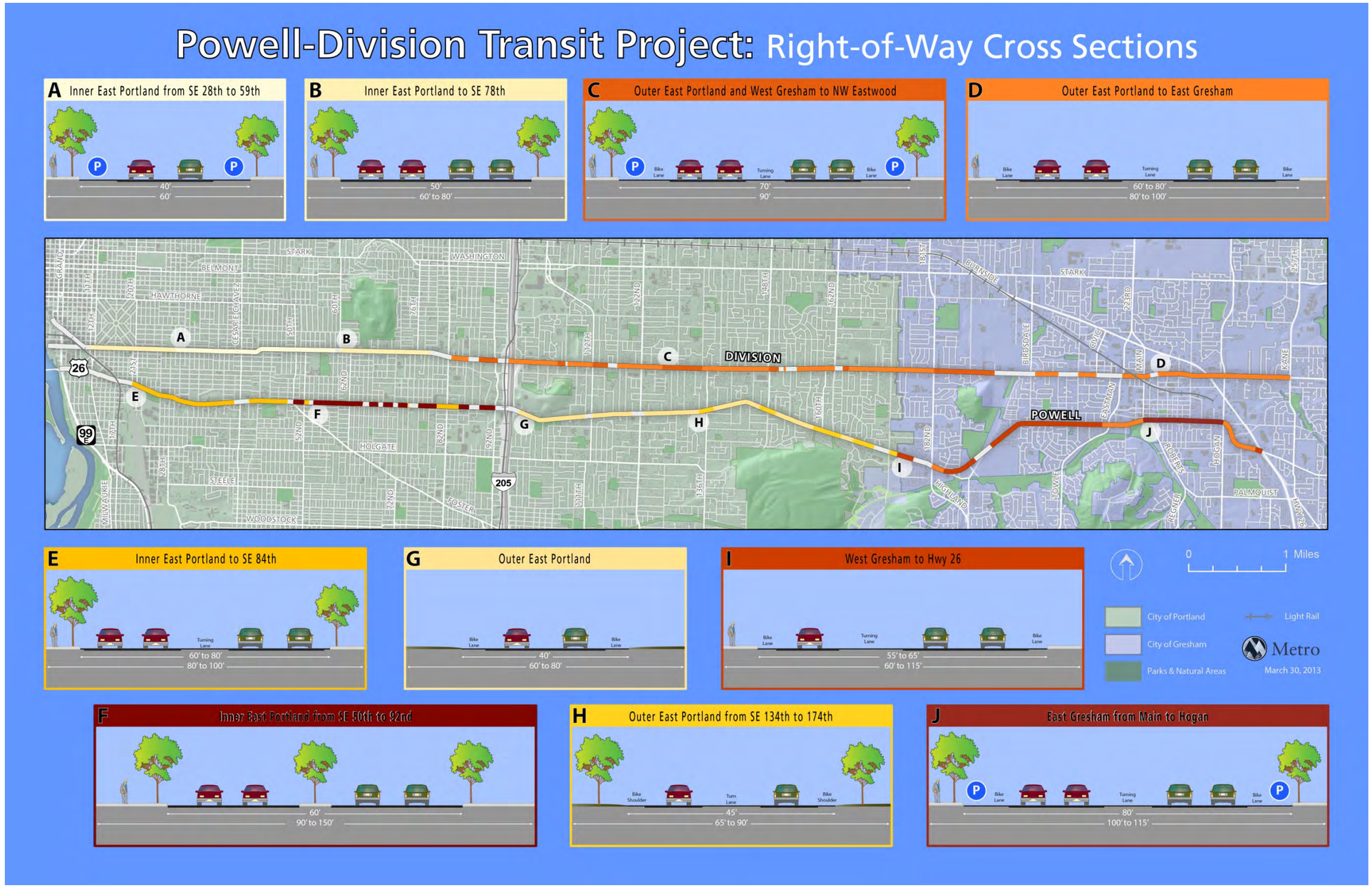
DIVISION

- Existing street cross-section: Two travel lanes each direction plus a center lane
- ROW: A majority of the ROW is 90' wide. It increases to 110' and 115' wide just west and east of Birdsdale and decreases to 80' wide between Kelly and Cleveland.
- Bike facilities: Bike lanes exist along all arterials within the project study area. On Division, the bike lanes are "buffered" between west city limits and near Birdsdale Avenue. Most of the collector streets within the project study area are considered "shared roadways," meaning that autos and bikes share the travel lanes.
- Sidewalks: There are sidewalks the entire length of Division except a small segment between the Gresham-Fairview Trail and Birdsdale. That segment will be constructed in 2014.

POWELL

- Existing street cross-section: From Eastman to Hogan there are two travel lanes each direction and a center lane.
- Improvements to Powell from the western city limits (181st) to Eastman were completed in 2007. Due to environmental and existing land use build out constraints, this segment was not built to the five lane cross-section but alternatively to a four lane cross-section with a constant center lane and travel lanes that alternate from two lanes westbound and one lane eastbound to one lane westbound and two lanes eastbound.

Figure 2-4. Street geometry



2.3 What is the Transit system?

2.3.1 Existing conditions

TriMet is responsible for transit service in the corridor. Transit facilities in the corridor include light rail lines and stations, transit centers, streetcar, frequent service bus lines, bus lines, bus stops and amenities, and park and rides. TriMet's two highest ridership bus routes, 4 Division/Fessenden and 72-Killingsworth serve the corridor.

The 9-Powell Boulevard line and the 4-Division/Fessenden provide the main east-west service bus in the study area. The 4-Fessenden is a frequent service bus, providing service about every 15 minutes. The 9-Powell is a frequent service route between downtown Portland and 82nd Avenue with buses about every 15 minutes. From 82nd to the Gresham Transit Center buses run about every 15 minutes only during the rush hours. The other lines serving the corridor are shown in Table 2-6. The table shows the streets and transit lines that provide north/south bus service and transfer locations in the corridor, as well as the frequency for each bus line and the locations.

Table 2-6 Streets served, TriMet bus lines, frequency and destinations

Street	Line	Frequency	Destinations/Locations
SE 11th and 12th	70-12/NE 33rd	30 minutes	NE 33rd and Sunderland to Milwaukie
	19-Woodstock/Glisan	30-min.	Gateway TC to Mt. Scott and 112th
Ladd's Addition, 20th and 26th	10-Harold St.	15-min.	SE Foster
Cesar Chavez	75-Cesar Chavez/Lombard	15-min.	Lombard, Cesar Chavez, Milwaukie
	66 Marquam Hill/Hollywood	Rush-hour only	Hollywood TC, Cesar Chavez , Powell, Marquam Hill
50th	14-Hawthorne	15-min.	Hawthorne, 50th, Lents town center
52nd	71-60th Ave/122nd Ave	30-min.	Clackamas TC, Parkrose TC, Lents town center
82nd	72 Killingsworth/ 82nd Ave	15-min.	Clackamas TC, Swan Island
122nd	71-60th Ave/122 Ave		
182nd	87-Airport Way/181st	60-min.	Gresham TC, 18nd; Airport Way,
223rd	21-Sandy Blvd/223rd	30-min.	Gresham TC; Gateway TC
Hood, between the Gresham Transit Center and Powell	80-Kane/Troutdale Rd 81-Kane 257	30-min.	Gresham to Frontage Rd in Troutdale
	84-Powell Valley/Orient	Rush-hour only	Gresham TC to Kelso
Kane	80-Kane/Troutdale Rd 81 Kane 257		

Figure 2.5. 4-Division morning and evening peak travel times

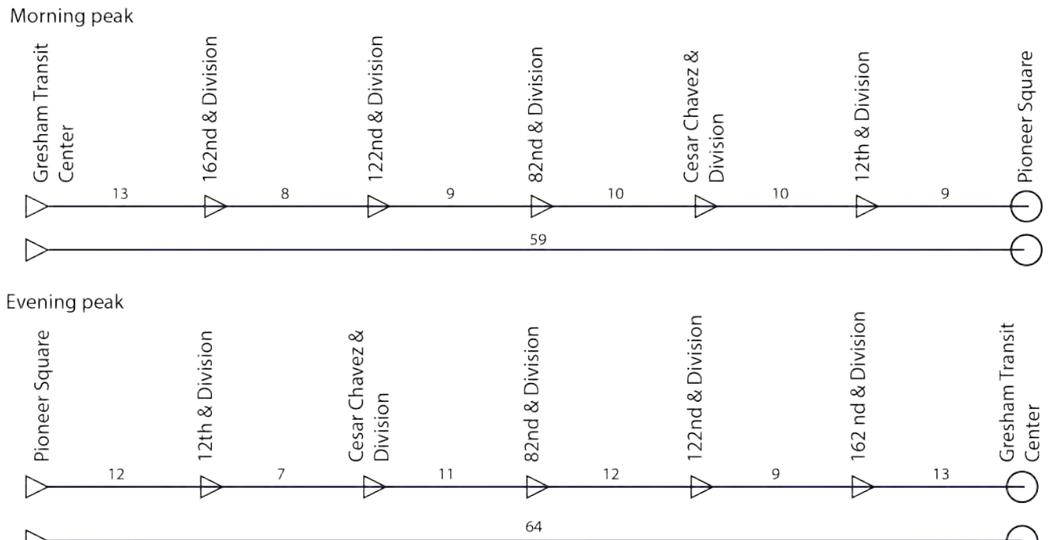
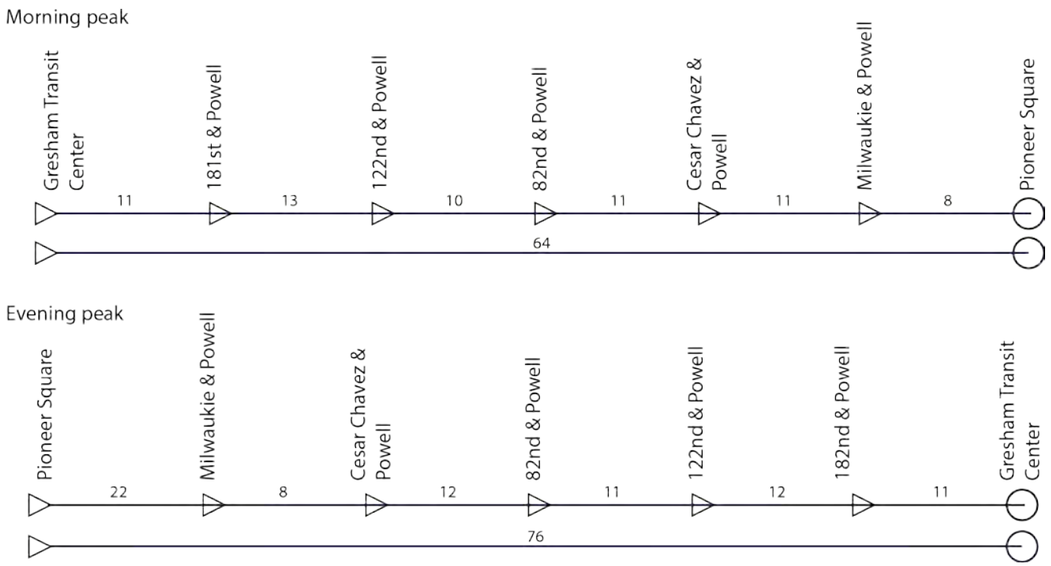


Figure 2.6. 9-Powell morning and evening peak travel times



Peak hour transit travel times for the 9-Powell and 4 Division between time points and through the corridor are shown in Figures 2. 5 and 2.6. Travel times on both lines in the evening peak from Pioneer Square to the Gresham Transit Center is over an hour, with the travel time on the 9-Powell over an hour and fifteen minutes.

The corridor is also served by two existing Metropolitan Area Express (MAX) light rail lines and another, the Portland-Milwaukie line, is currently under construction. The MAX Blue Line provides service north of the corridor from Portland City Center to downtown Gresham. The Green Line runs north-south across the corridor near I-205 and provides service to Clackamas town center, and downtown Portland and connections to Portland International Airport via the Red Line. The Portland-Milwaukie line will provide service to inner SE Portland, the city of Milwaukie and north Clackamas County beginning in September 2015. Trains will run between approximately 4:30 a.m. and 1:30 a.m. daily (ending one half hour earlier on Sundays). Trains will arrive every 15 minutes most of the day, and every 10 minutes on average during weekday rush hours. The Portland-Milwaukie light Rail Project also includes a new Willamette River Bridge which will accommodate transit, bike and pedestrian trips. It is currently assumes that the 9-Powell Boulevard line will use the new bridge to cross the river from downtown Portland to the inner east side.

Figure 2-7 shows existing lines. Figure 2-8 shows the number of bus riders getting on and off at stops in the corridor; it does not include light rail ridership.

Tables 2-7 through 2-10 show the locations in SE Portland and Gresham where more than 200 riders get on or off daily on average and the lift is used more than 20 times monthly.

Table 2-7 #4 Division to downtown Portland from SE Portland and Gresham

Stop	Ons–daily average	Offs–daily average	Total	Monthly Lifts
SE Division & 82nd	306	425	731	105
Gresham Transit Center	418	85	503	95
SE Division St MAX Station	85	323	408	58
SE Division & 122nd	223	141	364	105
SE Division & Cesar Chavez	115	152	267	78
SE Madison & Grand	130	114	244	34
SE Division & 182nd	150	59	209	38
SE Division & 12th	106	98	204	18
SE Division & 162nd	148	50	198	42
SE Division & 148th	104	77	181	36
SE Division & Ladd	110	59	169	40
SE Division & 130th	113	46	159	51
SE Division & 145th	106	36	142	70
SE Division & 135th	98	36	134	25
SE Division & 174th	77	34	111	39

Table 2-7 #4 Division to downtown Portland from SE Portland and Gresham

Stop	Ons–daily average	Offs–daily average	Total	Monthly Lifts
SE Division & 112th	64	41	105	31
SE Division & 52nd	56	46	102	13
SE Division & 68th	52	24	76	25
16900 Block SE Division	53	19	72	31
SE Division & 98th	28	13	41	23

Table 2-8 #4 Division to Gresham TC from downtown Portland

Stop	Ons–daily average	Offs–daily average	Total	Monthly Lifts
SE Division & 82nd	494	337	831	131
SE Division St MAX Station	338	98	436	59
SW Madison & 4th	293	88	381	22
Gresham Transit Center	3	361	364	14
SE Division & 122nd	194	161	355	96
SE Division & Cesar Chavez	133	131	264	86
SE Division & 145th	71	184	255	87
SW Madison & 1st	210	41	251	16
SE Hawthorne & 6th	95	153	248	10
SE Division & 182nd	81	140	221	36
SE Division & 12th	104	116	220	17
SE Division & 20th	84	133	217	39
SE Division & 119th	34	135	169	42
SE Division & 162nd	53	115	168	36
SE Division & 50th	85	68	153	33
SE Division & 136th	42	109	151	32
SE Division & 174th	35	92	127	44
SE Division & 41st	59	64	123	24
12700 Block SE Division	40	80	120	41
SE Division & 112th	39	74	113	27
SE Division & 160th	21	90	111	22
SE Division & 148th	50	46	96	21
SE Division & 67th	30	58	88	21
SE Division & 168th	17	48	65	36
SE Division & 131st	17	42	59	26

