

ATLAS OF CURRENT CONDITIONS FOR WALKING AND BICYCLING

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Made possible with funding from the Centers for Disease Control and Prevention.

OVERVIEW

The following report is an atlas of the current conditions related to walking and biking throughout the City of Gresham. Population, safety, health indicators, equity considerations, and existing infrastructure were analyzed to create the following set of maps that, together, show a snapshot of the existing conditions in Gresham's bicycle and walking networks and the community using them.

HOW TO USE THIS ATLAS

The "Atlas of Current Conditions for Walking and Bicycling" is meant to serve as a resource for the City of Gresham. It contains an inventory of elements that are essential to walking and biking, as well as to understanding the community the networks serve. The data is presented in a set of maps and descriptive narrative.

DATA SOURCES

The data on current biking and walking conditions and safety is from the City of Gresham.

Demographic data used in this report is from the American Community Survey's 5-year estimates for 2009-2013 and was collected at the census block group level. The American Community Survey (ACS) is an ongoing survey that provides vital information on a yearly basis about the United States and its communities.

The health outcome, access to family wage jobs, and access to child care data is from the Coalition for a Livable Future's Regional Equity Atlas.

NOTES ON THE DATA

This report pulls from available data sources. The geography, year collected and other aspects of the data vary depending on what was available.

There are other areas of inquiry that could help tell a more complete story that were not available but could be included in future work if data availability or collection methods advance.

Other desired data identified while applying a racial equity lens to the project included police stops (by age, race and reason for stop); off-site after-school support and programming; and gang-related activity.

THE CURRENT HEALTH & ECONOMIC STATUS OF THE COMMUNITY

ACTIVE TRANSPORTATION PLAN

Active transportation is any human-powered mode of transportation, such as walking or bicycling. Active transportation supports transit.

The City of Gresham, which is located at the east end of the Portland metropolitan area, is working on an Active Transportation Plan as a follow-up to its recently adopted Transportation System Plan. The project was initiated because Gresham residents wanted more detailed work done regarding active transportation.

A quality active transportation system allows people to get around more easily using active transportation, which increases transportation choices, improves access to important destinations and enhances the health of people using the system.

This project will:

- Produce a complete inventory of the City's active transportation network, including bike lanes, shared streets, trails, paths, and amenities such as signs.
- Develop a draft bike network and a draft pedestrian network that are "low stress" and encourage people to choose active transportation to get to important destinations, including healthy food options, recreational opportunities, jobs and schools.
- Identify gaps in those networks and a list of projects to address those gaps and complete the active transportation network.
- Define how the City prioritizes bicycle and pedestrian projects to improve active transportation networks.
- Update the vision and goals for City programs related to Active Transportation, such as Safe Routes to School and bike safety programs.
- Create a toolbox of best practices in active transportation design.
- Feature an inclusive public engagement approach to ensure a wide variety of people are involved in its creation, including people of color, people with low incomes and people of different ages and abilities.

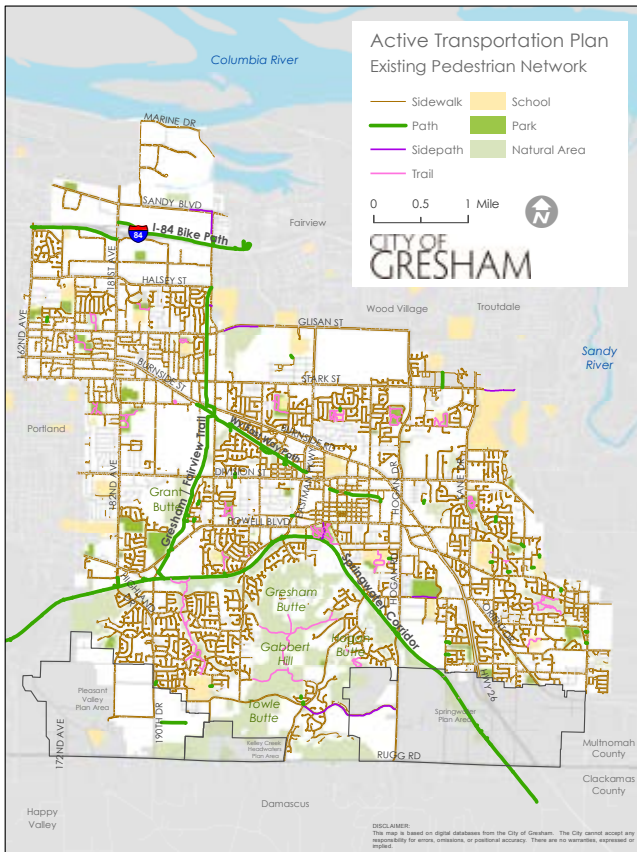
This project is partially funded by a Racial and Ethnic Approaches to Community Health (REACH) grant, which was awarded to Multnomah County by the Centers for Disease Control and Prevention. The REACH grant will support integration of health and equity into the plan as well as culturally relevant community engagement and development of culturally specific maps and educational materials. The REACH grant supports projects and programs that aim to improve health equity, particularly for the African American/Black community, by reducing the burden of chronic disease through preventable risk factors such as diet and nutrition.

GREATER PORTLAND/GRESHAM METRO AREA

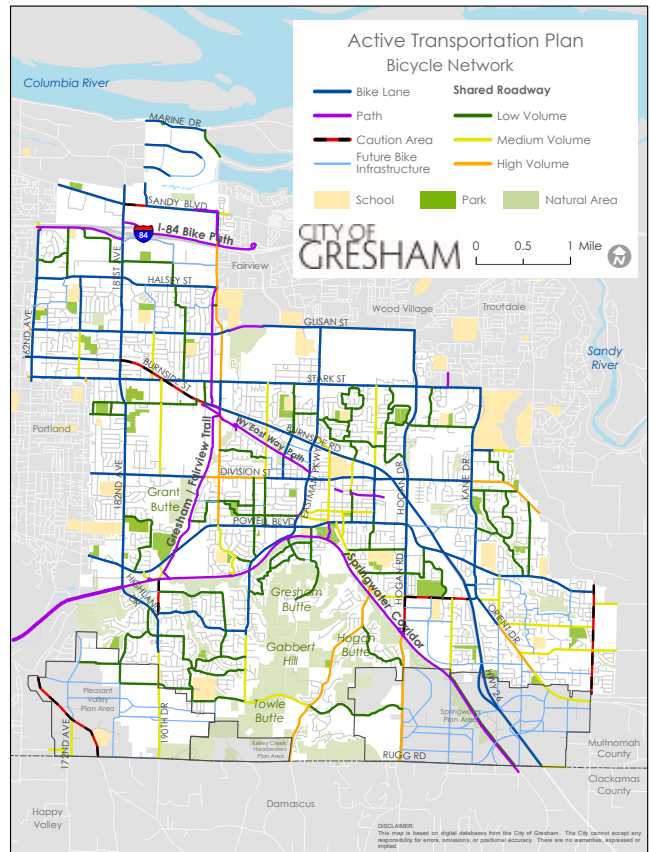


Map source: State of the Centers Report/Metro

Gresham's location in the region.



Gresham's current pedestrian network.



Gresham's current bicycle network.

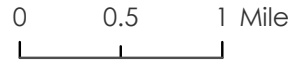
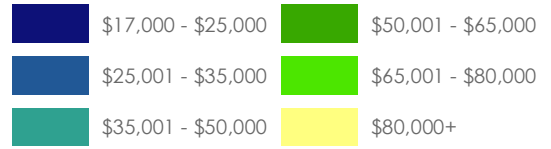
MEDIAN HOUSEHOLD INCOME

The Median Household Income Map shows the average household income by Census block group across Gresham. Bicycling and walking are no cost or low cost transportation options that ought to be provided for all people in Gresham, particularly those with less resources to spend on transportation.