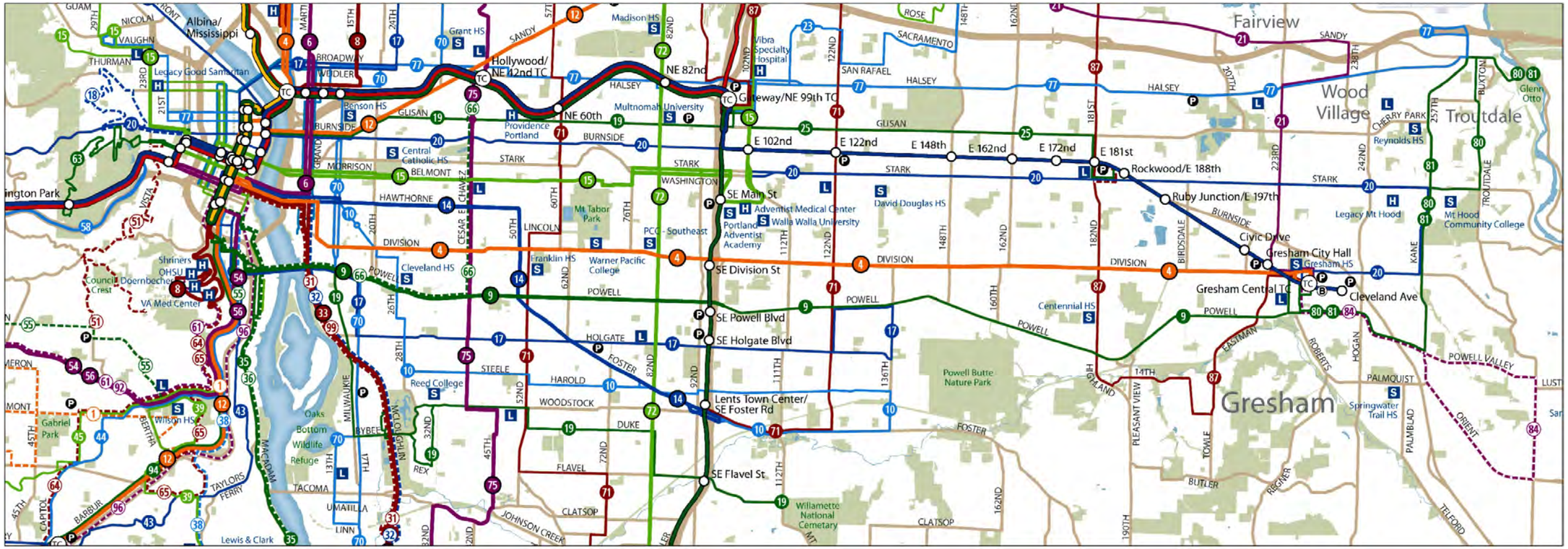
Table 2-9 #9 Powell to downtown Portland from SE Portland and Gresham

Stop	Ons– daily average	Offs– daily average	Total	Monthly Lifts
Gresham Transit Center	439	172	611	111
SE Powell & 82nd	286	203	489	69
SE Powell & Cesar Chavez Blvd	293	136	429	55
SE Powell & 28th	128	206	334	11
SE Powell & Milwaukie	80	226	306	13
SE Powell & 92nd	116	129	245	40
SE Powell & 52nd	146	87	233	27
SE Powell & 26th	155	62	217	5
SE Powell & 122nd	134	58	192	47
W Powell & SW 181st	100	64	164	35
2700 Block W Powell	95	66	161	24
SE Powell & 34th	79	53	132	26
SE Powell & 21st	82	45	127	25
SE Powell & 112th	77	28	105	25
SE Powell & 71st	77	25	102	27
SE Powell & 156th	14	5	19	21

Table 2-10 #9 Powell to Gresham TC or SE 98th from downtown Portland

Stop	Ons– daily average	Offs– daily average	Total	Monthly Lifts
SE Powell & 82nd	311	361	672	82
SE Powell & Cesar Chavez Blvd	205	379	584	76
SE Powell & Milwaukie	216	124	340	21
SE Powell & 92nd	208	126	334	49
SE Powell & 122nd	162	166	328	72
SE Powell & 26th	153	174	327	8
Gresham Transit Center	1	274	275	17
SE Powell & 52nd	138	125	263	23
SE Powell & 50th/Foster	60	158	218	18
SE Powell & 28th Pl	101	113	214	18
W Powell & SW Highland	76	112	188	28
2700 Block W Powell	80	100	180	27
SE Powell & 21st	72	93	165	26
SE Powell & 34th	66	91	157	29
SE Powell & 112th	30	71	101	22
SE Powell & 72nd	27	72	99	29

Figure 2-7 Existing Transit Lines



TriMet transit system map

Bus Service
- Frequent Service
- Standard Service
- Rush-Hour Service

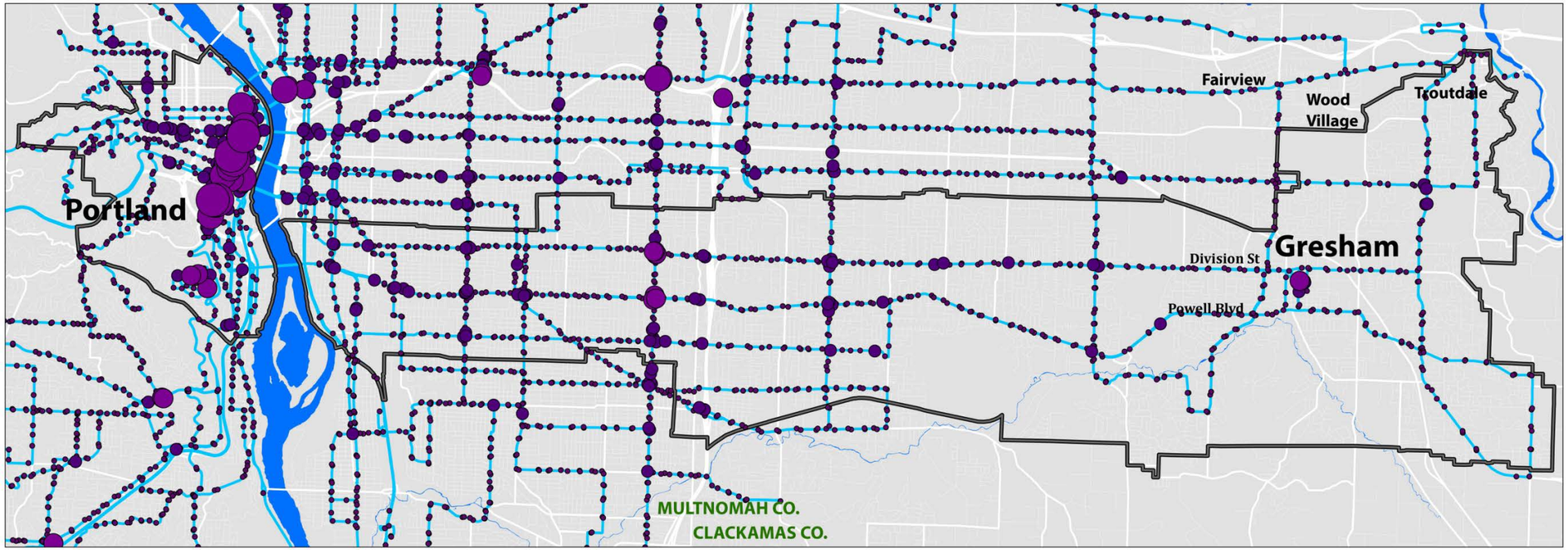
Rail Service
- MAX Blue Line — Hillsboro/City Center/Gresham
- MAX Green Line — Clackamas TC/City Center
- MAX Red Line — Airport/City Center/Beaverton TC
- MAX Yellow Line — Expo Center/City Center
- WES Commuter Rail — Beaverton/Wilsonville

Points of Interest
- Transit Center
- Bike Parking Facility
- Park & Ride Lot
- High School or College
- Hospital
- Library

corridor study area

0 0.5 1 2 Miles

Figure2-8. Transit Stop Activity



Powell Division Corridor

Fall 2013 Passendger Census data

Total on/offs

- 0 - 178
- 179 - 611
- 612 - 1200
- 1201 - 2270
- 2271 - 4935
- 4936 - 8504

corridor study area

0 0.5 1 2 Miles

Source:TriMet

2.3.2 Transit Improvements

2.3.2.1 Service Enhancement Planning

TriMet Service Enhancement Plans are a multi-year effort to improve transit service in the region. The process will look at growth and engage local communities to determine where new service should be located and how to improve existing services for future growth. TriMet is conducting the Eastside Southeast and Service Enhancement Plans concurrently with the Powell-Division Transit and Development Project. The Eastside area includes East Portland (generally east of I-205) and the cities of Gresham, Troutdale, Wood Village, Fairview and unincorporated Multnomah County within the TriMet district boundary. The Southeast area includes SE Portland south of Division and west of I-205.

Figure 2-9. Southeast and Eastside Service Enhancement Plan areas

The Service Enhancement Plan will identify:

- near-term bus service improvements that can be made soon with modest cost
- long-term bus service improvements to implement over time
- partnerships with cities, the county, ODOT and businesses to improve walking and biking access to bus stops, light rail stations and transit centers.

Improvements identified through this process will be incorporated into TriMet's Transit Investment Priorities (TIP) program for implementation.

The Service Enhancement Plans in considering infrastructure improvements will review and evaluate:

- current plans and programs
- new data, including the most recent Census
- plans for residential and commercial growth
- demographic changes and equity considerations
- input from jurisdictions, employers, institutions, and neighborhood and community groups

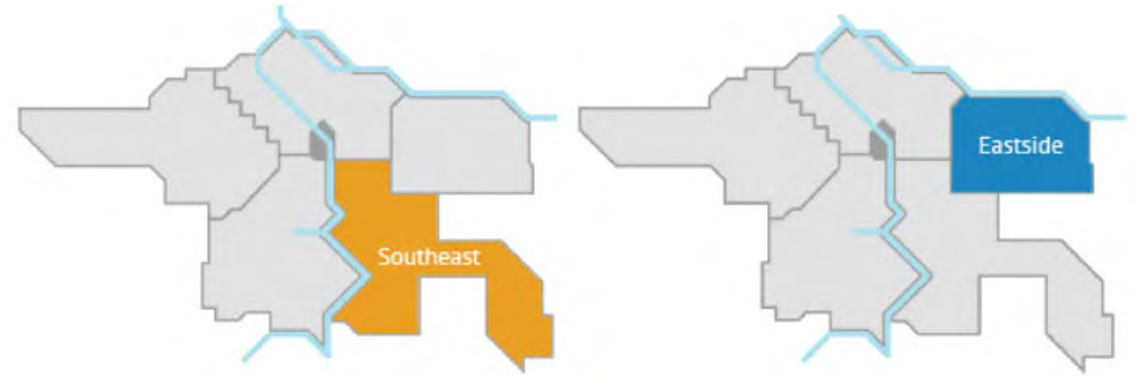
Opportunities to provide input will occur at outreach meetings and through online channels.

The timeline for the Eastside Enhancement plan is:

Winter–spring 2014: Public input and data collection
Spring 2014: Draft shared vision for bus service improvements
Summer 2014: Public feedback on draft vision
Early fall 2014: Refine vision
Fall 2014: Public feedback on refined vision
Winter 2015: Finalize vision

The timeline for the Southeast plan is scheduled to implement bus service changes related to the Portland-Milwaukie light rail line when it opens in September 2015. The timeline for the Southeast Service Enhancement Plan is:

Winter–spring 2014: Public feedback and data collection for Portland-Milwaukie Light Rail bus service
Summer 2014: Feedback on initial draft for bus service with PMLR and future needs
Fall 2014: Feedback on refined proposal for bus service with PMLR and future needs
Winter 2015: Finalize PMLR bus service plan and collect feedback on draft shared vision for bus service improvements
Spring–summer 2015: Public feedback on refined vision
September 2015: Implement PMLR bus service changes
Fall 2015: Finalize vision



2.3.2.2 The Portland-Milwaukie Light Rail Project

The 7.3-mile Portland-Milwaukie MAX light rail extension will serve new 10 stations, including the Clinton/SE 12th Avenue Station between Division and Powell at Clinton Street and SE 12th Avenue, and MAX stations in downtown Portland. Bus lines 9-Powell and 4-Division, which currently travel across the Ross Island Bridge would instead use the new transit bridge, improving reliability by avoiding traffic congestion.

Figure 2-10. Rendering of the Clinton/SE12th Avenue Station

Figure 2-11. New Portland-Milwaukie bridge for transit, bikes and pedestrians

Figure 2-12. Portland-Milwaukie bridge

2.3.2.3 Gresham

Gresham's Transportation System Plan completed in December 2013 identified the following needs:

- Enhanced north/south transit access.
- Improved frequency and service hours on lines serving Wood Village, Troutdale, Sandy, Mt.. Hood Community College, Powell, Glisan.
- Light rail extension or other high capacity transit connection to Mt.. Hood Community College.
- High capacity transit (7-8 minutes all day service) connecting the Gresham Regional Center, Town Center and other major destinations and employment centers.
- Primary transit (15 minutes all day service) on all other arterial corridors serving higher density and mixed-use, transit-oriented land uses and community destinations.
  Fixed-route neighborhood transit service in moderate and lower density residential areas connecting to transfer points and major destinations.

2.3.2.4 Portland

The city of Portland is currently updating its comprehensive plan to implement the Portland Plan adopted in 2012. The Portland Plan sets short- and long range goals for the city focusing on a core set of priorities:

- Prosperity
- Education
- Health
- Equity

Transit has a part to play in achieving these goals. The following guiding policies s are identified in the plan:

- Make it easier for students to get to school, work and other needed services on public transit.
- Continue to promote innovation in public projects related to transportation and environmental services, an innovative active transportation system — transit, walking, use of mobility devices, biking, car and bike sharing
- Increase the use of transit, bikes, walking, carpooling and telecommuting to reduce both wear and demand on the transportation system and to free up capacity for freight mobility.
- Improve access to jobs in priority neighborhoods through frequent transit
- Provide for the growing housing needs of the disabled and elderly through designing housing units to be more physically accessible, and locating more of this housing near neighborhood hubs and frequent transit service.
- Link housing to transportation at the local level by including housing strategies as part of planning major transit investments.
- Continue to expand access to affordable transportation options, including sidewalks, frequent service transit, bicycle networks, car and bike sharing, and other alternatives that allow households to function without a car or with one car. Develop corridor-specific housing strategies as a component of major transit investments.
- Link neighborhood centers to each other, employment areas, the Central City and the broader region through a multi-modal transit system. Prioritize safe and attractive frequent transit service, bikeways and accessible pedestrian connections, including sidewalks.

2.4 Active Transportation

Active transportation refers to non-motorized transportation modes, such as bicycling and walking. The term "active transportation" refers to the fact that people are physically active. It is human-powered transportation that engages people in healthy physical activity. Walking, bicycling, the use of strollers, wheelchairs/mobility devices, skateboarding, and rollerblading are active transportation. Active transportation supports public transportation because most trips on public transportation include walking or bicycling. The combination of wide arterials with the lack of protected crossings, connectivity, and adequate sidewalk and bike facilities can create barriers for using active transportation in parts of the corridor, especially east of 82nd Avenue. Existing bike facilities are shown in Figure 2-15. The RTP defines mixed-use corridors and pedestrian oriented districts as shown in Figure 2-16.

2.4.1 Regional

2.4.1.1 Regional Active Transportation Plan

A regional initiative, the Active Transportation Plan (ATP) is focused on identifying and implementing projects that will make it easier and safer to walk, ride a bike or take public transportation. The plan identifies a vision, policies and actions to complete a seamless green network of on- and off-street pathways and districts connecting the region and integrating walking, biking and public transit. A draft ATP has been developed and is currently being refined with stakeholder input. A public review draft of the plan will be available March 21 for public comment. The ATP will provide new pedestrian and bicycle maps and update pedestrian and bicycle policies in the 2014 update of the Regional Transportation Plan (RTP). Updates to the the Regional Transportation Functional Plan (RTFP), the implementing plan of the RTP, will be considered in 2018.

The bicycle system includes bicycle lanes, low volume streets, bicycle boulevards, regional trails, and bicycle transit facilities. The different functional elements of the regional bicycle network are:

Regional Bicycle Parkways form the backbone of the regional bicycle network, providing for direct and efficient travel with minimal delays in different urban environments and to destinations outside the region.
Regional Bikeways provide for travel to and within the Central City, Regional Centers, and Town Centers.
Community Bikeways provide for travel to and within other 2040 Target Areas. These routes also provide access to regional attractions such as schools and parks and connect neighborhoods to the rest of the regional bicycle network.
Regional Trails are paved off-street facilities serving bicyclists and other non-motorized users. They typically serve as longer distance routes connecting neighborhoods to 2040 target areas, often providing access to parks, schools, and natural areas.
Bike-Transit Facilities provide connections between modes, i.e. large---scale bike parking facility at a transit station.

Two functional classes are applied to regional pedestrian routes in the Active Transportation Plan; this is the first time the regional pedestrian network has had functional classifications associated with routes. Pedestrian parkways are the highest functional classification for regional pedestrian routes. They mirror the regional transit network and are also key regional destinations themselves. Pedestrian parkways are major urban streets that provide frequent and almost frequent transit service (existing and planned) or regional trails. Regional pedestrian corridors are the second functional classification for regional pedestrian routes. Regional pedestrian corridors are all urban arterials and trails that are not parkways. Pedestrian parkways and regional pedestrian corridors connect to and through pedestrian districts.

2.4.1.2 Pedestrian Network Analysis

TriMet's Pedestrian Network Analysis project, completed in 2011, identified locations within the Portland region where pedestrian investments would provide better access to transit stops and have the strongest potential to improve pedestrian safety, both actual and perceived, and increase the number of people walking and using transit. Out of TriMet's 7000 bus stops, three of the ten of stop locations chosen as areas to address first are in the Powell-Division corridor:

- SE Division and 182nd
- SE Division and 122nd
- SE Powell and 82nd

According to the Pedestrian Network Analysis report, there are 2,136 people getting on or off a bus at SE Division and 182nd every week on average. Conditions observed near this intersection include:

- People walk along the south side of SE Division St. east of SE 190th Ave. on the grass where there are no sidewalks.
- Students going to Centennial Middle School and senior citizens cross the intersection, where crossings are long and curb cuts are not available on all corners, to access the bus stop at SE 182nd Ave. & SE Division St. Pedestrians must watch for motor vehicles making permitted right turns on red.
- People cross mid-block at unmarked intersections along Division St., particularly in the stretch between SE 174th Ave. and SE 182nd Ave.
- Many people wait for the bus without a place to sit at the westbound Line 4 Division bus stop located just east of SE 174th Ave.
- People step off the sidewalk into the roadway to find a clear pathway due to overgrown landscaping on the north side of SE Division St., east of SE 190th Ave.

According to the report, there are 8,925 people getting on or off a bus at SE Division and 122nd every week on average. Conditions observed near this intersection include:

- People walk in the roadway or on the shoulder of the road along SE Powell Blvd. where there are no sidewalks.
- People cross mid-block or at unprotected intersections along SE Division St. and SE 122nd Ave.
- People walk on curb tight sidewalks along SE Division St. where there is no landscaped buffer and the on-street parking, which is supposed to provide a buffer between pedestrians and traffic, is unused.

According to the report, there are 17,782 people getting on or off a bus at SE Powell and 82nd every week on average. Conditions observed near this intersection include:

- Motor vehicles were observed running red lights at this intersection, mostly on left turns.
- People walk along the side of the road on SE Powell Blvd, east of I-205, where the sidewalk ends.

- People cross outside of marked mid-block crossings. Motor vehicles did not stop for people trying to cross SE Powell Blvd. at mid-block crossings and Also, elderly residents cross SE Powell Blvd. at SE 84th Ave., near Kirkland Manor, to reach Westbound, Line 9 stop. There are no crosswalk or pedestrian facilities at this intersection.
- People walk on curb tight sidewalks along SE 82nd Ave., where there is no landscaped buffer between pedestrians and traffic.

Specific suggestions for where and what improvements would make walking and access to transit safer, easier and more comfortable are included for each of the areas studied. Suggest improvements include:

- shorten crossing distances
- make crosswalks more visible
- lengthen pedestrian phase of signal timing
- complete sidewalk networks
- improve sidewalks by widening and providing a buffer from traffic.

According to the Oregon Household Activity Survey (OHAS) conducted by Metro in 2011, active transportation is increasing in the region. An analysis of the data and comparison with a similar survey in 1994 by the city of Portland reports:

- In 1994 19 percent of trips by Portlanders were either walking (12 percent) transit (5.5 percent) or bicycling (1.6 percent).
- In 2011 28 percent of trips by Portlanders were either walking (15 percent) transit (7 percent) or bicycling (6 percent).
- There were approximately 162 million more annual trips taken by Portland residents in 2011 than in 1994, an increase of 24 percent
- 47 million of those additional trips were walking trips (29 percent), 36 million were bicycling trips (22 percent) and 20 million were transit trips (12 percent). Together, walking, bicycling and transit accounted for 64 percent of trips added since 1994
- Walking added the most new non-automotive trips, bicycling increased the most per capita
- Total annual motor vehicle mile traveled by Portland residents seems to have dropped from 2.35 billion in 1994 to 2.26 billion in 2011

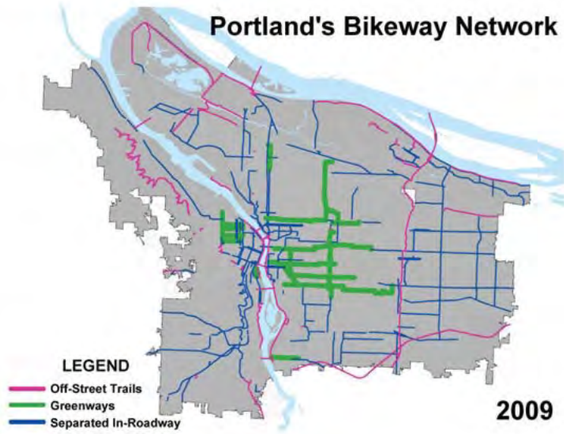
Regionally, the survey showed the percent of commuter bike use has more than quadrupled, increasing form 1 percent to 4.6 percent between 1994 and 2011. Bike use for all purposed has more than doubled from 1.1 percent to 2.8%.

2.4.2 Portland

Bicycling in Portland is growing dramatically. According to the Existing Conditions report prepared for the Portland in2007 and updated in 2009:

- Bicycle traffic across the four bicycle friendly Willamette River bridges has increased 321% since 1990
- In 2006, 14.5% of Portlanders reported that bicycling served as their primary or secondary commuting mode;
- Between 1990 and 2005 the US Census reported a 190% increase in bicycle commuting in Portland.

There is a direct correlation between the expansion of Portland's bicycle network and the growth in bicycle ridership that the city experienced between the early 1990s and 2009. Focused investments to build the city's bikeway network eliminated barriers to bicycling for many.



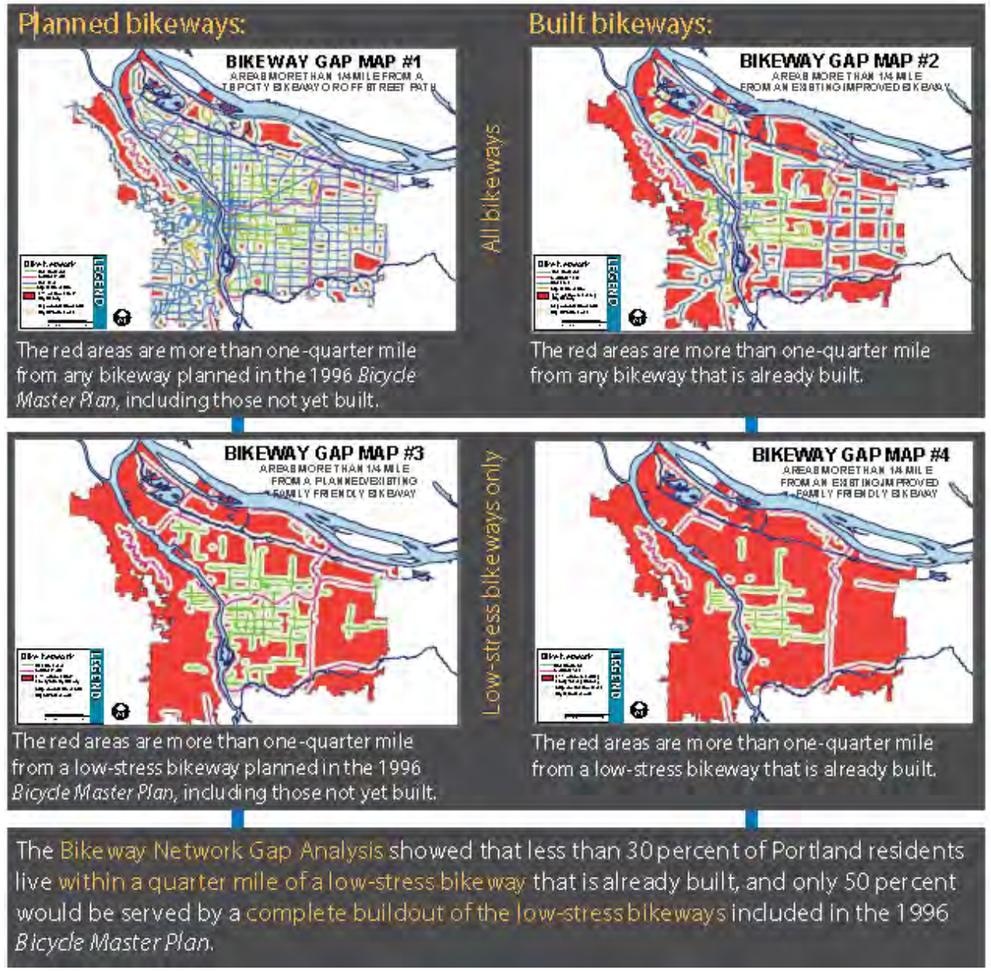
Planning for bicycle facilities in Portland is guided by the Portland Bicycle Plan for 2030. The plan provides a vision, policy recommendations, and a preferred bicycle network for the city. Planning for pedestrian facilities in Portland is guided by the Pedestrian Master Plan.

East Portland in Motion is a five-year implementation strategy for active transportation projects and programs east of 82nd Avenue in the City of Portland. Because the features that make active transportation attractive in other areas of Portland, like sidewalks, low-stress bikeways, and frequent transit, are not as prevalent east of 82nd Avenue it is not surprising that rates of walking, biking or taking transit to work or school are lower in East Portland than in the city as a whole. Still, many people who depend on active transportation choose to live in East Portland for its lower housing costs, and often must walk, bike or wait for the bus in substandard conditions.

Major findings from the East Portland In Motion Action Plan community involvement process included:

- **Importance of transit.** People want safer access to and from transit stops, including for both MAX and buses, particularly when crossing busy streets. For many people in East Portland who do not have access to a car, transit is more important than bicycling for daily travel.
- **Build multiple types of sidewalks in high demand areas.** Survey respondents support building a mix of sidewalk types, from wide sidewalks with room for landscaping, to more affordable curb-tight sidewalks. Sidewalk projects in densely populated neighborhoods like Powellhurst-Gilbert received particularly strong support.
- **Low-stress bikeways are most popular.** People gave highly favorable ratings to neighborhood greenways and paved trails, both of which minimize interactions with cars. Bicycle facilities that pose more potential conflict with cars, including advisory bike lanes and enhanced shared roadways, received the lowest ratings.

Figure 2-13. Portland planned and built bike facilities



East Portland in Motion prioritizes projects that have already been discussed, planned or scoped to some extent. Sources for East Portland in Motion projects include:

- Planning documents adopted by the City of Portland over the past several years, including
  - East Portland Action Plan
  - Portland Bicycle Plan for 2030
  - 122nd Avenue Complete and Green Main Street Project
  - City of Portland Transportation System Plan
  - Safe, Sound and Green Streets
- Neighborhood priorities stated by neighborhood associations and school districts
- Geographic analysis and field investigation that revealed additional gaps in East Portland's network of sidewalks, bikeways, trails and street crossings.

PBOT considered the following criteria to narrowing the list of hundreds of projects identified in the above sources into a manageable number of projects that can be feasibly implemented over the next five years:

- Community support
- Transportation equity
- Accessibility
- Connectivity
- Leverage

East Portland in Motion recommends over 80 active transportation projects or programs over the next five years. PBOT has secured funding at the city level to construct projects programmed in the first two years. Complete implementation will require future funding allocations and partnerships with other agencies. Recommendations include:

Sidewalk infill Portland is planning to construct over eight miles of sidewalk on arterial streets. This will include:

  - 5.7 miles of "curb-tight" sidewalk within existing rights-of-way on streets like SE Stark Street and SE 162nd Avenue.
  - 2.4 miles of separated sidewalk, including the SE 122nd "Complete and Green Main Street" project, and sidewalks along neighborhood collector streets like NE Prescott Street and SE 136th Avenue.
- **Crossing improvements**. PBOT plans to build over 50 crossing improvements to help people access transit stops and other destinations along busy streets. Some crossings will be built as part of sidewalk or neighborhood greenway projects. NE Halsey Street, SE Division Street, SE Stark Street, 122nd Avenue and other arterial streets will see improvements ranging from median refuge islands to full traffic signals.
- **Neighborhood greenways** are low-traffic, low-speed streets where priority is given to people biking and walking. They provide quieter alternatives to busier streets nearby and enhance the environment through tree plantings and landscaping. PBOT is planning nearly 30 miles of new neighborhood greenways in East Portland, starting with a north-south route along the 130s avenues and an east-west route along SE Market, Mill and Main streets.
- **Separated in-roadway bikeways** help people bike to destinations along busier streets. These facilities include regular and buffered bike lanes and cycle tracks. PBOT plans to stripe seven miles of new or enhanced bike lanes in East Portland, including portions of NE Prescott and SE Division streets.
- **Bicycle parking.** With the help of regional funding, PBOT will establish safe and secure "Bike & Rides" at three MAX stations, create higher quality bike parking at suburban-format shopping centers through a pilot "Bike & Shop" program, and provide bicycle parking in traditional business districts like Parkrose and Lents.

- **Education and encouragement programs.** East Portland in Motion recommends the continuation and expansion of several proven city programs that help people use active transportation. This includes:
  - expanding Safe Routes to School to 28 schools in five school districts;
  - administering safety programs on six High Crash Corridors; and
  - bringing the SmartTrips program back to East Portland.

Figure 1-14 and Table 2-11 show projects identified through the East Portland in Motion Plan.