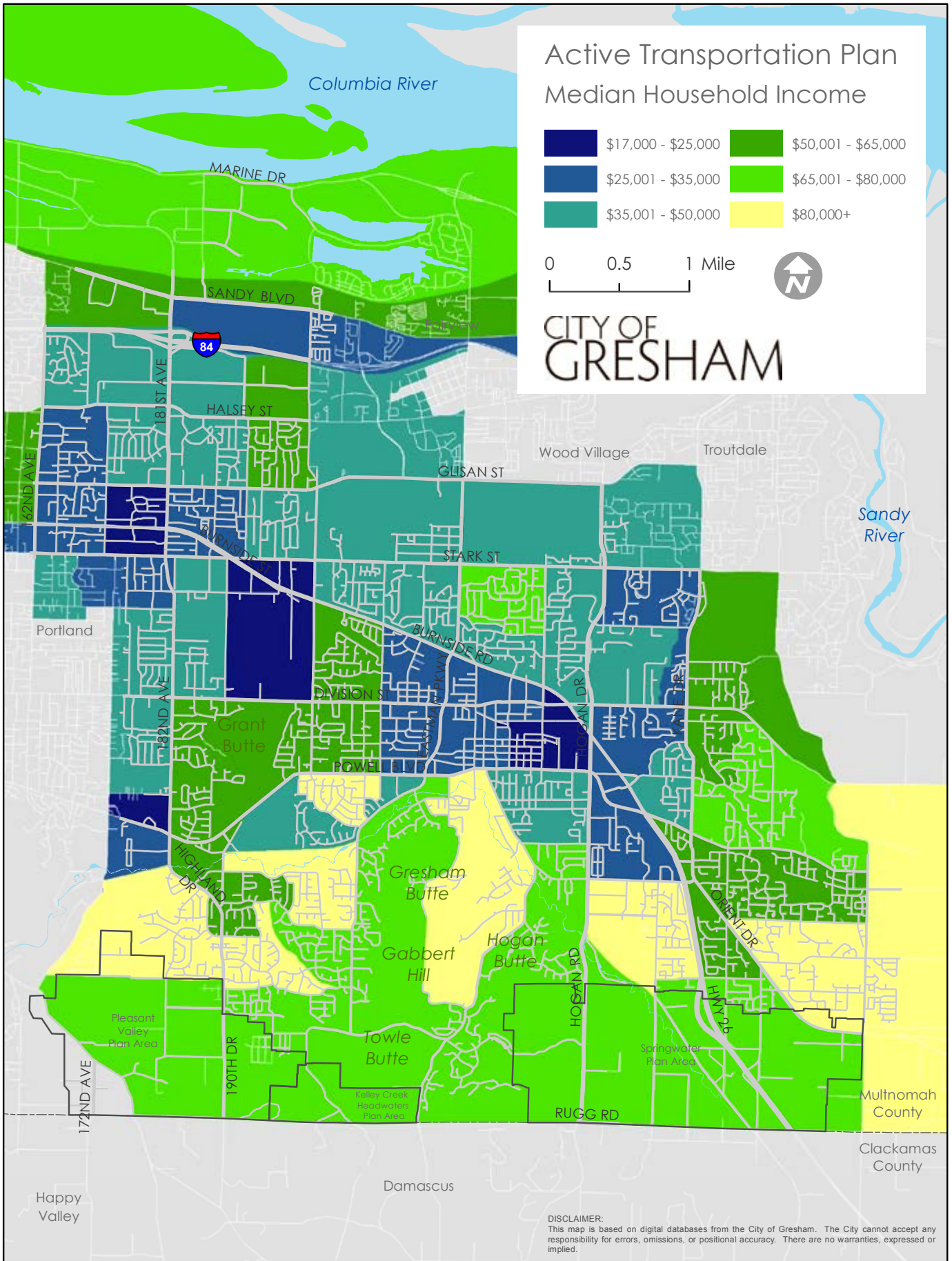
The lowest median household income tract is located directly north of Grant Butte in the Rockwood and Centennial neighborhoods, with an average household income of less than \$25,000 per year. Three of the four lowest median household income tracts are located adjacent to Burnside Street/Burnside Road, with majority of the tracts along the corridor with a median household income of less than \$35,000 per year. Two other areas of concentrated low income households are along Interstate 84, between the freeway and Sandy Boulevard in the North Gresham neighborhood, and in the neighborhoods adjacent to Centennial High School (west of 182nd Ave to the city boundary).

The highest median household income tracts are located south of the downtown central business district of Gresham, in the more suburban areas of Gresham Butte and Pleasant Valley. Majority of the highest income tracts are along and south of Johnson Creek, with a median household income over \$65,000 per year.

Active Transportation Plan Median Household Income



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RESIDENTIAL & EMPLOYMENT DENSITY INDEX

The Residential and Employment Density Index Map displays the density of people per acre living and working in Gresham. Areas with higher population densities typically have a greater mix of land uses, shorter distances between destinations, and better connectivity, making these areas more attractive places to bike and walk. Employment areas with mixes of retail, commercial, and employment have the potential for short trips on foot or by bike.

The areas with the higher values for the density index have more people living and working in them than areas with lower density values. Areas with the highest combined residential and employment density include the following:

- Northeast neighborhood and North Central neighborhoods, particularly near Stark Street, Hogan Drive, and Kane Drive
- Along Orient Drive in the Kelly Creek neighborhood
- Rockwood neighborhood, on both sides of Burnside Street and along 181st Ave
- In the southern portion of the Centennial/northern portion of the Southwest neighborhoods along 182nd Ave

There are also areas of very low residential and employment density in Gresham, concentrated in the northern part of the city, between Sandy Boulevard and Marine Drive and to the south, in the Southwest, Gresham Butte, and Kelly Creek neighborhoods.

Active Transportation Plan

Residential and Employment Density Index

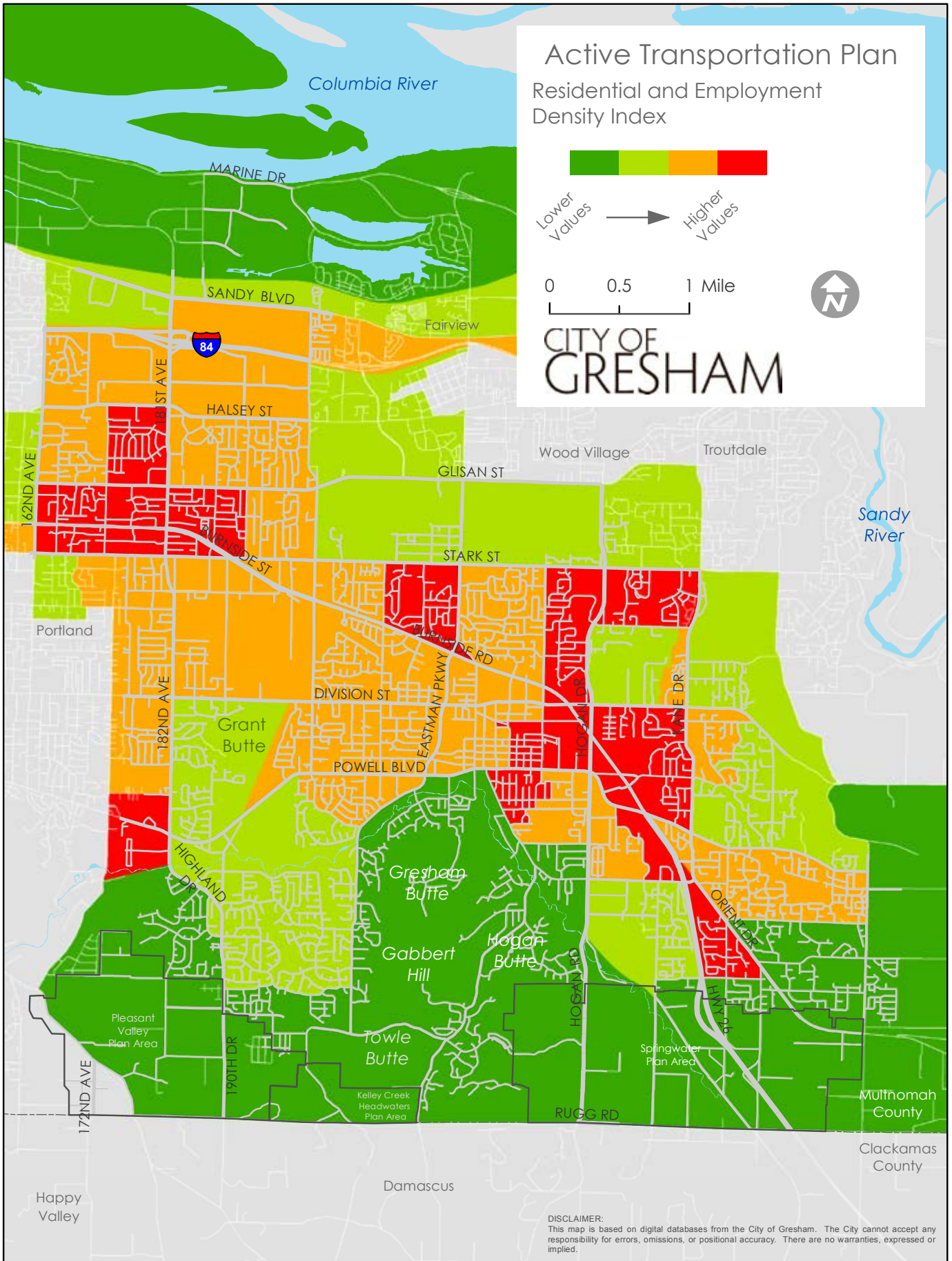


Lower Values → Higher Values

0 0.5 1 Mile



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KEY DESTINATIONS

The Key Destinations Map shows where important destinations are located throughout Gresham, such as large employers, civic institutions, libraries, schools and colleges, and parks/natural areas. Key destinations are important for walking and bicycling, as they provide areas for potential trip generation. It is critical that key destinations are easily accessible by people walking, biking, and using public transit, as these destinations provide services that are important for daily life.

The top employers are clustered near Interstate 84, which provides easy freeway access to large industrial sites, while the majority of the city's large natural areas and parks are located in the southern part of the city.

Also illustrated are designated "Centers", which provide a density of commercial, retail, and other key destinations in Gresham. These centers include Rockwood, Ruby Junction, and Downtown Gresham. The centers are focused around MAX stops, which provide access to key destinations for those using public transit. Walkable activity centers that are compact and easy to navigate on foot or by bike create a more interesting and safe environment for all people.

TOP EMPLOYER	NUMBER OF EMPLOYEES
1. Boeing of Portland	1,810
2. U.S. Bank of Oregon- Col. Center	1,636
3. Xerox Commercial Solutions	680
4. On Semiconductor	666
5. Mt. Hood Medical Center	601
6. Microchip Technology Inc.	467

Active Transportation Plan

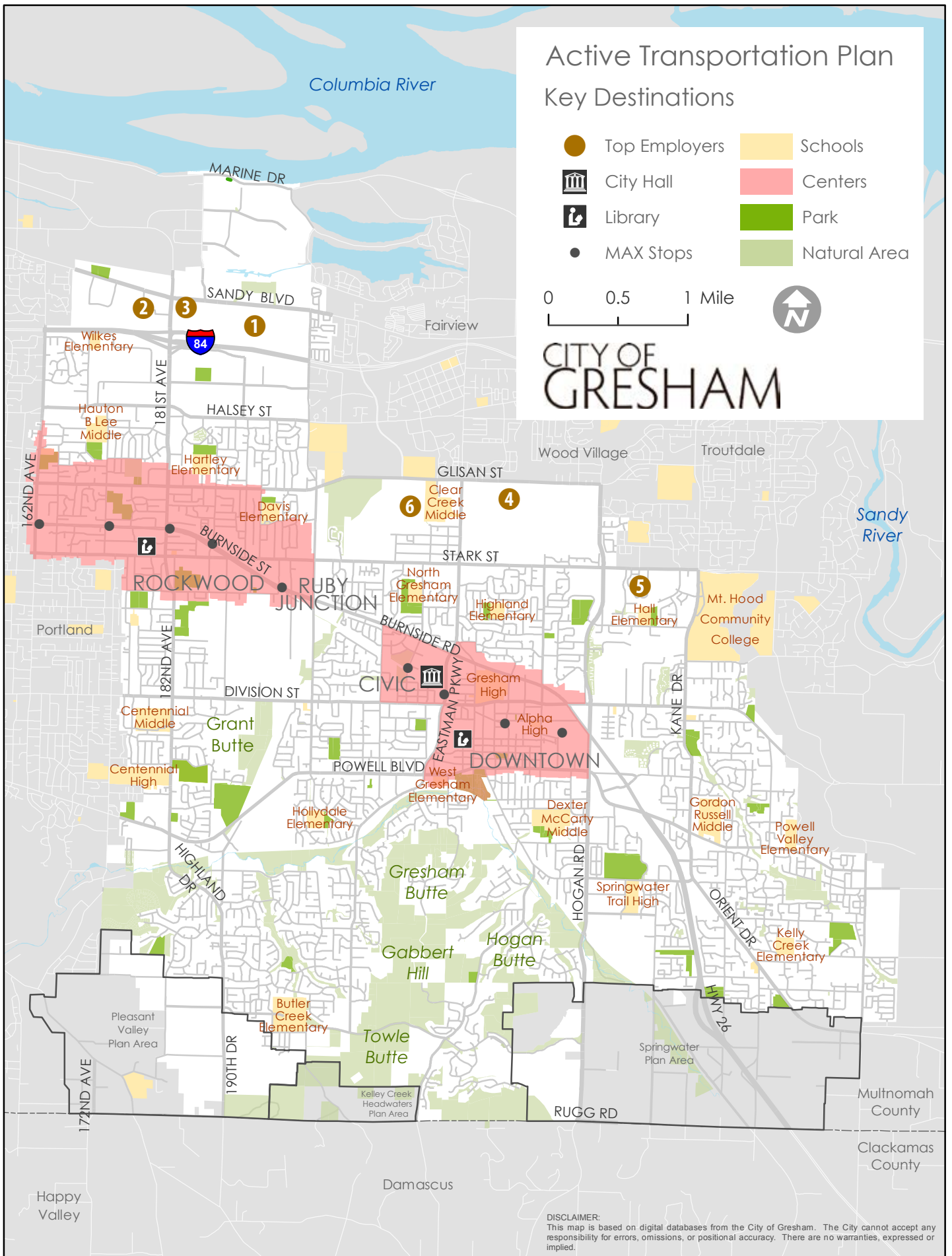
Key Destinations

- Top Employers
- Schools
- City Hall
- Centers
- Library
- Park
- MAX Stops
- Natural Area

0 0.5 1 Mile



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FOOD ACCESS

Safe and convenient access to fresh, healthy, and affordable food is an important aspect of healthy living. The average American is at risk for preventable chronic diseases associated with consuming excess calories, inadequate consumption of fruits, vegetables, whole grains, and some micro-nutrients, and overconsumption of added products such as refined sugar and preservatives.

Limited transportation options can lead to limited access to full service food vendors that provide a variety of healthy food options, forcing people to rely on food vendors with less healthy and nutritious food options. It is important to provide access to food options for people walking, biking, and using transit throughout Gresham.

The Food Access Map shows where supermarkets and small grocery stores are located in Gresham, in addition to culturally specialized grocery stores and emergency food locations, such as food banks or pantries. Most grocery stores are located on major roadways, including:

- Stark Street
- Division Street
- Powell Boulevard
- Burnside Road
- 181st/182nd Ave
- Eastman Parkway/223rd Ave
- Kane Drive

Note: The Food Access Map was created using data from the Gresham Opportunities Mapping Project, conducted by graduate planning students at Portland State University.

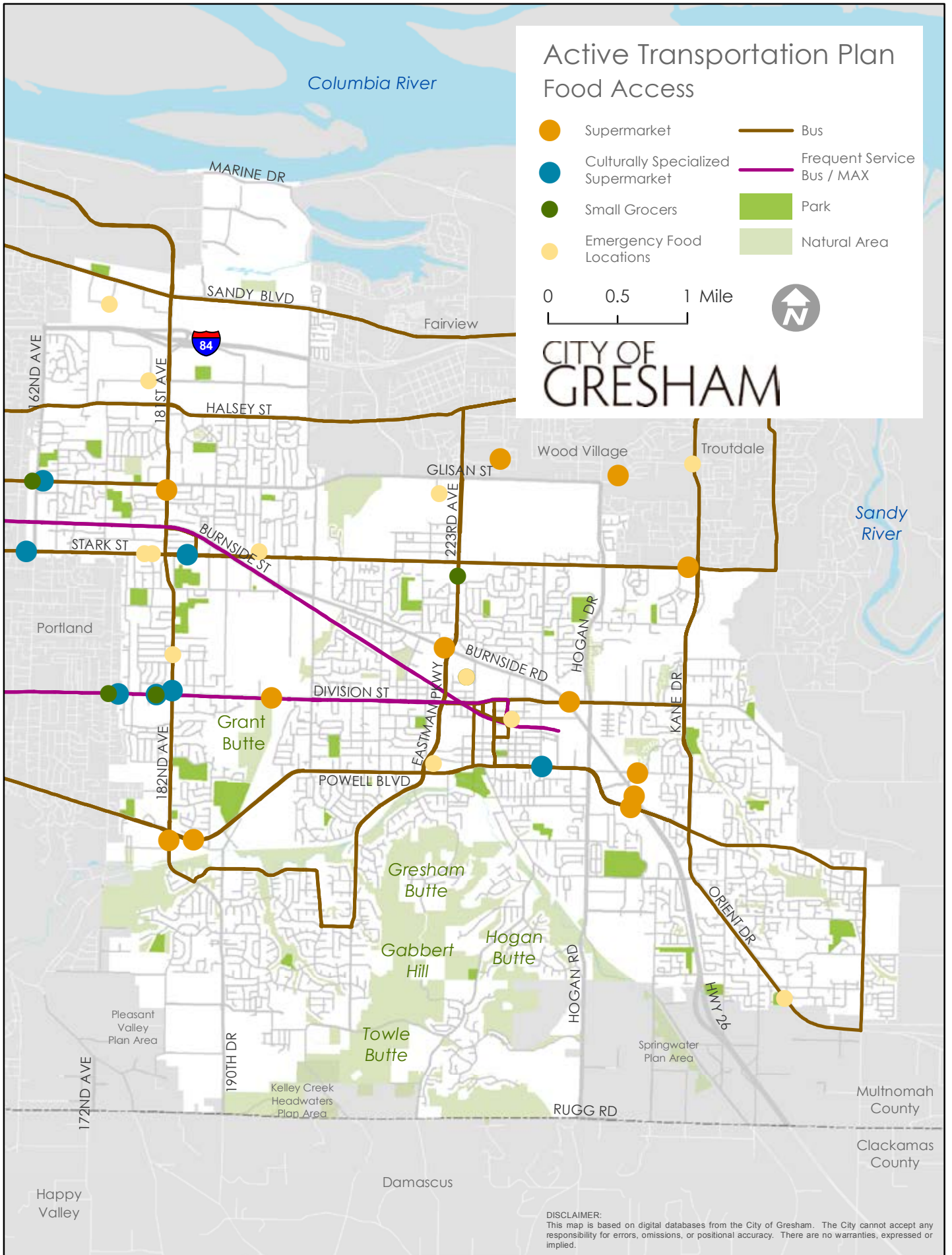
Active Transportation Plan Food Access

- Supermarket
- Culturally Specialized Supermarket
- Small Grocers
- Emergency Food Locations
- Bus
- Frequent Service Bus / MAX
- Park
- Natural Area

0 0.5 1 Mile



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RATE OF DIABETES

The Rate of Diabetes Map shows average diabetes rates by Census block groups in Gresham. Diabetes rates are directly related to overall health. In addition, low-income communities and communities of color experience higher rates of chronic diseases like diabetes.