Figure2-14. East Portland in Motion Projects

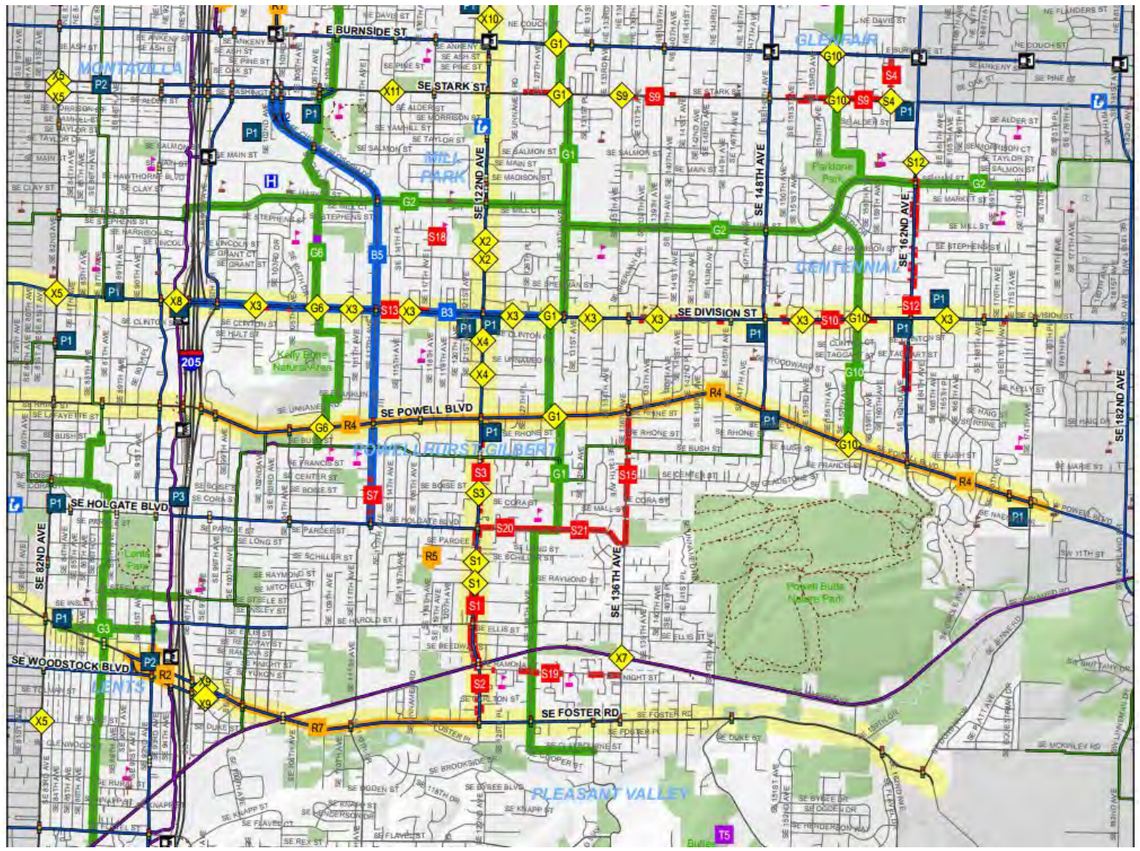


Table 2-11 East Portland in Motion Projects

SIDEWALK INFILL - TYPE 1 (existing curb & stormwater)

ID#	Project	Years	Potential Funding Sources	Length (mi)
S-1	SE 122nd Ave Complete and Green Main Street	2011-14	ODOT FF, Lents URA, HB 2001 EP	1.03
S-2	SE 122nd Ave Sidewalk Infill, Ramona - Foster	2012-13	HB 2001 EP, Lents URA	0.13
S-3	SE 122nd Ave Sidewalk Infill, Powell - Holgate	2012-13	HB 2001 EP, Lents URA	0.22
S-4	SE 160th Ave Sidewalk Infill: Burnside - Stark	2012-13	HB 2001 EP	0.11
S-5	NE Sandy Blvd Sidewalk Infill: 66th - 92nd	2012-13	HB 2001 CW	0.10
S-6	NE Wrindler St Sidewalk Infill: 99th - 112th	2012-13	HB 2001 EP, Gateway URA	0.18
S-7	SE 112th Ave Sidewalk Infill: Powell - Holgate	2012-13	HB 2001 EP, PPR	0.10
S-8	NE Glisan St Sidewalk Infill: 148th - 162nd	2012-14	HB 2001 EP	0.57
S-9	SE Stark St Sidewalk Infill: 126th - City Limit	2012-14	HB 2001 EP	0.57
S-10	SE Division St Sidewalk Infill: 148th - City Limit	2012-14	HB 2001 EP	0.51
S-11	NE 162nd Ave Sidewalk Infill: I-84 - Webster	2012-14	HB 2001 EP, Gateway URA	0.43
S-12	SE 162nd Ave Sidewalk Infill: Salmon - Powell	2012-14	HB 2001 EP	0.90
S-13	SE Division St Sidewalk Infill: 99th - 148th	2013-15	Metro RFF, HB 2001 EP	0.54
S-14	SE 148th Ave Sidewalk Infill: Halsey - Glisan	2014-15	HB 2001 EP	0.52
S-23	Unfunded Next Tier Sidewalk Projects - Type 1 (not mapped)	Ongoing	HB 2001 CW, other available funding	3.68
	TOTAL			6.25

SIDEWALK INFILL - TYPE 2 (curb & stormwater not present)

ID#	Project	Years	Potential Funding Sources	Length (mi)
S-15	SE 136th Ave Innovative Sidewalk Pilot Project	2012-14	HB 2001 EP, PPR, BES, PBOT ATF	0.52
S-16	NE Prescott St Innovative Sidewalk Infill: 105th - 116th	2012-14	HB 2001 EP	0.35
S-17	NE Fremont St Shared Pathway: 102nd - 112th	2012-14	PBOT ATF	0.49
S-18	SE 117th Ave Sidewalk: Mill Park ES	2012-14	ODOT SR2S	0.06
S-19	SE Ramona St Sidewalk Infill: 122nd - 136th	2012-14	ODOT TE	0.31
S-20	SE Holgate Blvd Shared Pathway: 122nd - 130th	2012-14	ODOT TE	0.34
S-21	SE Holgate Blvd Shared Pathway: 130th - 136th	2013-14	Metro RFF, HB 2001 EP	0.33
S-22	Unfunded Next Tier Sidewalk Projects - Type 2 (not mapped)	Ongoing	HB 2001 CW, other available funding	5.14
	TOTAL			2.49

CROSSING IMPROVEMENTS associated with sidewalk projects

ID#	Project	Years	Potential Funding Sources	Crossings
S-1	SE 122nd Ave at Schiller St, Raymond St	2012-14	ODOT FF, Lents URA, HB 2001 EP	2
S-3	SE 122nd Ave at Boise St	2012-13	HB 2001 EP, PBOT Ped Safety fund	1
S-4	SE Stark St at 160th Ave	2012-13	HB 2001 EP, PBOT Ped Safety fund	1
S-5	NE Sandy Blvd at 91st Ave	2012-13	HB 2001 CW, PBOT Ped Safety fund, HCC	1
S-6	NE Halsey/Weidler at 106th Ave	2012-13	HB 2001 EP, Ped Safety fund, Gateway URA	2
S-9	SE Stark St at 130th/130th Ave	2012-14	HB 2001 EP, PBOT Ped Safety fund	1
S-12	SE 162nd Ave at Salmon St	2012-14	HB 2001 EP, PBOT Ped Safety fund	1
	TOTAL			9

CROSSING IMPROVEMENTS associated with neighborhood greenways

ID#	Project	Years	Potential Funding Sources	Crossings
G-1	130s Greenway at Glisan, Burnside, Stark, Division, Powell	2012-14	Metro RFF, PBOT ATF	5
G-3	Knott/Russell Greenway at 102nd, 122nd, 148th	2013-14	PBOT ATF	3
G-6	100s Greenway Central at Division, Powell	2013-14	Metro RFF, ODOT, PBOT ATF	2
G-7	Pacific/Oregon/Holladay Greenway at 102nd, 122nd	2013-14	Metro RFF, PBOT ATF	2
G-8	Woodland Park Greenway at 102nd/Shell	2014-15	PBOT ATF	1
G-9	100s Greenway North at Glisan/108th	2014-16	PBOT ATF	1
G-10	130s Greenway at Halsey, Glisan, Burnside, Stark, Division, Powell	2015-16	PBOT ATF, Metro RFF, ODOT	6
	TOTAL			19

CROSSING IMPROVEMENTS funded by ODOT, Metro

ID#	Project	Years	Potential Funding Sources	Crossings
X-1	NE 102nd Ave at Skidmore St	2012-14	ODOT SR2S, PBOT Ped Safety fund	2
X-2	SE 122nd Ave at Stephens St, Lincoln St	2012-14	ODOT SR2S, PBOT Ped Safety fund	2
X-3	SE Division St: 101st - City Limit	2013-15	Metro RFF, PBOT Ped Safety fund	8
X-4	SE 122nd Ave at Clinton St, Tibbetts St	2013-15	Metro RFF, PBOT Ped Safety fund	2
X-5	82nd Avenue Safety Improvements	2015-16	ODOT	6
	TOTAL			19

CROSSING IMPROVEMENTS at multi-use trails

ID#	Project	Years	Potential Funding Sources	Crossings
X-6	NE Glisan St at I-205 Multi-Use Path	2012-13	PBOT, ODOT, Gateway URA	1
X-7	SE 136th Ave at Springwater Corridor	2013-15	PBOT, PPR	1
X-8	SE Division St at I-205 Multi-Use Path	2014-15	PBOT, ODOT, TriMet	1
	TOTAL			3

CROSSING IMPROVEMENTS - other

ID#	Project	Years	Potential Funding Sources	Crossings
X-9	SE Foster/Woodstock at 97th Ave	2012-13	PBOT Ped Safety fund, Lents URA	1
X-10	NE 122nd Ave at Davis St	2014-15	PBOT Ped Safety fund	1
X-11	SE Stark St at 113th Ave	2014-15	PBOT Ped Safety fund, Gateway URA	1
X-12	NE Halsey St at 114th Ave	2015-16	PBOT Ped Safety fund, Gateway URA	1
X-13	NE Halsey St at 136th PI / 137th Ave	2015-16	PBOT Ped Safety fund	1
X-14	Maintenance of Existing Pedestrian Signals (not mapped)	Ongoing	PBOT Signals Rehab & Reconstruction funds	
X-15	Unfunded Next Tier Crossing Improvements (not mapped)	Ongoing	PBOT Ped Safety fund, other available funding	
	TOTAL			5

HOOD GREENWAYS

Project	Years	Potential Funding Sources	Length (mi)
s Neighborhood Greenways	2012-14	Metro RFF, PBOT ATF	6.49
Neighborhood Greenway (Market/Mill/Millman/Main)	2012-13	PBOT ATF	4.37
Neighborhood Greenway: Southern Section	2012-13	PBOT ATF	3.07
krose Neighborhood Greenway	2012-14	PBOT ATF	1.65
dBlvd/Rose Neighborhood Greenway	2013-14	PBOT ATF	3.70
s Neighborhood Greenway: Central Section	2013-14	PBOT ATF	2.00
dbc/Oregon/Holladay Neighborhood Greenway	2014-16	Metro RFF, PBOT ATF	2.10
odland Park Neighborhood Greenway	2014-15	PBOT ATF	1.90
s Neighborhood Greenway: Northern Section	2014-16	PBOT ATF	2.23
s Neighborhood Greenway	2015-16	PBOT ATF	2.89
TAL			29.49

D IN-ROADWAY BIKEWAYS

Project	Years	Potential Funding Sources	Length (mi)
ide Safety Improvements at Intersections (not mapped)	2011-13	PBOT ATF	
Glisan Bike Lane Pilot Project: 148th - 162nd	2012-13	PBOT ATF	0.69
Division Buffered Bike Lane: Phase 1	2013-14	Metro RFF	1.80
Prescott Bike Lane: 61st - 122nd	2015-16	PBOT ATF	2.32
Cherry Blossom / 112th Bike Lane	2015-16	PBOT ATF	2.41
TAL			7.22

ARKING

Project	Years	Potential Funding Sources	Spaces
t Portland Bike & Shop Pilot Project	2011-13	PBOT Bike Parking fund, EECBG, GTR	96
Street Bicycle Parking for Traditional Business Districts	2011-13	PBOT Bike Parking fund	80
t Portland Bike & Rides	2014-15	Metro RFF	300
TAL			476

pport for projects led by other agencies)

Project	Years	Potential Funding Sources	Length (mi)
away Green Parkrose Access	2012-14	ODOT, PPR, PWB, PBOT	0.31
Trail	2013-15	PBOT, PWB, Port of Portland, Ikea	0.25
ss Levee Trail	2014-16	Metro, PPR, BES, Multnomah County, PBOT	0.77
vans Gulch Trail: 82nd - I-205 MUP	2015-16+	Metro, PPR, PBOT	0.78
ster Mountain Trail	2015-16+	Metro, PPR, PBOT	4.30
TAL			5.10

IMPROVEMENTS (support for projects led by other agencies)

Project	Years	Potential Funding Sources	Length (mi)
102nd Ave Streetscape: Phase 2	2011-13	Gateway URA	0.25
ter/Woodstock Streetscape & Ramona Green Street	2012-14	Lents URA, RFF	0.84
Sandy Blvd Safety Project: 122nd - 141st	2012-14	ODOT	0.92
er Powell Conceptual Design Plan Implementation	2015-16+	ODOT, PBOT, Metro, TriMet	4.09
al Improvement Districts (with PDC funding)	Ongoing	Property owners, Lents & Gateway URAs	
dral Gateway Street and Accessway Development	Ongoing	Gateway URA, private redevelopment	
ter-Lents Integrated Partnership: SE Foster Rd Elevation	Ongoing	Lents URA, regional & federal grants	1.22
TAL			7.31

S

Program	Years	Potential Funding Sources	Schools
s Routes to School: Parkrose SD	2011-16	PBOT SR2S	5
s Routes to School: PPS east of 82nd Avenue	2011-16	PBOT SR2S	5
s Routes to School: Reynolds SD	2011-16	PBOT SR2S	3
s Routes to School: David Douglas SD	2011-16	PBOT SR2S	12
s Routes to School: Centennial SD	2012-16	PBOT SR2S	3
nd Avenue High Crash Corridor Safety Project	2011-12	HCC non-capital funds	
ter Road High Crash Corridor Safety Project	2011-12	HCC non-capital funds	
son Street High Crash Corridor Safety Project	2012-13	HCC non-capital funds	
ine Drive High Crash Corridor Safety Project	2012-13	HCC non-capital funds	
dy Boulevard High Crash Corridor Safety Project	2013-14	HCC non-capital funds, ODOT	
ell Boulevard High Crash Corridor Safety Project	2013-14	HCC non-capital funds, ODOT	
art Trips: East Portland Active Transportation to Transit	2014-15	PBOT Transportation Options, Metro RFF	
t Portland Active Transportation Network Branding	2014-16	PBOT Transportation Options, Metro RFF	
TAL			28

2.4.3 Gresham

2.4.3.1 Bicycle facilities

Bicycle facilities in Gresham include regional and community bikeways on most of the arterials identified in the Regional Transportation Plan. The City of Gresham recently completed the Gresham Fairview Trail between Halsey and the Springwater Corridor at Linneman Junction. The 3.29 mile connection fills a critical north-south regional trail connection in the Plan Area. The trail is programmed to be completed between Halsey and Marine Drive.

The 3.29 mile Gresham Fairview Trail recently opened, including a 177 foot bridge over Powell Blvd.

Most of the arterials in the Plan Area include bicycle lanes. These include 181st, 223rd, Hogan and 257thAreas where gaps exist in the bicycle system include:

- 238th /Hogan north of Stark St.
- Kane Dr. south of Division St.
- The MAX trail between the Gresham Gresham Transit Center and Ruby Junction light rail stations.
- The Gresham Fairview Trail between Halsey St. and Marine Dr/40Mile Loop Trail
- Connections south of the Springwater Corridor through Pleasant Valley
- Connections along the Sandy River in Troutdale

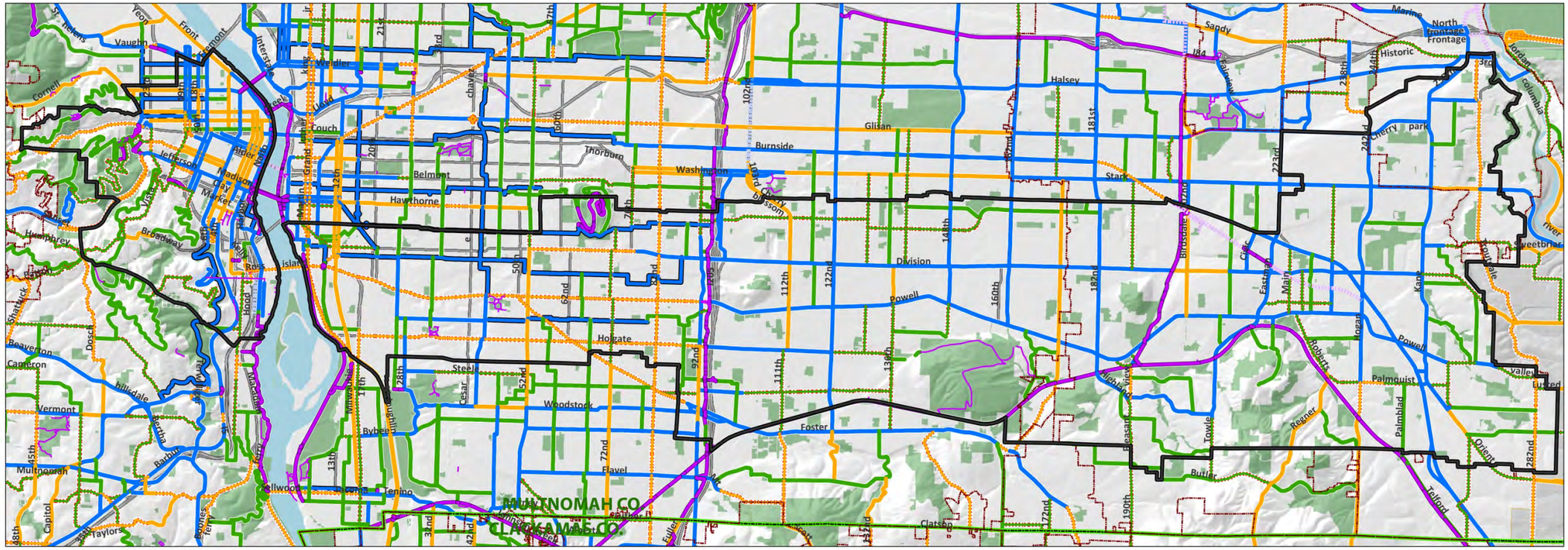
The majority of arterial streets within the study area are striped with six foot bike lanes. The exception is Division between the Gresham Fairview Trail crossing and Wallula Avenue. Gresham has grant funding to complete this missing link of bike facility by 2015.