Regular physical activity, such as walking, jogging, and bicycling, reduces the risk of many chronic diseases, including cardiovascular disease, diabetes, and some cancers.¹ The diabetes rate for Multnomah County overall was 7.7% using data from 2010-2013.²

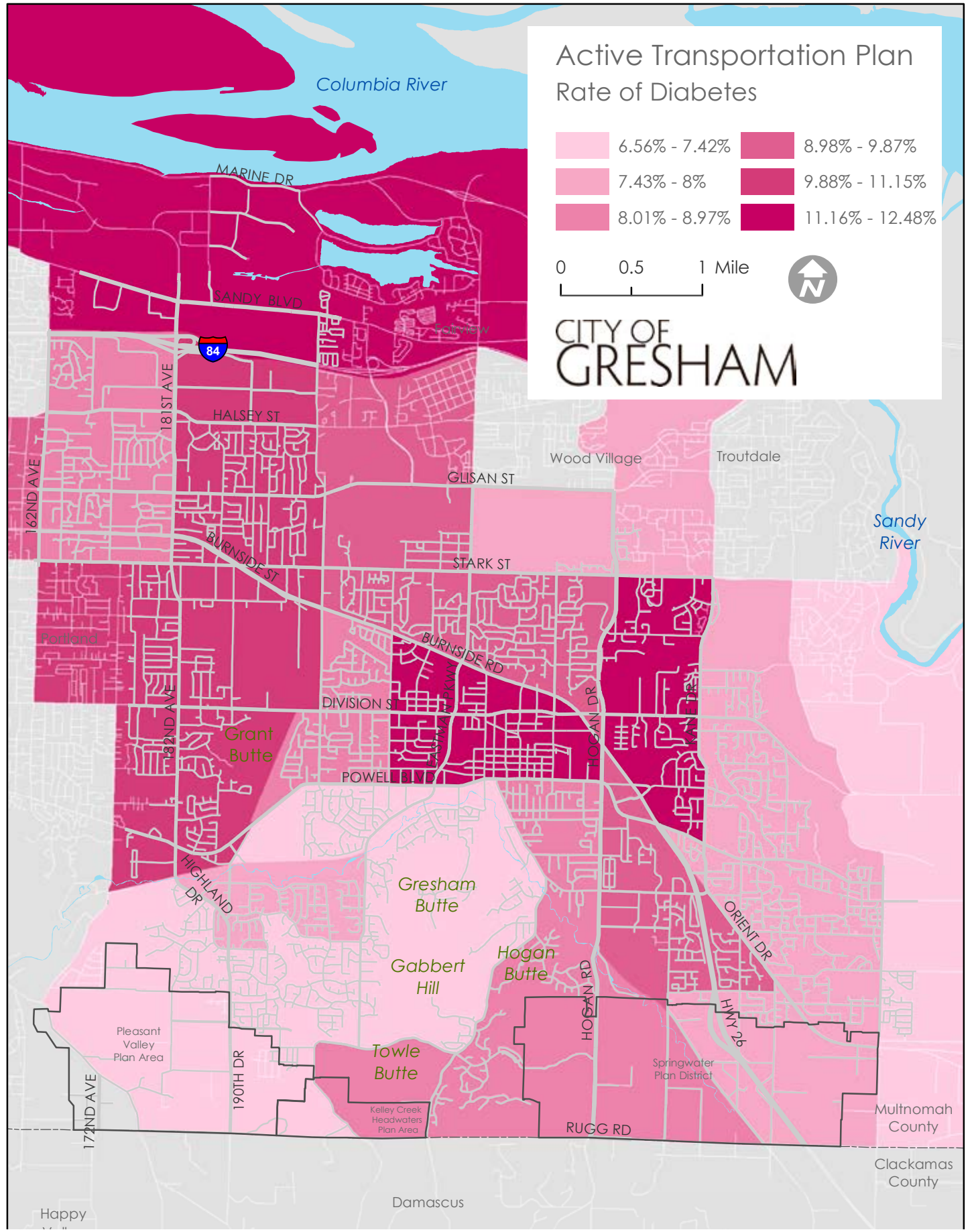
Rates of diabetes are highest in tracts north of Interstate 84 in the northern portions of Wilkes East and North Gresham neighborhoods, with rates between 11.16% and 12.48%. Rates are also high between Powell Boulevard and Burnside Road and between Hogan Drive and Kane Drive, in the Northwest and Central City neighborhoods. Rates are also high in the western portions of the Northeast and Powell Valley neighborhoods.

Rates are lowest in the Pleasant Valley and Gresham Butte neighborhoods, in addition to east of Kane Drive, with rates between 6.56% and 7.42%.

Note: Data for the health outcomes came from the Regional Equity Atlas database.

1 Center for Disease Control (2005) Perceptions of neighborhood characteristics and leisure-time physical inactivity – Austin/Travis County, Texas, 2004. *Morbidity and Mortality Weekly Report* (54:37), 926-928.

2 Oregon Health Authority, Public Health Division, Health Promotion and Chronic Disease Prevention section. Chronic diseases among Oregon adults, by county, 2010-2013. <https://public.health.oregon.gov/DiseasesConditions/ChronicDisease/DataReports/Pages/CountyData.aspx>. Created March 9, 2015. Accessed June 9, 2016



Active Transportation Plan Rate of Diabetes

6.56% - 7.42%	8.98% - 9.87%
7.43% - 8%	9.88% - 11.15%
8.01% - 8.97%	11.16% - 12.48%



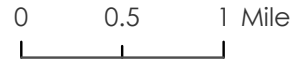
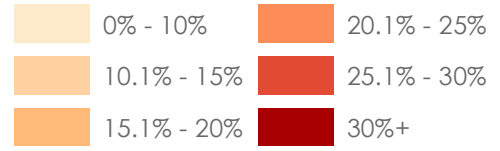
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NON-WHITE POPULATION

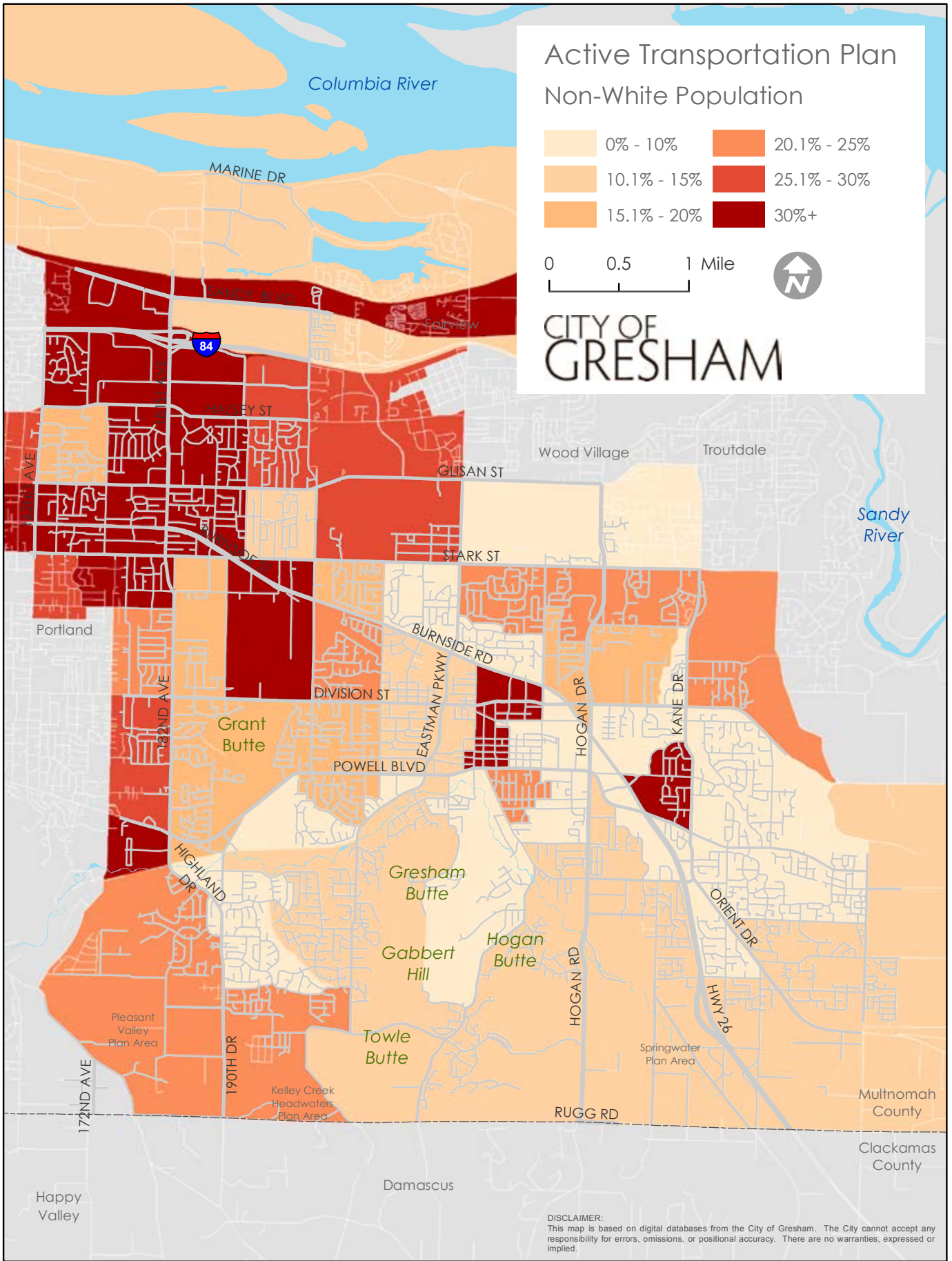
The Non-White Population Map displays the percentage of people who identify as non-white per Census block group across Gresham. The percentage of the population that identifies as non-white is highest in the north-western parts of Gresham, particularly near Interstate 84 and along 181st/182nd Avenue in the Wilkes East and North Gresham neighborhoods. The Rockwood neighborhood shows over 30% of residents as non-white. Neighborhoods located along Burnside Road, including Rockwood, have the most non-white populations, with tracts near Hogan Drive and Kane Drive having over 30% identifying as non-white.

Tracts in the southern part of Gresham, in the Gresham Butte and Kelly Creek neighborhoods, have the lowest percentage of population identifying as non-white, with less than 10% in some tracts.

Active Transportation Plan Non-White Population



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BLACK POPULATION

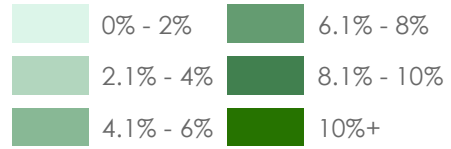
The Black Population Map displays the percentage of people who identify as black per Census block group across Gresham.

The REACH grant supports projects and programs that aim to improve health equity, particularly for the African American/Black community, so it is important to understand the number and location of people who identify as black in Gresham.

The percentage of the population that identifies as black is concentrated in the north-western parts of the city, along Burnside Road, NE 181st Ave and Interstate 84, with over ten percent of people in those tracts identifying as black. This includes the neighborhoods of Rockwood, the northern portion of Centennial, Wilkes East and North Gresham.

Neighborhoods with the lowest percentage of black populations are in the historic downtown, the southern portion of the Centennial neighborhood, Southwest neighborhood and near Highway 26 in the neighborhoods of Mt. Hood and Kelly Creek, with between zero and four percent of the population in those tracts identifying as black.

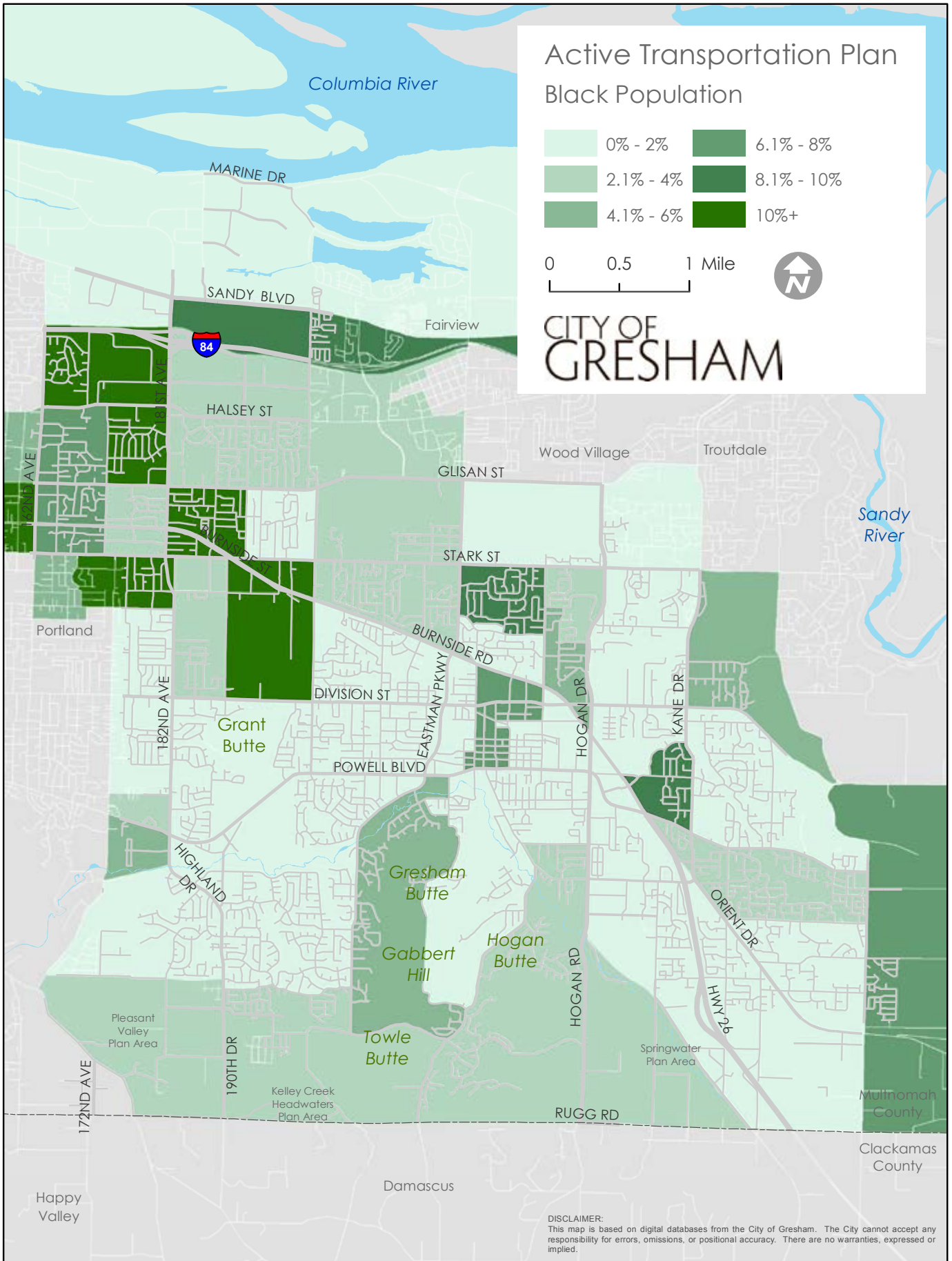
Active Transportation Plan Black Population



0 0.5 1 Mile



CITY OF GRESHAM

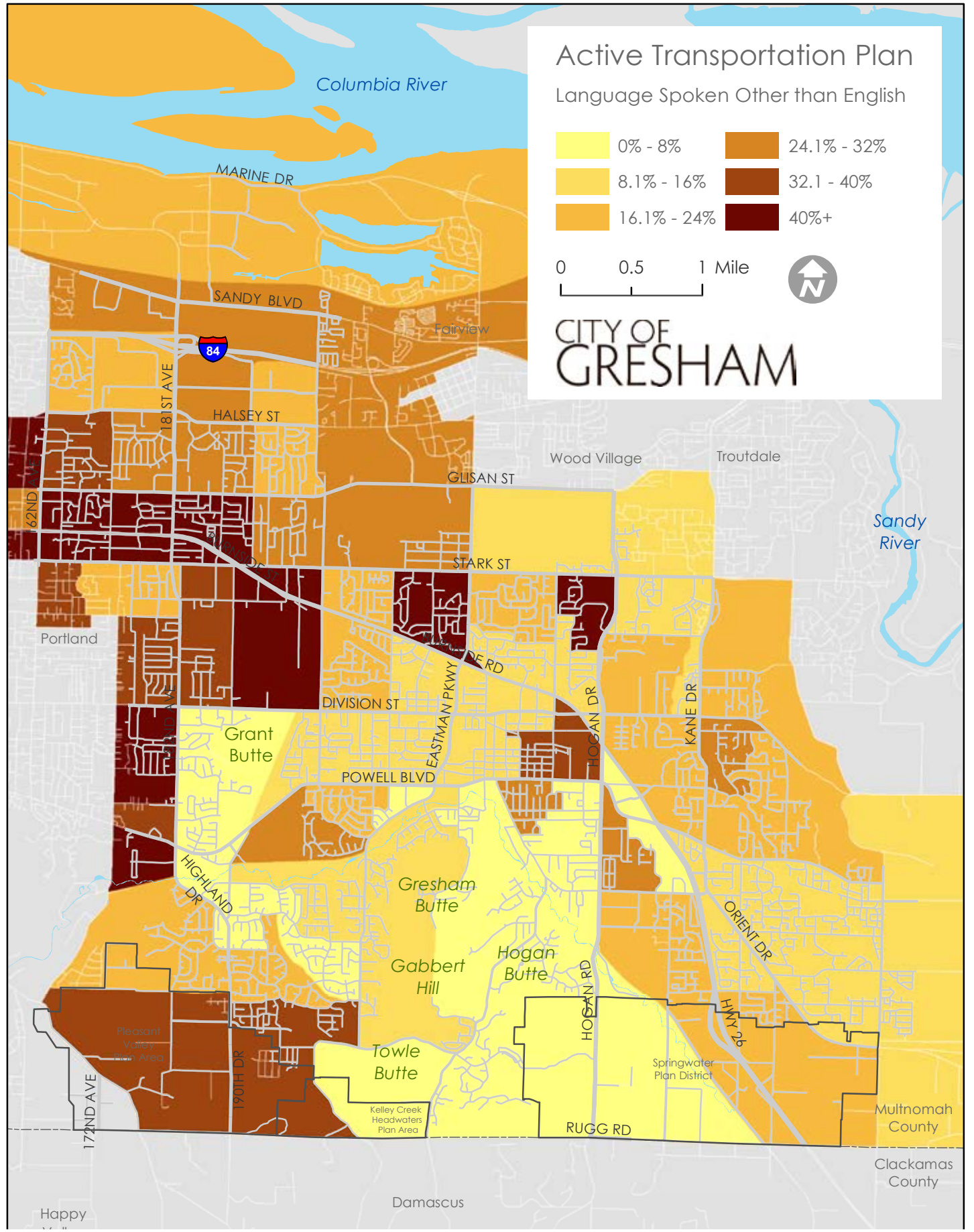


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LANGUAGES SPOKEN OTHER THAN ENGLISH

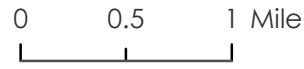
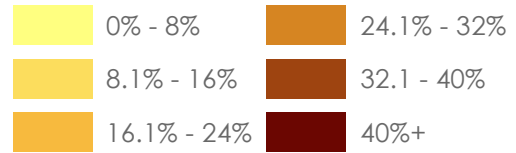
The Languages Spoken Other Than English Map shows the location of populations that speak a language other than English at home, per Census block group in Gresham. Majority of these populations are located in the western part of Gresham, where there are over ten tracts with more than 40% of the population speaking a language other than English at home. High concentrations of households with languages spoken other than English are present in the following neighborhoods:

- Rockwood
- Centennial
- Wilkes East
- North Central



Active Transportation Plan

Language Spoken Other than English



CITY OF GRESHAM

SENIOR (OVER 65) POPULATION

The Senior (Over 65) Population Map displays the percentage of people over the age of 65 per Census block group across Gresham. As adults age, it is important to provide facilities and opportunities to be physically active. Several studies have found that older adults prefer walking over other physical activities, demonstrating the importance of providing a safe and comfortable place for people of all ages to walk¹.