The minor arterials and local streets are not currently striped with bike lanes. Main Avenue, through Gresham's downtown from Division Street to Powell Boulevard is striped with sharrows (similar to the design shown below) to indicate a bicycle route and connectivity between the Springwater Corridor Trail and Gresham's downtown.

TriMet provides a bike and ride facility at its Gresham Central Transit Center. The Park and Ride Garage facility is accessible via a keycard purchased through TriMet or bicycles may park within the garage for a nominal hourly fee. TriMet also has bike lockers for rent at the following MAX stations: Civic Drive, Gresham Central, Gresham City Hall and Cleveland Avenue.

Gresham has installed directional signage throughout Gresham to provide bicyclists information regarding key destination locations and approximate time to reach those destinations. The City has bicycle loop detectors at several of the signalized intersections along the study area corridors so that bicycles can trigger a signal without having to dismount.

Figure 2-15 Existing Bicycle Routes per the "Bike There" Map



2.4.3.2 Pedestrian conditions

The existing pedestrian system is primarily comprised of on-street facilities that provide for safe walking opportunities. Walking for short distances is an attractive option for most people when safe and convenient pedestrian facilities are available. The combination of well maintained and illuminated sidewalks of appropriate width, curb ramps, well marked and protected street crossings, and streetscape amenities that might include benches, landscaping and wide planting strips make walking an attractive, convenient and safe mode of travel.

On-street facilities might be supplemented with trails and separate sidewalk connections that provide direct and pleasant pedestrian connections.

The Regional Transportation Plan defines mixed-use corridors and pedestrian oriented districts, as shown in Figure 2-16. In the Plan Area, most corridors are included in the pedestrian system, including 181st, 223rd, 257th, Halsey St, Stark St, Burnside Rd, Division St and Powell Boulevard. In the Plan Area pedestrian districts are focused on the five centers: Troutdale, Wood Village, Fairview, Rockwood, Gresham Regional Center and Pleasant Valley.

Recent updates to the pedestrian system have included improvements at 223rd and Fairview Avenue, Halsey Street, and Stark Street near Mt Hood Community College. The City of Gresham is also improving pedestrian accessibility in Rockwood and downtown Gresham. The Rockwood in Motion plan includes future boulevard treatments to 181st and Burnside. Improvements to Hood Street and Cleveland Avenue in downtown Gresham in 2011-2012 will include streetscape improvements.

Gaps identified in the pedestrian system, which include:

- Division between Eastman and 182nd
- Halsey between 238th and the Columbia River Highway
- Foster Road through Pleasant Valley
- Local connections within the six centers.
- The MAX trail between the Gresham Gresham Transit Center and Ruby Junction light rail stations.
- Connections south of the Springwater Corridor through Pleasant Valley
- Connections along the Sandy River in Troutdale

Sidewalks and Pedestrian Crossings

Gresham is currently inventorying existing sidewalks for all streets within city limits. All arterial and collector streets have been inventoried and local streets are nearly complete. Approximately 78% of the length of arterials within the Gresham study area have sidewalks, totaling 17.1 miles of sidewalks. This mileage counts sidewalks on both sides of the streets and excludes driveway widths. A segment of Division that lacks sidewalk (Wallula St. to Gresham-Fairview Trail) is lacking sidewalk but that will be constructed within the 2014-2015 calendar years. Hogan Rd. between Burnside Rd. and Powell Blvd. also has a segment of missing sidewalk.

There are approximately 60 marked crosswalks along the study area corridors. The crosswalks occur primarily at the intersections of arterials with other arterials or collector streets. Gresham has also installed Rectangular Rapid Flashing Beacons (RRFB); two of which are on study area corridors. One RRFB is located on Division and the other is located on Eastman Pkwy at the MAX Blue Line crossing.

Figure2-16 Future Regional Pedestrian Network (Regional Transportation Plan)

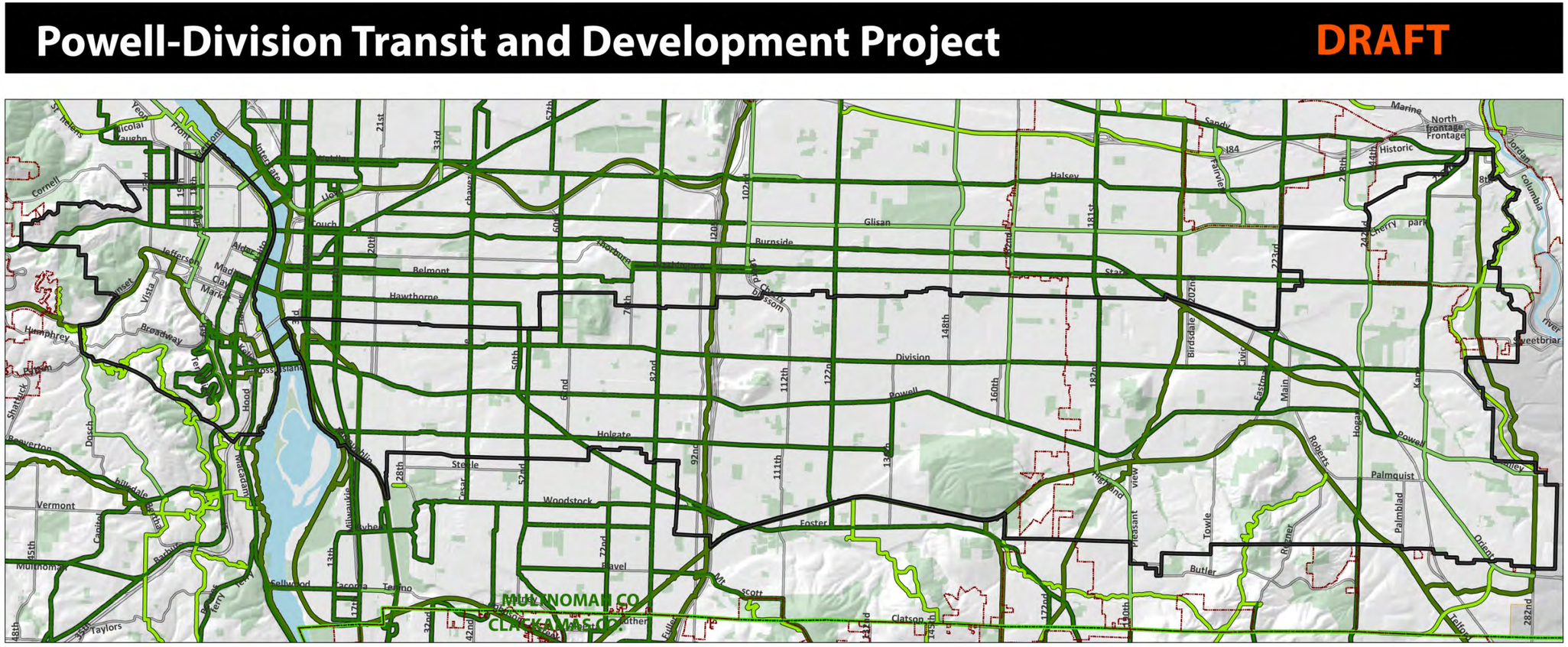
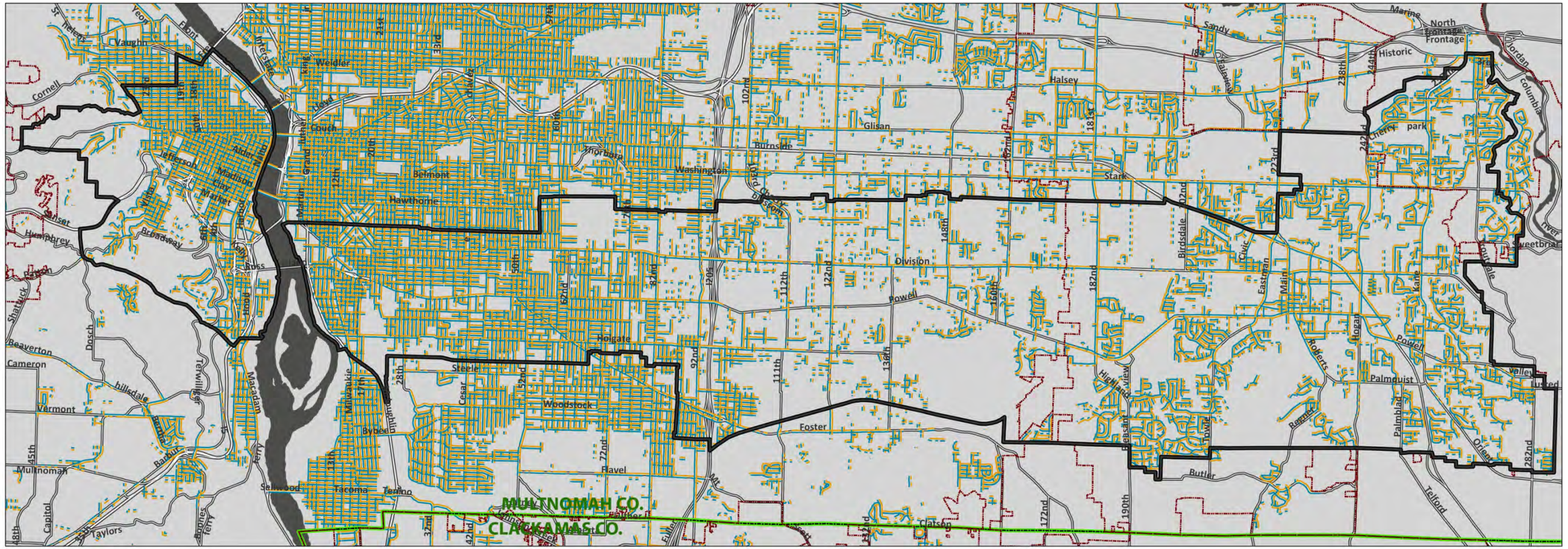


Figure 2-17 Existing Sidewalks



2.5 How do freight and goods move in the area?

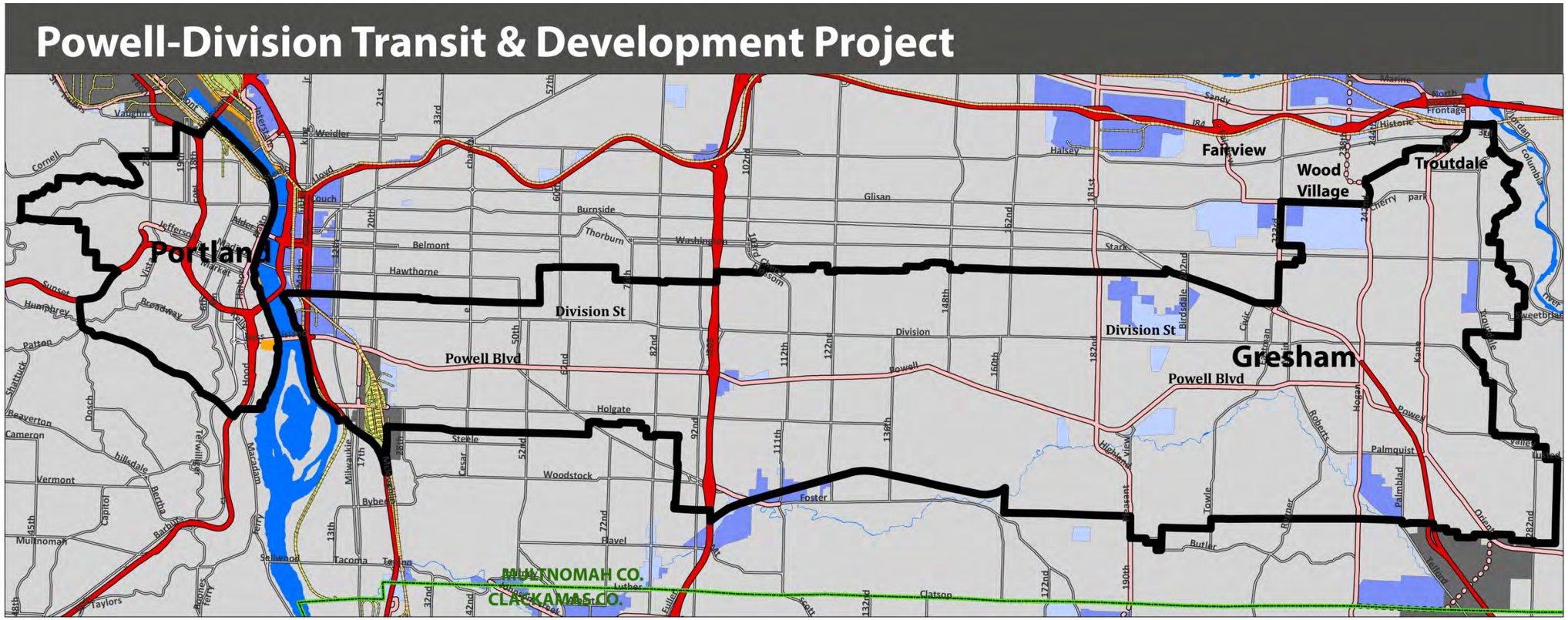
Reducing delay and increasingly reliability of the freight network is critical for the health our regional economy .The Freight impacts should be considered in all transportation planning, funding, policy, project development and implementation.

The regional freight network identifies the transportation networks and facilities that serve regional and state freight mobility needs. The freight system in the corridor includes roads and rail systems. The Central Eastside Industrial District is an industrial sanctuary and Regional Title 4 land that includes Interstate 5 and Brooklyn Yard. In the middle of the corridor, Interstate 205 is a primary north-south connection to Washington State and I-5. Powell Boulevard is part of the regional freight network and both Powell and Division are part of the federally designated National Highway System (NHS).

Figure 2-18 shows the regional freight network and land designated as employment, industrial, and significant industrial in the corridor.

This section will provide truck percentages to total trips per the model updates.

Figure 2-18 Freight Network



2.6 How is the system managed?

Transportation System Management and Operations (TSMO) is a set of integrated transportation solutions intended to improve the performance of existing and new transportation infrastructure. Through a combination of transportation system management (TSM) and transportation demand management (TDM) systems, services and projects, TSMO addresses transportation goals such as mobility, reliability, safety and accessibility, which have traditionally been achieved via larger scale, expensive infrastructure investments.

TSMO strategies, including adaptive signal timing and transportation management associations, have been implemented in some locations in the corridor, but there are additional opportunities. Portland and Gresham have currently done signal optimization for transit lines on Powell and Division. TSMO projects currently identified in Gresham are shown in Figure 20.

The Regional Transportation Plan identified system and demand management along the mobility corridor and parallel facilities for all modes of travel. TSMO also manages transportation from the demand side.