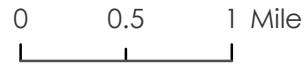
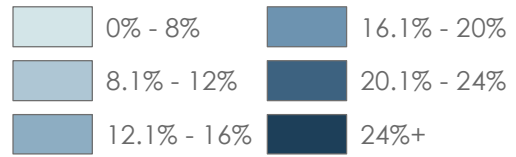
As people age, they are more likely to use more medications and develop physical cognitive disabilities. According to the AAA, "Seniors are outliving their ability to drive safely by an average of 7 to 10 years."

The distribution of senior populations is fairly consistent throughout Gresham, with majority of tracts showing between 8% to 16% of the population over age 65.

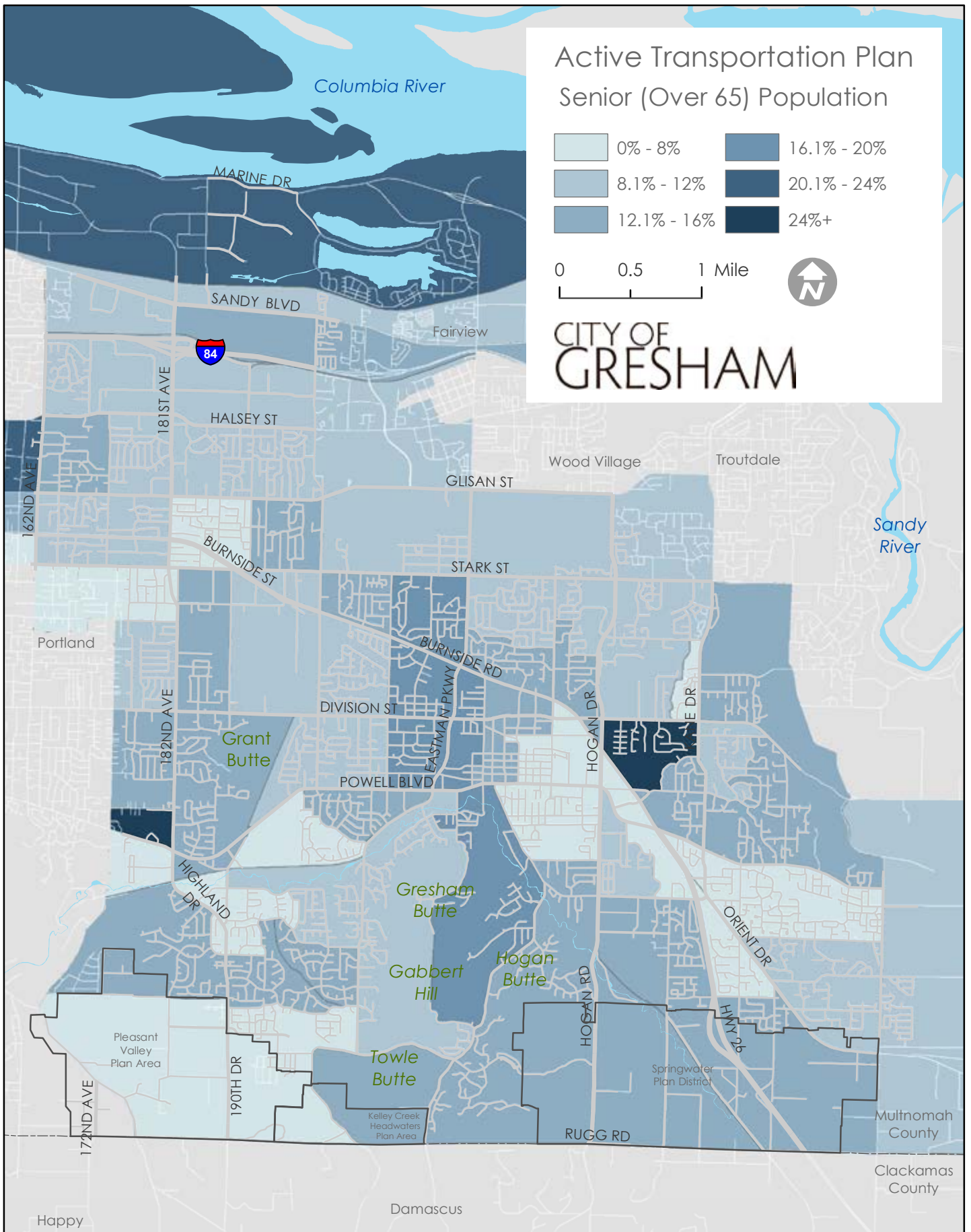
There are only two tracts with over 24% of the population over age 65; in the southern portion of the Centennial neighborhood and in the western portion of the Powell Valley neighborhood. There are a few tracts with less than 8% of the population over age 65, in the Kelly Creek, Central City, and Historic Southeast neighborhoods, as well as the northern portion of the Centennial neighborhood.

¹ Price, Anna E., Julian A. Reed, and Suresh Muthukrishnan. "Trail User Demographics, Physical Activity Behaviors, and Perceptions of a Newly Constructed Greenway Trail." *Journal of Community Health* 37.5 (2012): 949-56. Web.

Active Transportation Plan Senior (Over 65) Population



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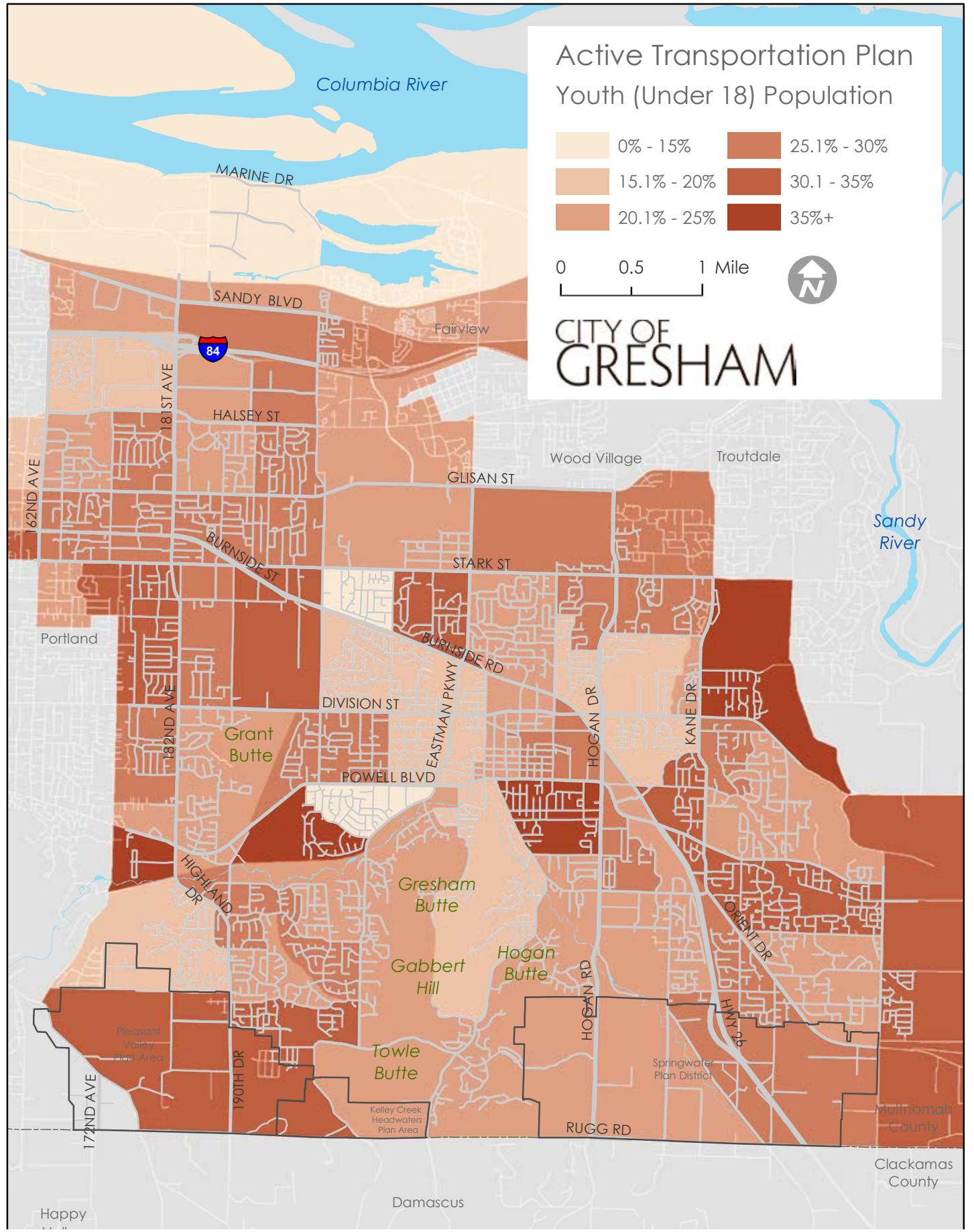
YOUTH (UNDER 18) POPULATION

The Youth (Under 18) Population Map shows where households with children under age 18 per Census block group are located in Gresham. It is important to understand where children are present, as children perceive traffic and traffic safety differently than adults do. This differing perception makes children particularly susceptible to traffic related injuries and death. Designing a pedestrian and bicycle network with children in mind may result in a safer environment for users of all ages.

The youth populations are fairly distributed across Gresham, with majority of tracts having fifteen to thirty percent of the population under age 18.

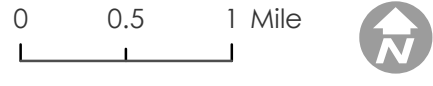
There are four Census tracts in Gresham with over 35% of the population under age 18. There are located in the following neighborhoods:

- Northeast
- the western portion of Hollybrook
- the southern portion of Centennial
- and the northern portion of the Historic Southeast neighborhood



Active Transportation Plan Youth (Under 18) Population

	0% - 15%		25.1% - 30%
	15.1% - 20%		30.1 - 35%
	20.1% - 25%		35%+



CITY OF GRESHAM

EQUITY INDEX

Good transportation is vital for access to activities and essential services that are needed for daily life. In automobile-dependent communities, those who do not have the ability to drive or do not have access to vehicles can be at a great economic and social disadvantage. People of color, those with low incomes and younger and older residents often do not have access to vehicles and may have a higher need for transportation options that do not require the purchase of a vehicle.

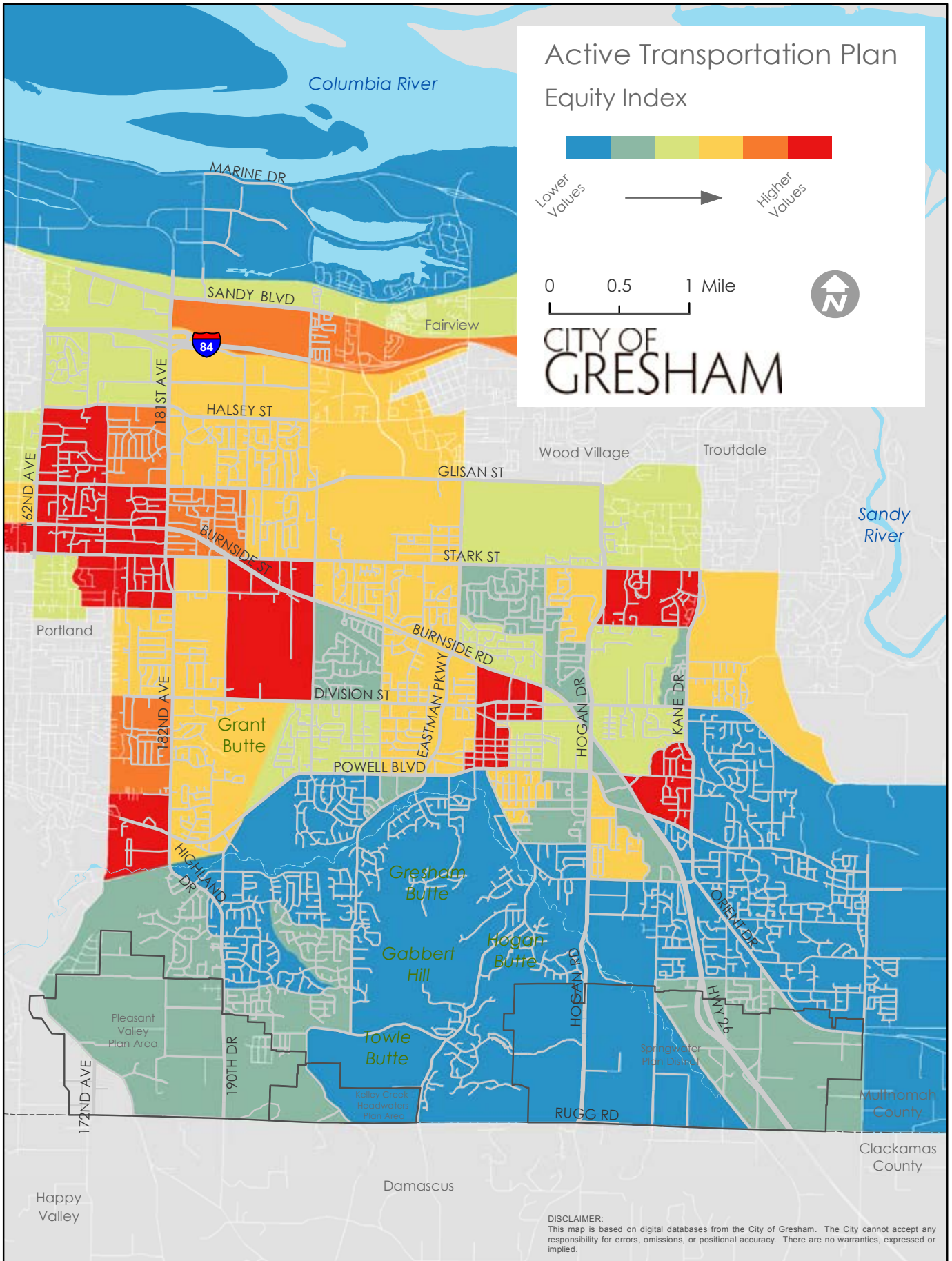
The Equity Index Map shows a combination of three factors that are equally weighted:

- Median Household Income
- Non-White Populations
- Youth (Under 18) Population & Seniors (Over 65) Population

The highest concentrations of these populations are present in the following areas:

- The Rockwood neighborhood of Gresham, between 162nd and 181st Ave and along Burnside Street
- Between Stark Street and Division Street in the North Central and Northwest neighborhoods
- In the Northeast neighborhood near Hall Elementary School
- The Central City in the residential neighborhoods near Gresham High School
- The southern portion of the Centennial neighborhood

Investments in active transportation in these locations may have the most impact on expanding travel options for people who do not have access to an automobile.



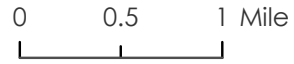
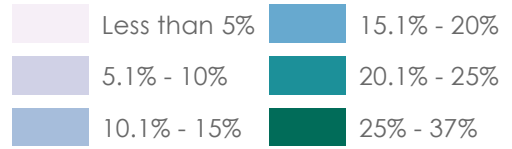
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EDUCATIONAL ATTAINMENT

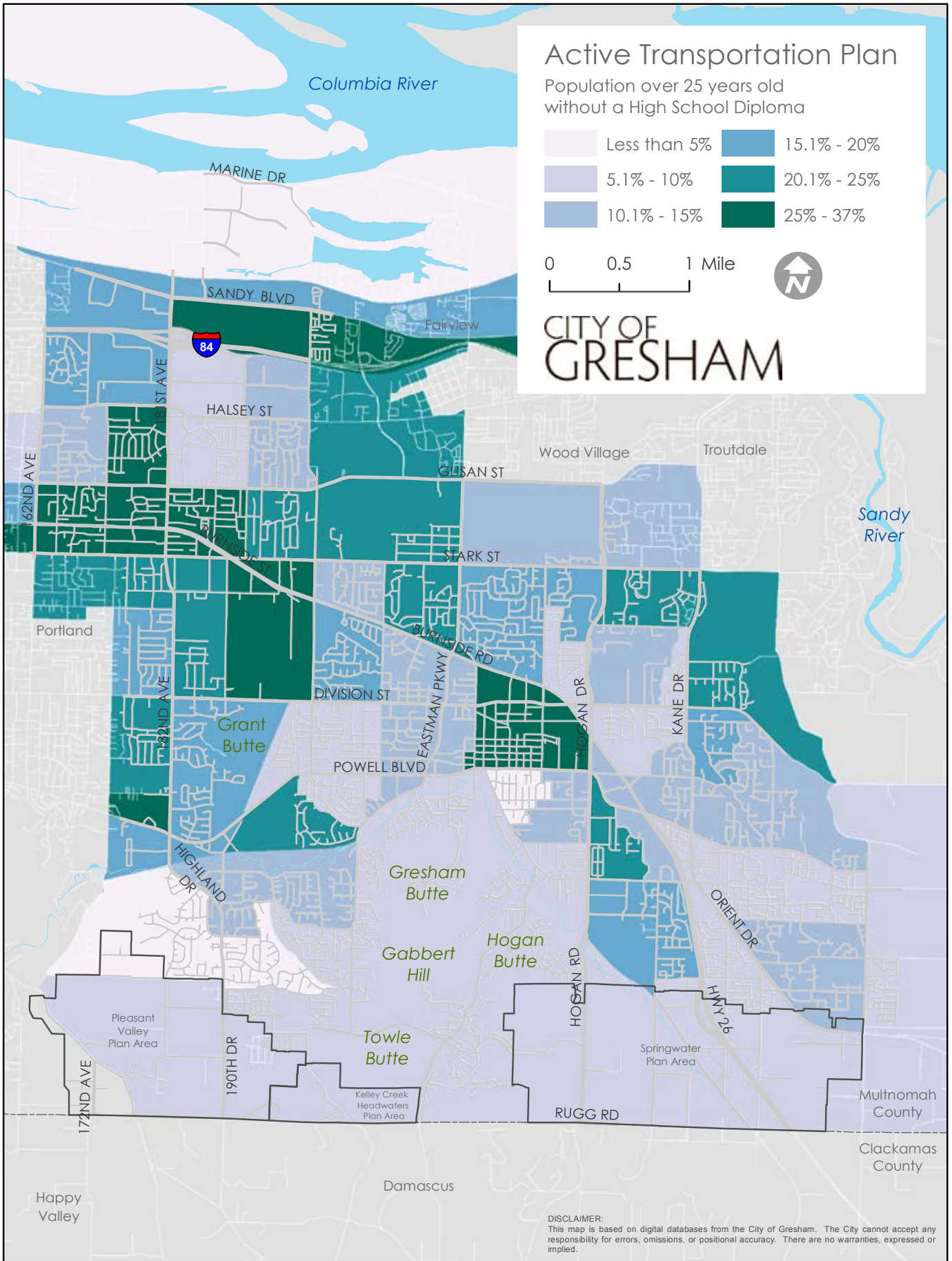
The Educational Attainment Map looks at the percentage of population over age 25 without a high school diploma in Gresham, which includes high school equivalency. The dark green color represents areas where 25 percent to 37 percent of the adult population do not have a high school diploma. This population is concentrated along Burnside Street and 181st Ave in the Rockwood area and in the northern part of the city, near Sandy Boulevard.