Examples of system management include:

- Multimodal Traffic Management
  - Traffic signal coordination
  - Transit signal priority treatment
  - Detection and countdown timers for bicycles and pedestrians
- Traffic Incident Management
  - Improve surveillance
  - Expand incident management teams and training
- Transportation Demand Management
  - Ridesharing
  - Collaborative marketing (e.g., Drive Less Save more campaign)
  - Individualized marketing (e.g. SmartTrips residential outreach)
  - Transportation Management Associations
  - Employer outreach
- Traveler Information
  - Real-time traveler information for freeways and arterials
  - Enhance traveler information tools, including trip planning for transit, bike and walk trips

Regional Transportation Plan System Management Vision:

1. Use advanced technologies, pricing strategies and other tools to actively manage the transportation system

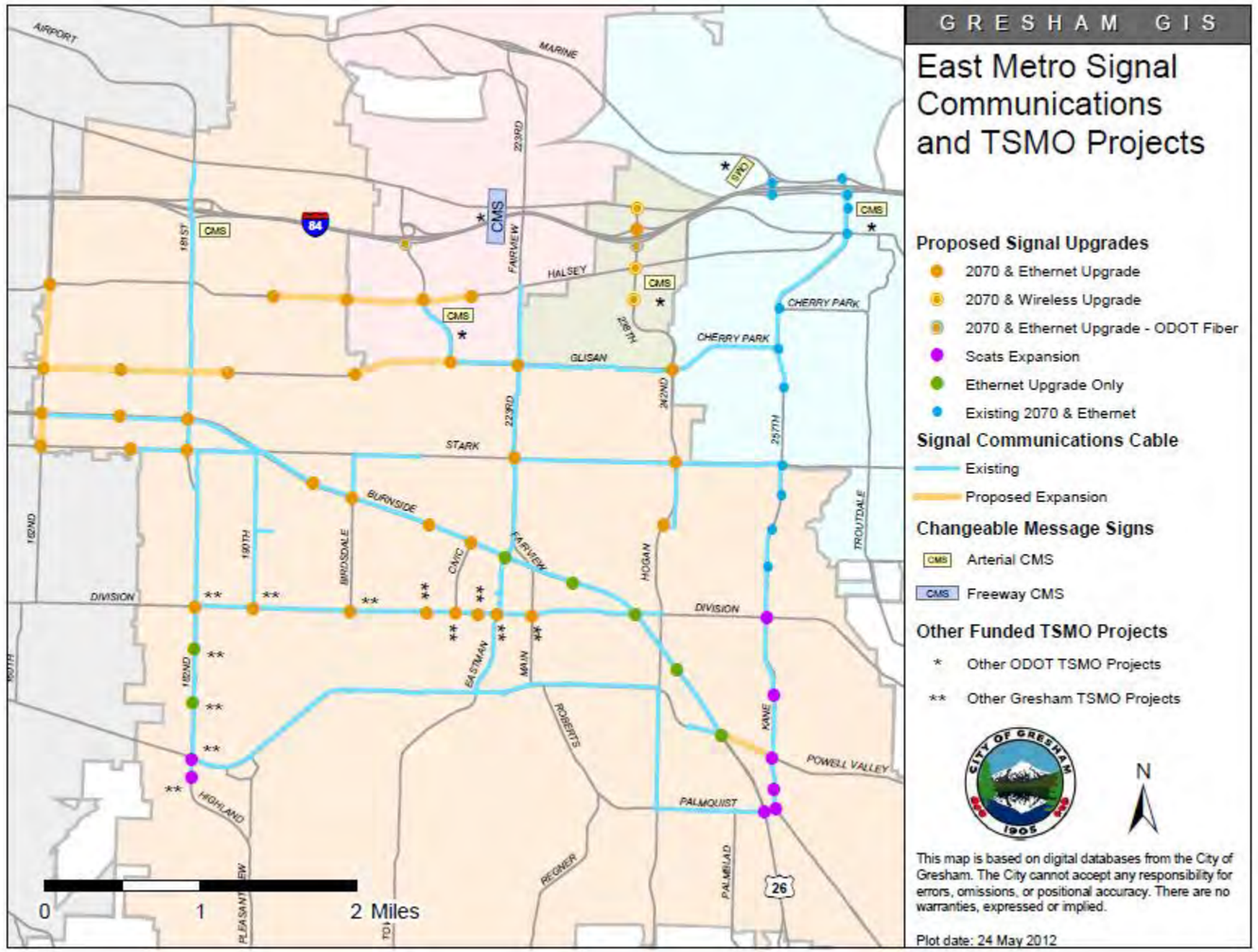
2. Provide comprehensive real-time traveler information to people and businesses

3. Improve incident detection and clearance times on the region's transit, arterial and throughway networks

4. Implement incentives and programs to increase awareness of travel options and incent change

Figure 19 ODOT's Trip Check

Figure 2-20 Identified TSMO in Gresham and East Multnomah County



2.7 What are safety considerations?

Traffic safety affects the corridor in several ways. Safety concerns prevent many from choosing to walk or bike. Crashes cause personal tragedy, lost productivity, rising insurance costs, congestion, and delay to the movement of people and goods. Efforts to improve transportation safety are a critical priority. Increasing awareness of safety issues is an important part of to improving safety. Traffic crashes are the leading cause of accidental deaths in the United States, and the leading cause of deaths of all kinds for ages 15-34.

2.7.1 ODOT Safety Improvement Program

The most comprehensive source of crash data is collected and maintained by Oregon Department of Transportation's (ODOT) Crash Analysis Unit. The data is distributed to local governments to conduct safety analysis. Figure 2-13?? shows the concentrations of crashes in the corridor based on ODOT crash data.

The Safety Priority Index System (SPIS) is a method developed by the ODOT for identifying potential safety problems on state highways. Powell Boulevard within the City of Portland and 82nd Avenue are state highways within the corridor. The purpose of the SPIS program is to identify and prioritize sites that merit further investigation for potential safety improvements. Each year the Portland regional office generates a list of the top 10% SPIS sites. The top 5% sites are investigated and evaluated. If a correctable problem is identified, a benefit/cost analysis is performed and appropriate projects are initiated, often with funding from the Highway Safety Improvement Program (HSIP). SPIS data for the state highways in the corridor are shown in Figure 2-??

2.7.2 Regional Safety Plan

The Regional Transportation Safety Plan (RTSP), completed in 2012, describes urban safety conditions in the region, provides policy context and recommends actions that can help reduce serious crashes. Responding to a Federal Highway Administration recommendation, Metro has been working with local governments, ODOT, TriMet, consultants and researchers since 2009 to study transportation safety from an urban perspective. The effort will help set priorities and eventually develop strategies to meet the 2035 Regional Transportation Plan's target of reducing fatalities and serious injuries by 50 percent.

The goal of the RTSP is to help the region reduce fatalities and serious injury crashes. The RTSP serves as a data-driven framework and specifically urban-focused safety plan to build upon ODOT's statewide success and reduce fatalities and serious injuries in the Portland metropolitan region. Metro, in coordination with the Regional Safety Workgroup analyzed crash data provided by ODOT and produced the first State of Safety in the Region report. This report provides the data foundation of the RTSP. Some of the key findings from the data are:

- Arterials have the highest serious crash rate for all modes.
- Alcohol and drugs are a primary contributing factors to fatal crashes.
- Speeding and aggressive driving are the leading contributing factors toward serious crashes.
- Serious pedestrian crashes are disproportionately represented after dark.
- Serious nighttime pedestrian and bicycle crashes occur disproportionately where street lighting is not present.
- Streets with more traffic lanes have particularly high serious pedestrian crash rates per mile and per VMT.

The Regional Transportation Plan includes a number of investments and actions aimed at further improving safety in the region, including:

- Investments targeted to address known safety deficiencies and high-crash locations
- Completing gaps in regional bicycle and pedestrian systems
- Retrofitting existing streets in downtowns and along main streets to include on-street parking, street trees, marked street crossings and other designs to encourage traffic to follow posted speed limits
- Intersection design improvements
- Intelligent Transportation System strategies, including signal timing and real-time traveler information on road conditions and hazards
- Expanding safety education, awareness and multi-modal data collection.

2.7.3 Portland High Crash Corridor

High Crash Corridors (HCCs) are extended areas of roadway that have exceptional concentrations of crashes. Powell and Division are both among the top ten HCC in the city of Portland. In addition, SE 82nd Avenue and SE 122nd Avenue are HCCs that intersect the corridor. HCC program objectives include traffic safety improvements and education to increase the number of people walking, biking or taking transit and reduce the number of pedestrians, bicyclists and motorists killed or injured in crashes. Specific recommendations include:

Enforcement

- Specific and targeted DUII missions
- Crosswalk enforcement actions
- Speed limit enforcement
- Automated red light cameras

Engineering

- Pedestrian median refuge islands
- Corner sidewalk curb ramps
- Sidewalk infill
- Curb extensions
- Relocate bus stops closer to improvements
- Vehicle speed study

Education

- Corridor-wide safety campaigns
- Pedestrian and driver safety training
- Safe Routes to School programs
- Letter writing campaigns

- Young driver improvement classes
- Share the Road safety classes

SE Division Street High Crash Corridor Safety

The HCC program completed the SE Division Street Safety Plan February 2013. The plan identified the following improvements that are not yet complete or funded:

- Marked crosswalks and median islands at or near 64th & 68th, design to-be-determined by planning process
- Curb ramps from SE Cesar Chavez Boulevard to SE 98th Avenue.
- Audible pedestrian signal enhancements as part of future signal upgrades.
- Safety improvements such as center median islands, pedestrian crossing improvements, and signal improvements 60th to 80th Avenues (ODOT, TriMet and PBOT have partnered to request funding for 2016/17).
- Develop access management plan or city policy related to access management.

SE Powell Boulevard

The SE Powell Boulevard High Crash Corridor study is currently underway. The program is addressing traffic safety inner SE Powell from SE 7th Ave to SE 92nd Ave. An existing Conditions report completed June 13, 2013 includes:

- key findings
- overview of crash data, including crash types and locations
- location of pedestrian and transit facilities
- other plans and projects

Key findings include:

- The average distance between improved pedestrian crossings is about four blocks (900 feet.)
- The percentage of pedestrian crashes on Powell Boulevard is about 50 percent higher than the city wide percentage. Seven pedestrian fatalities were reported in the past ten years of crash data.
- The incidence of rear-end crashes on Powell Blvd is about 50 percent higher than the citywide average. About 20 percent of these crashes were related to stopping for pedestrians.
- Inattentive driving, including fatigue, is overrepresented as a crash factor (about 4% of all crashes. Alcohol and drug related crashes account for over 2% of the crashes.

SE Powell Boulevard is serviced by Tri-Met Line #9, which travels along Powell from the Ross Island Bridge to the Gresham Transit Center. The highest boarding locations without enhanced pedestrian crossing improvements are shown in Table 2-8.

Table 2-12 Highest boarding locations without enhanced pedestrian crossing improvements

Powell intersection	Average daily ons/offs	Existing condition
SE 28th Avenue	527	existing island for westbound, eastbound stop is 270' from island
SE 34th Avenue	220	existing island
SE 36th Avenue	119	existing island
SE 55th Avenue (westbound only)	122	215' to island 54th Avenue
SE 67th Avenue	115	480' to signal at 65th Avenue
SE 79th Avenue	192	775' to signal at 82nd Avenue

SE 82nd Avenue High Crash Corridor Safety Plan(2008)

The 82nd Avenue of Roses High Crash Corridor Safety Plan was completed in January 2008. The HCC Safety Map (2012) is available at http://www.portlandoregon.gov/transportation/article/415737. It identifies improvement projects along 82nd Avenue that are complete, planned and funded, and unfunded. Planned and unfunded projects on SE 82 Avenue include:

- Larger bus shelters and parking removal at Division
- Powell Boulevard access management

122nd Avenue High Crash Corridor Safety Plan (2012)

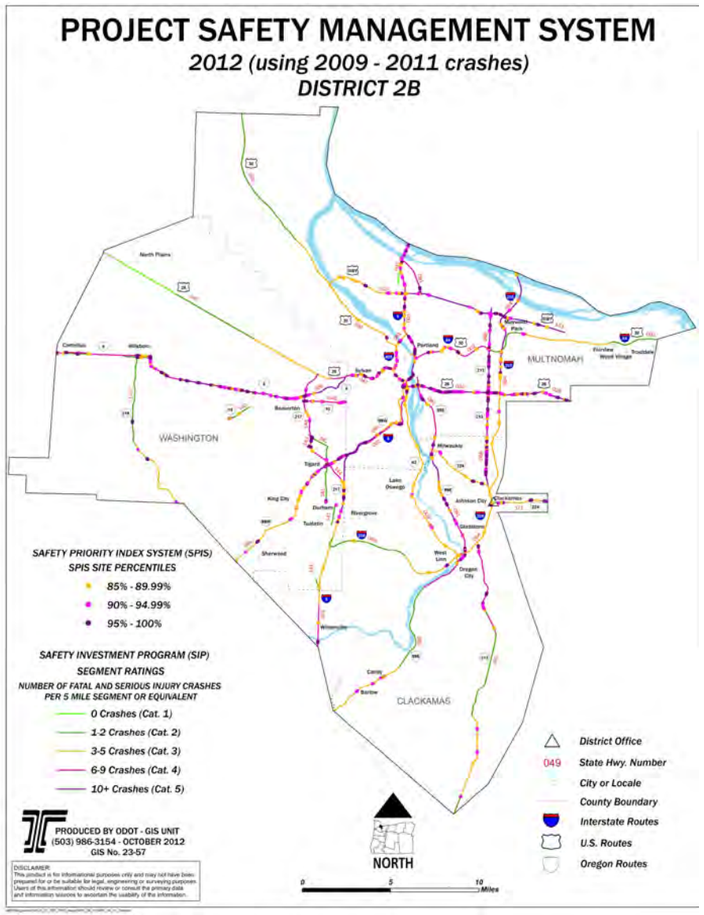
Ninety-five percent of pedestrian crashes on 122nd Avenue involve pedestrians crossing this roadway, with more than half occurring at signalized intersections. Findings for SE 122th include:

- Pedestrian safety at high-traffic signalized intersections (Division, Powell) is a concern for residents and business people
- There are few opportunities for safe pedestrian crossings between signalized intersections on SE 122nd.
- Overall, the lack of a connected street grid is a barrier to efficient, safe travel by walking.

Recommendations for SE 122th include:

- Pedestrian median islands at SE Lincoln,
- Pedestrian safety crossing improvements at SE Clinton, SE Tibbetts, SE Bush, SE Boise, SE Schiller, SE Raymond, and SE Carlton.
- Study and implement ways to further improve pedestrian crossing safety at Division and Powell.
- Conduct a streetscape study, develop a project for inclusion in the TSP and pursue funding.

Figure 2-21 ODOT SPIS

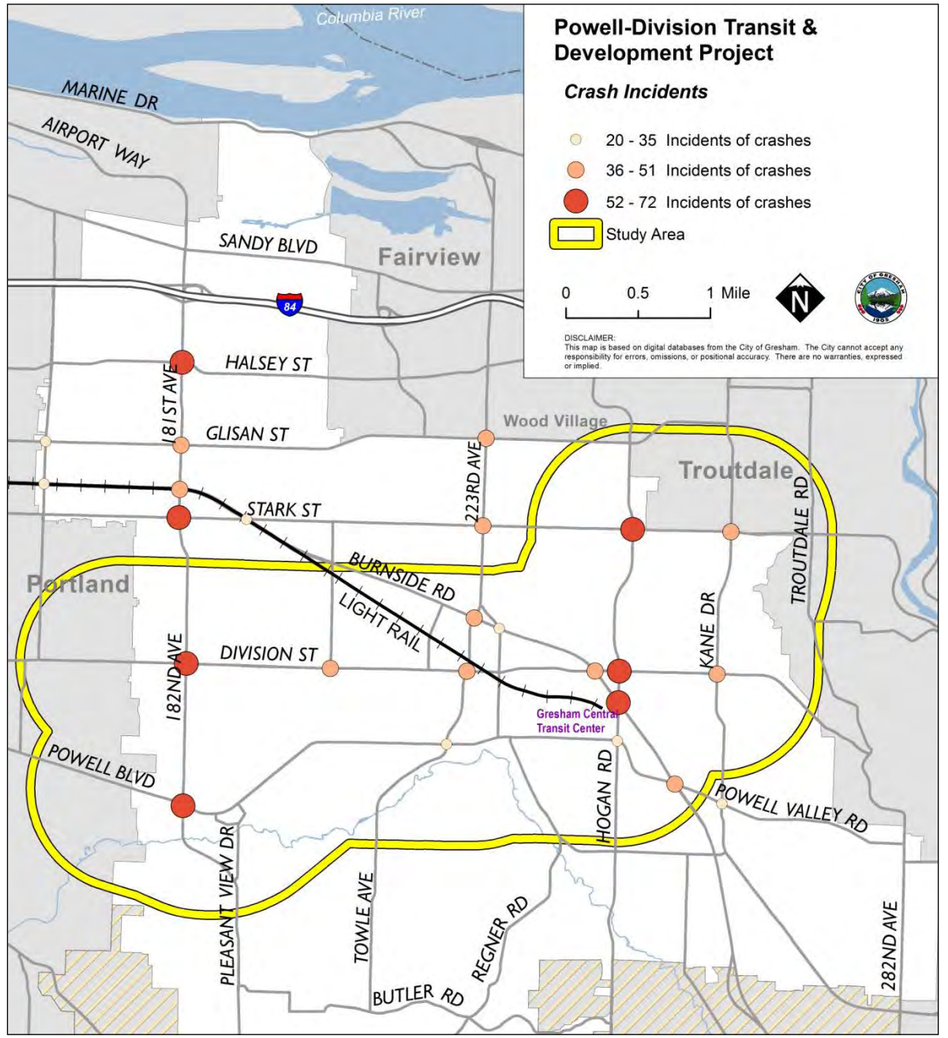


2.7.4 East Metro and Gresham safety focus areas

Along the arterial streets within the study area, safety is measured by identifying areas with high crash incidents. As shown in Figure 2.22, the city's seven highest incidents of crashes occur at the intersection of arterials. Within the study area, the following intersections have had the highest incident of crashes from 2010 through 2012:

- 181nd Avenue and Division
- 182nd Avenue and Powell
- Hogan and Stark
- Hogan and Division
- Hogan and Burnside.

Figure 2-22. Gresham crashes



Gresham has a list of projects in its Transportation System Plan to address congestion and safety issues at these intersections.

Figure 2-23 Crash Density Locations

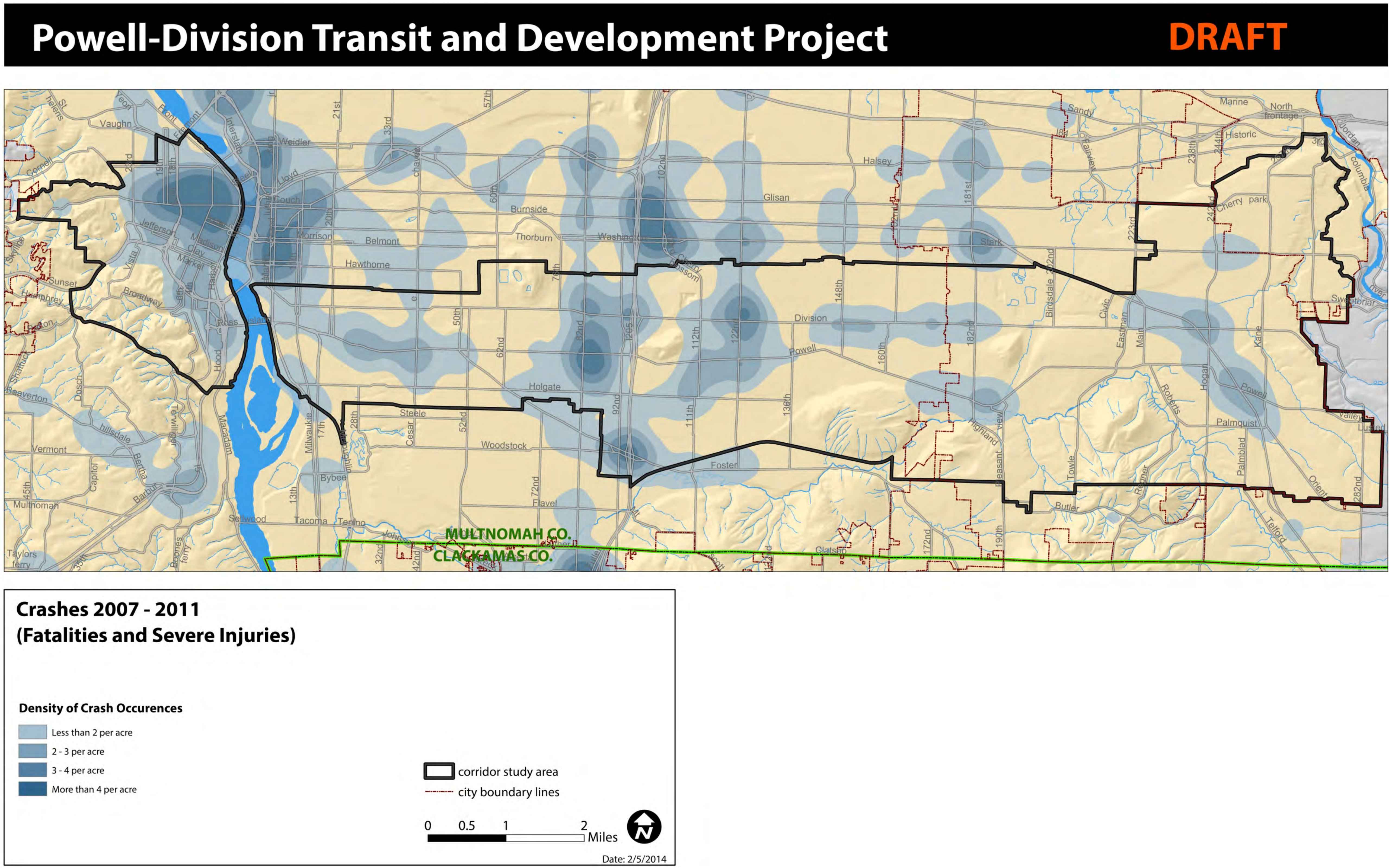
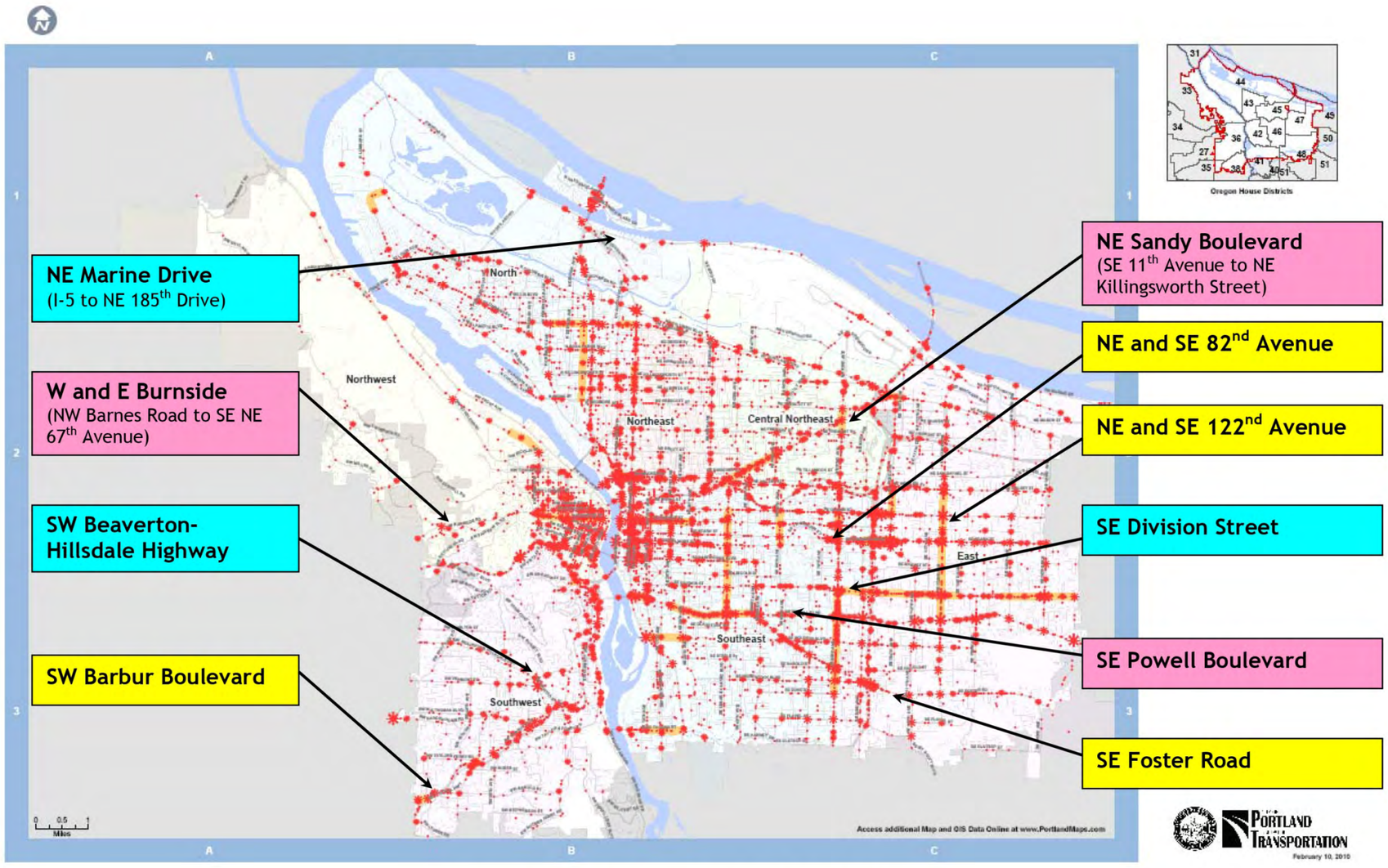


Figure 2-24 Portland High Crash Corridors



2.8 What investments have been proposed for the area?

This section describes transportation projects in the corridor identified in 2035 Regional Transportation Plan. The Regional Transportation Plan, completed in 2010, identifies the region's investment priorities for the transportation system. The RTP lists projects for the state transportation system as well as the federal financially constrained system. Figure 2-26 shows projects in the corridor and Table 2-9 starting on the following page lists the projects. The project ID in the table corresponds to the project number on the figure.

Figure 2-26 Identified Regional Transportation Plan projects in the corridor

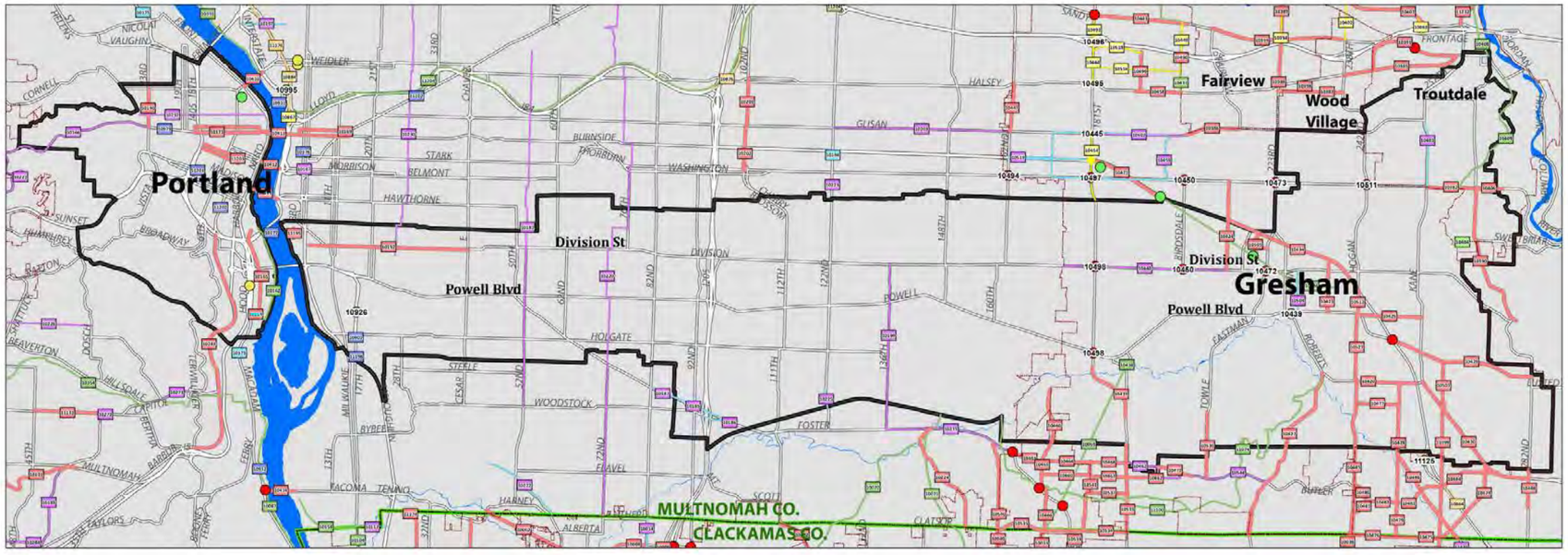


Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
10069	Gresham	Build trail linking Gresham and the Clackamas River.	$1,900,000	2008-2017	Regional Trail	Regional Trail
10070	North Clackamas PRD	Build trail to Mt. Talbert regional park.	$5,100,000	2008-2017	Regional Trail	Regional Trail
10071	North Clackamas PRD	Build trail to/on Scouter's Mt.	$9,070,000	2008-2017	Regional Trail	Regional Trail
10162	Portland	Provide two paths in order to separate bicyclists from pedestrians in remaining gaps (Marquam Bridge to SW Gibbs, SW Lowell to SW Lane, Benz Springs) of South Waterfront's Willamette Greenway trail.	$2,650,000	2008-2017	Regional Trail	Pedestrian /bike
10163	Portland	Construct a bike and pedestrian bridge of I-5 at SW Gibbs to connect the Corbett-Terwilliger-Lair Hill neighborhood to North Macadam.	$12,259,000	2008-2017	Roads/ Bridges	Pedestrian /bike
10165	Portland	Five lane street improvement from SW Sheridan to SW Gibbs Street. Convert SW Moody to two lanes southbound only. Extend SW Bond Ave. from SW Gibbs St. to River Parkway as two lanes northbound only.	$18,834,515	2008-2017	Roads/ Bridges	Pedestrian /bike
10167	Portland	Improve pedestrian and bicycle access to bridge approaches.	$4,100,000	2008-2017	Pedestrian	Bike
10169	Portland	Implements a one-way couplet design including new traffic signals, widened sidewalks, curb extensions, bike lanes on-street parking and street trees.	$17,852,000	2008-2017	Roads/ Bridges	Bike/ Pedestrian
10171	Portland	Implements a one-way couplet design including new traffic signals, widened sidewalks, curb extensions, bike lanes on-street parking and street trees.	$75,895,353	2008-2017	Roads/ Bridges	Bike/ Pedestrian
10176	Portland	Construct streetcar from NW	$121,335,00	2008-	Transit	

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
		Lovejoy/10th to SE Water	0	2017	capita	
10177	Portland	Construct streetcar from SE Water to SW Moody after alternatives analysis has been completed.	$19,000,000	2018-2025	Transit capita	
10192	Portland	The project will design and build streetscape and transportation improvements between SE 12th Ave and SE 39th Ave, complete base repair and pavement reconstruction between SE 6th Ave and SE 10th Ave, and grind and overlay asphalt in the area between SE 1	$5,848,135	2008-2017	Roads/ Bridges	Bike/ Pedestrian
10198	Portland	Install needed ITS infrastructure (communication network, new traffic controllers, CCTV cameras, and vehicle /pedestrian detectors). These ITS devices allow us to provide more efficient and safe operation of our traffic signal system.	$515,703	2018-2025	ITS	
10201	Portland	Implement Gateway Regional Center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting, bicycle lanes, and multi-modal safety improvements.	$3,234,000	2008-2017	Roads/ Bridges	Bike/ Pedestrian
10202	Portland	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting and new bicycle facilities.	$4,500,000	2008-2017	Roads/ Bridges	Bike/ Pedestrian
10203	Portland	Infill missing sidewalk, add curb ramps at corner, add 3 median island crossings, and add a	$3,100,241	2018-2025	Bike	Pedestrian

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
		signal.				
10215	Portland	Widen street to three lanes to provide two travel lanes, continuous turn lane, bike lanes, sidewalk, and drainage.	$16,963,856	2008-2017	Bike	Pedestrian
10223	Portland	Provide an at-grade improved pedestrian crossing on SE 122nd Ave..	$1,993,000	2026-2035	Pedestrian	Bike
10224	Portland	Widen existing 20' of pavement to new 34? roadway with travel lanes, bike lanes, curb and sidewalk.	$20,191,557	2026-2035	Roads/ Bridges	Bike/ Pedestrian
10230	Portland	Design & implement bikeway along SE 29th,30th/NE 26th/28th / NE Oregon, Wasco, from SE Clinton to NE Lombard using bike blvds. & bike lanes.	$1,837,573	2026-2035	Bike	
10232	Portland	Add bike boulevard from NW 24th Ave to the Steel Bridge, new Bike/ Pedestrian bridge over I-405 on Flanders, connections to bikeways on Vista, 18th, 14th, 13th, Broadway, 3rd, 2nd, Glisan and Everett.	$2,392,337	2008-2017	Bike	Pedestrian
10283	Portland	Construct Improvements for transit, bikes and pedestrians. Transit improvements include preferential signals, pullouts, shelters, left turn lanes and sidewalks.	$6,594,100	2018-2025	Roads/ Bridges	Bike/ Pedestrian
10382	Multnomah Co.	Reconstruct Stark St. to minor arterial standards by widening the existing 2 lanes to provide for 4 traffic lanes, a continuous left-turn lane, bike lanes, sidewalks, and intersection improvements.	$3,150,000	2008-2017	Roads/ Bridges	Bike
10385	Multnomah Co.	Widen Halsey St to 3 lane minor arterial with center turn lane/median, sidewalk and bicycle lanes, consistent with Halsey Street Conceptual Design Plan				
10387	Multnomah Co.	Construct to 3 lane collector standards with center turn lane/median, sidewalks, bicycle lanes.	$2,300,000	2008-2017	Roads/ Bridges	Bike
10388	Multnomah Co.	Reconstruct 223rd Ave to major collector standards with 2 travel lanes, center turn lane/median, sidewalks and bicycle lanes. Requires reconstruction of RR bridge under another project.	$1,400,000	2008-2017	Roads/ Bridges	Bike
10391	Multnomah Co.	Reconstruct Historic Columbia River Hwy and NE 244th Ave to minor arterial standards with 2 travel lanes, center turn lane/median, bicycle lanes and sidewalk. Reconstruction of railroad bridge on HCRH is not included in this project.	$6,151,000	2026-2035	Roads/ Bridges	Bike
10398	Multnomah Co.	Construct new extension of Wood Village Blvd as a major collector with 2 travel lanes, center turn lane/median, sidewalks and bicycle lanes.	$1,573,000	2008-2017	Roads/ Bridges	Bike
10403	Multnomah Co.	Improve sidewalks, crossings, lighting and bus stops.	$1,600,000	2008-2017	Pedestrian	Bike
10404	Multnomah Co.	Replace culverts with fish friendly structures allowing for passage to federally endangered species	$6,000,000	2008-2017	Other	
10406	Multnomah Co.	Reconstruct road to arterial standards with 1 travel lanes in each direction, center turn lane/median, sidewalks and bicycle lanes.	$1,810,000	2018-2025	Roads/ Bridges	Pedestrian
10409	Multnomah Co.	Constructs new trail adjacent to Beaver Creek.	$1,400,000	2018-2025	Regional Trail	Regional Trail
10411	Multnomah Co.	Rehabilitate mechanical system, approach structure, corrosion	$25,000,000	2008-2017	Roads/ Bridges	

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
		control, phase 1seismic. Phase 1.				
10413	Multnomah Co.	Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	$13,300,000	2008-2017	Roads/ Bridges	
10420	Gresham	Improves to five lane collector standards, intersection improvements.	$7,784,844	2018-2025	Roads/ Bridges	Pedestrian
10421	Gresham	Complete boulevard improvements.	$7,873,990	2008-2017	Roads/ Bridges	Freight
10423	Gresham	Reconstructs street from Burnside to Powell.	$1,100,000	2008-2017	Roads/ Bridges	Pedestrian
10424	Gresham	Widen road, add curb/gutter, sidewalks. At Burnside, add northbound, southbound, left turn lanes. Signalize Stark.	$8,347,988	2018-2025	Roads/ Bridges	Pedestrian
10425	Gresham	Brings to standards, adds pedestrian, bicycle facilities.	$4,466,312	2018-2025	Roads/ Bridges	Pedestrian
10427	Gresham	Brings to standards, adds pedestrian, bicycle facilities, improves Regner/Butler intersection by adding NB left-turn pocket and signalizing intersection.	$29,265,570	2018-2025	Roads/ Bridges	Pedestrian
10429	Gresham	Improve Powell Valley w. ped and bike facilities.	$14,645,408	2018-2025	Roads/ Bridges	Pedestrian
10430	Gresham	Upgrades to arterial 4 lane standards.	$9,000,000	2018-2025	Roads/ Bridges	Pedestrian
10431	Gresham	Reconstruct and widen street to five lanes with sidewalks and bike lanes. Widen and determine the appropriate cross-section for Highland Drive and Pleasant View Drive from Powell Boulevard to 190th Ave..	$19,646,521	2008-2017	Roads/ Bridges	Pedestrian
10434	Gresham	Complete boulevard design improvements Wallula to Hogan (2004 RTP 2048), also improve intersection of Burnside at Division (2002 TSP #15) by adding eastbound RT and signal,	$32,545,601	2008-2017	Roads/ Bridges	Pedestrian

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
		and also improve the intersection of Burnside and Hogan (2004 RTP #2032).				
10438	Gresham	Provide ped, bike and equestrian access to regional trail.	$271,562	2018-2025	Regional Trail	Pedestrian
10440	Gresham	Retrofit street to add bicylce facilities, sidewalks, and explore other multimodal facilities and connections.	$4,939,693	2008-2017	Bike	Pedestrian
10444	Gresham	Widens street to three lanes southbound.	$1,797,270	2008-2017	Freight	Roads/ Bridges
10447	Gresham	Reconstruct, widen to 5 lanes, plus EB RT at Glisan.	$7,915,303	2018-2025	Roads/ Bridges	Pedestrian
10454	Gresham	Complete boulevard design improvements.	$11,440,061	2008-2017	Freight	Roads/ Bridges
10458	Gresham	Widen to 4 lanes w. sidewalks and bikelanes.	$4,430,961	2008-2017	Roads/ Bridges	Bike
10459	Gresham	Improve sidewalks, lighting, crossings, bus shelters, benches.	$1,192,669	2018-2025	Pedestrian	Bike
10460	Gresham	Construction of new roadway that adds n/s capacity in vicinity of 174/Jenne. This facility will have two travel lanes in each direction (total 4 travel lanes), and a median/turn lane which will be primarily a median, with left turn pockets at the interse	$27,498,638	2008-2017	Roads/ Bridges	Pedestrian
10462	Gresham	Improve Butler Rd. in new alignment to collector standards, at intersection, add northbound and westbound turn pockets and signalize.	$13,166,455	2008-2017	Bike	Pedestrian
10463	Gresham	New north extension of Foster.	$15,417,627	2008-2017	Roads/ Bridges	Pedestrian
10464	Gresham	New ext. of Giese Rd. to Foster Road.	$17,987,232	2018-2025	Roads/ Bridges	Pedestrian
10465	Gresham	Upgrade street to urban standards w. sidewalks, bikelanes.	$11,520,364	2018-2025	Roads/ Bridges	Pedestrian
10466	Gresham	Upgrade street to urban	$7,112,978	2018-	Roads/	Pedestrian

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
		standards w. sidewalks, bikelanes, and add roundabout or traffic signal at 172nd/Foster.		2025	Bridges	
10468	Gresham	Upgrade street to urban standards w. sidewalks, bikelanes.	$5,430,469	2018-2025	Roads/ Bridges	Pedestrian
10471	Gresham	Construct new Butler road extension and bridge crossing.	$12,268,899	2008-2017	Roads/ Bridges	Pedestrian
10474	Gresham	Construction of new roadway that adds e/w capacity in vicinity Rugg Rd and connects Springwater Industrial area to Highway 26.	$30,672,208	2008-2017	Roads/ Bridges	Pedestrian
10475	Gresham	Construction of new roadway that adds e/w capacity in vicinity Rugg Rd and connects Springwater Industrial area to Highway 26.	$39,329,973	2008-2017	Roads/ Bridges	Pedestrian
10477	Gresham	Construction of new street for implementation of Springwater Plan.	$13,148,679	2008-2017	Roads/ Bridges	Pedestrian
10478	Gresham	Construction of new street for implementation of Springwater Plan.	$26,162,462	2008-2017	Roads/ Bridges	Pedestrian
10479	Gresham	Construction of new street for implementation of Springwater Plan.	$9,808,690	2008-2017	Roads/ Bridges	Pedestrian
10480	Gresham	Construction of new street for implementation of Springwater Plan.	$8,008,421	2008-2017	Roads/ Bridges	Pedestrian
10481	Gresham	Construction of new street for implementation of Springwater Plan.	$5,519,551	2008-2017	Roads/ Bridges	Pedestrian
10482	Gresham	Construction of new street for implementation of Springwater Plan.	$8,008,421	2008-2017	Roads/ Bridges	Pedestrian
10483	Gresham	Construction of new street for implementation of Springwater Plan.	$12,202,421	2008-2017	Roads/ Bridges	Pedestrian
10484	Gresham	Construction of new street for implementation of Springwater	$21,031,280	2008-2017	Roads/ Bridges	Pedestrian

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
		Plan.				
10485	Gresham	Improvement of existing roadway to arterial 4 lane standards.	$47,291,190	2008-2017	Roads/ Bridges	Freight
10486	Gresham	Improvement of existing roadway to collector standards, add bike and ped facilities, intersection improvements.	$29,419,888	2008-2017	Roads/ Bridges	Pedestrian
10488	Gresham	Improvement of existing roadway to collector standards, add bike and ped facilities, intersection improvements.	$7,146,436	2008-2017	Roads/ Bridges	Pedestrian
10499	Gresham	Improve to collector street standards.	$3,833,031	2008-2017	Roads/ Bridges	Freight
10501	Gresham	Widen road and add improvements.	$7,135,229	2018-2025	Roads/ Bridges	Pedestrian
10504	Gresham	Improve ped access/multi-modal on Hood St.	$986,467	2008-2017	Pedestrian	Bike
10505	Gresham	Support construction of street infrastructure improvements.	$4,765,219	2008-2017	Roads/ Bridges	Pedestrian
10507	Gresham	Retrofit bikelanes.	$52,425	2008-2017	Bike	Pedestrian
10512	Gresham	Improve to boulevard standards, and intersection improvements at Burnside, Division and Powell.	$8,739,328	2018-2025	Roads/ Bridges	Pedestrian
10516	Gresham	Complete collector and remove frontage road.	$9,990,952	2008-2017	Freight	Roads/ Bridges
10519	Gresham	Pedestrian enhancements.	$75,492	2008-2017	Pedestrian	Pedestrian
10527	Gresham	Improve to arterial standards.	$8,444,619	2018-2025	Roads/ Bridges	Pedestrian
10530	Gresham	Improve to collector standards. Add roundabout at Towle/Binford.	$11,897,840	2018-2025	Roads/ Bridges	Pedestrian
10533	Gresham	Improve existing road to major arterial standards, signalize 190th @ Giese, Butler, Richey, Cheldelin.	$28,644,245	2008-2017	Roads/ Bridges	Pedestrian
10535	Gresham	Extend Clatsop into Pleasant Valley, and construct bridge.	$20,163,595	2008-2017	Roads/ Bridges	Pedestrian
10537	Gresham	Improve to collector standards,	$7,925,735	2008-	Roads/	Pedestrian

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
		and signalize 190th/Richey.		2017	Bridges	
10540	Gresham	Improve 162nd to collector standards, add signal at Foster @ 162nd.	$21,236,546	2008-2017	Roads/ Bridges	Pedestrian
10541	Gresham	Improve 182nd to collector standards.	$11,797,690	2008-2017	Roads/ Bridges	Pedestrian
10544	Gresham	Construct bikelanes and sidewalks.	$5,705,413	2018-2025	Bike	Pedestrian
10860	Gresham	Build new road to green street collector standards.	$10,703,002	2008-2017	Roads/ Bridges	Pedestrian
10861	Gresham	Build new road to green street collector standards.	$10,368,393	2008-2017	Roads/ Bridges	Pedestrian
10862	Gresham	Build new road to green street community standards.	$9,991,393	2008-2017	Roads/ Bridges	Pedestrian
10864	ODOT	New interchange on US 26 to serve industrial area.	$29,500,000	2018-2025	Throughways	Roads/ Bridges
10867	ODOT	Conduct planning, preliminary engineering and environmental work to improve safety and operations on I-5, connection between I-84 and I-5, and access to the Lloyd District and Rose Quarter.	$30,000,000	2008-2017	Freight	Throughways
10884	ODOT	Acquire right-of-way to improve safety and operations on I-5, connection between I-84 and I-5, and access to the Lloyd District and Rose Quarter.	$20,000,000	2018-2025	Throughways	Throughways
10901	TriMet	Portland, N Macadam, OMSI, Brooklyn, Milwaukie, (Park Ave.).	$1,148,000,000	2008-2017	Transit capita	Pedestrian
10912	TriMet	Portland to Lake Oswego extension of Portland Streetcar.	$221,700,000	2008-2017	Transit capita	Pedestrian
10979	Portland	Construct streetcar from NW 23rd Avenue to E 14th Avenue after an alternatives analysis study is completed.	$118,500,000	2008-2017	Transit capita	Pedestrian
11074	Gresham	Construct new shared use trail (12' wide pervious asphalt)	$8,300,000	2008-2017	Regional Trail	Bike
11099	Gresham	Widen road and add improvements.	$7,135,229	2018-2025	Roads/ Bridges	Pedestrian

Table 2-13 Federally fiscally constrained Regional Transportation Plan Projects in the corridor

ID	Nominating Agency	Project Purpose	Cost Estimate	Time Period	Primary Mode	Secondary Mode
11100	Gresham	Construct new shared use trail (12' wide pervious asphalt)	$2,800,000	2008-2017	Regional Trail	Bike
11102	Portland	Extend streetcar from E 14th Avenue to the Hollywood District after an alternatives analysis study is completed.	$70,000,000	2008-2017	Transit capita	Pedestrian
11176	ODOT	Construct improvements to enhance safety and operations on I-5, connection between I-84 and I-5, and access to the Lloyd District and Rose Quarter.	$85,704,966	2008-2017	Throughways	
11195	Portland	Realign temporary Water Avenue to permanent alignment to facilitate freight traffic, streetcar, bicycle, pedestrian and light rail improvements in the Central Eastside Industrial District	$9,000,000	2008-2017	Roads/ Bridges	
11198	Portland	This project includes the following elements: Pathway extension of SW Moody to Montgomery Avenue, two-way cycle track on SW Moody between Gibbs Street and Marquam Bridge, bicycle-pedestrian path between SE 11th & Clinton and SE Division Place & 9th follo	$34,000,000	2008-2017	Transit capita	
11201	Portland	Concrete Bus Pads on SW Columbia and SW Jefferson	$325,000		Transit capita	
11202	Portland	Base repair and paving on areas of 3rd and 4th damaged by bus loads. Preservation of arterial, transit, bicycle.	$325,000		Transit capita	
11203	Portland	Replacement of brick intersections on SW Yamhill & SW Morrison	$1,000,000		Roads/ Bridges	