Active Transportation Plan

Population over 25 years old without a High School Diploma



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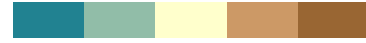
ACCESS TO FAMILY WAGE JOBS

The Access to Family Wage Jobs Map illustrates the percentage of the population in Gresham who are able to access family wage jobs using public transit, in 60 minutes or less. Family-wage jobs are defined by the Institute of Portland Metropolitan Studies as the income level needed to support one adult, one preschooler, and one school age child. The income level varies by the county of residence, with \$47,244 as the wage for Multnomah County.

The blue colors represent areas with lower access to family wage jobs, while the tan and brown colors represent higher access to family wage jobs. Single land use areas to the south and east of the downtown have the lowest access to jobs, while more urban, multi-use areas have higher access to jobs.

Active Transportation Plan

60 Minute Transit Access to Family Wage Jobs



Lower Access

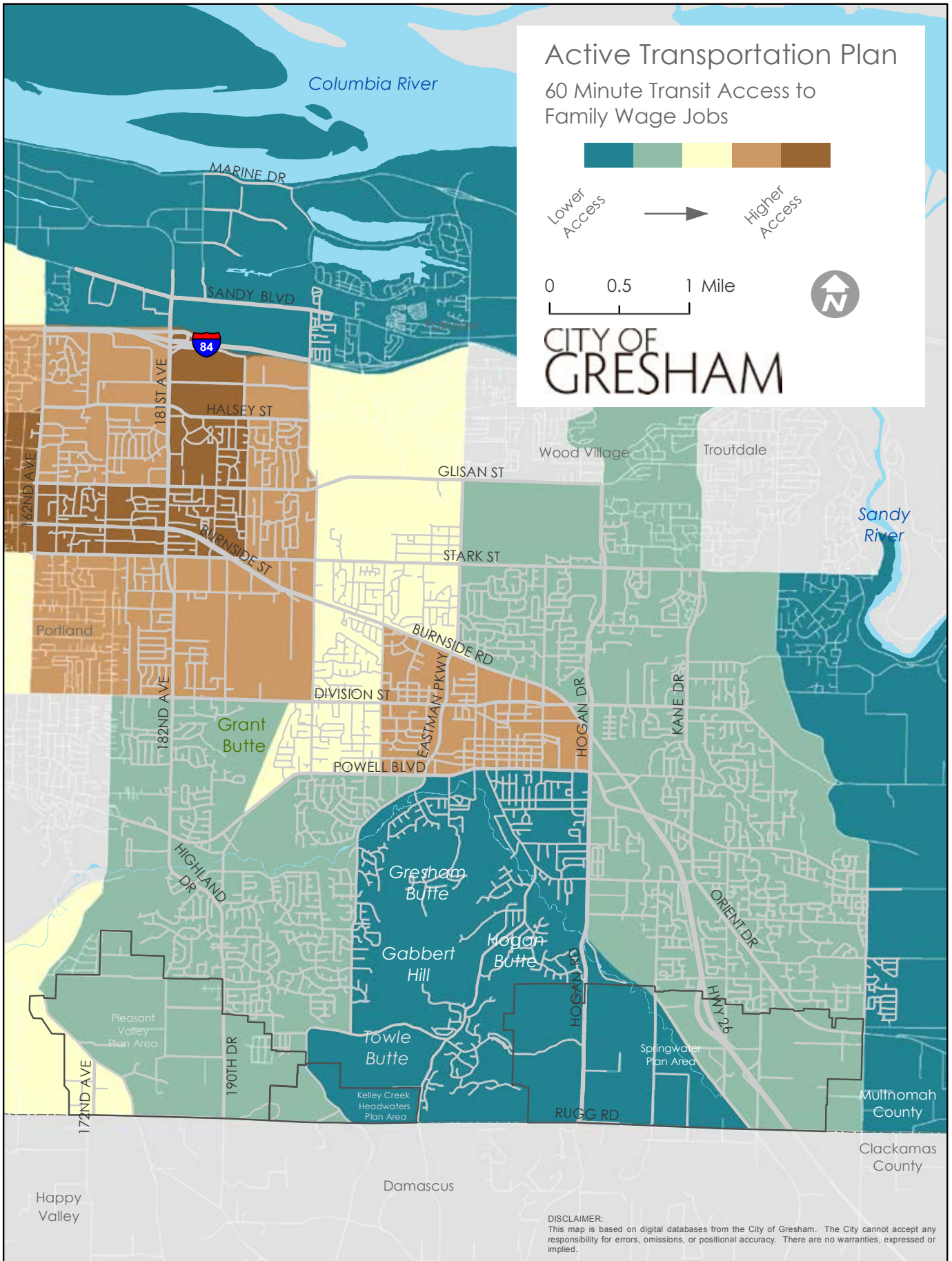


Higher Access

0 0.5 1 Mile



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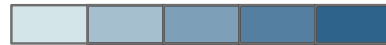
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POLICE CASE REPORTS

The Police Case Reports Map shows areas with high concentrations of police case reports in 2015. The darker color helps identify hot spots of reported criminal activity, while lighter locations have less police reports. Higher levels of police reports are located near the intersections of Burnside Street, 181st Avenue, and Stark Street. This may be an incomplete list, as not all crimes are reported.

Active Transportation Plan

Police Case Reports 2015

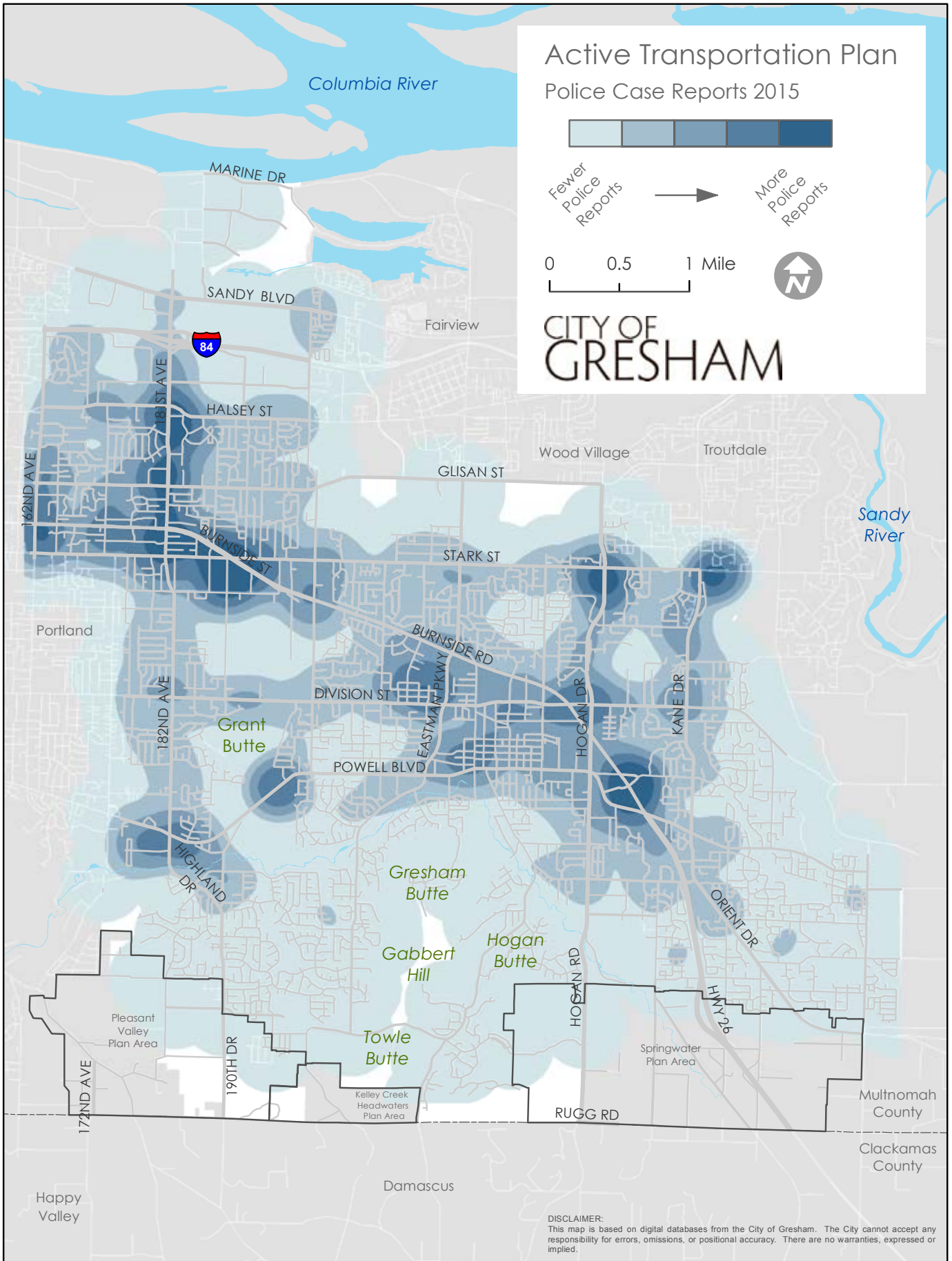


Fewer Police Reports → More Police Reports

0 0.5 1 Mile



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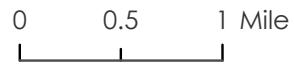
PROXIMITY TO LICENSED CHILDCARE

The Proximity to Licensed Childcare Map shows the location of licensed childcare and Head Start centers and the relative distance to facilities for families in Gresham. This map does not show the affordability or availability of childcare, which are great barriers to childcare access.

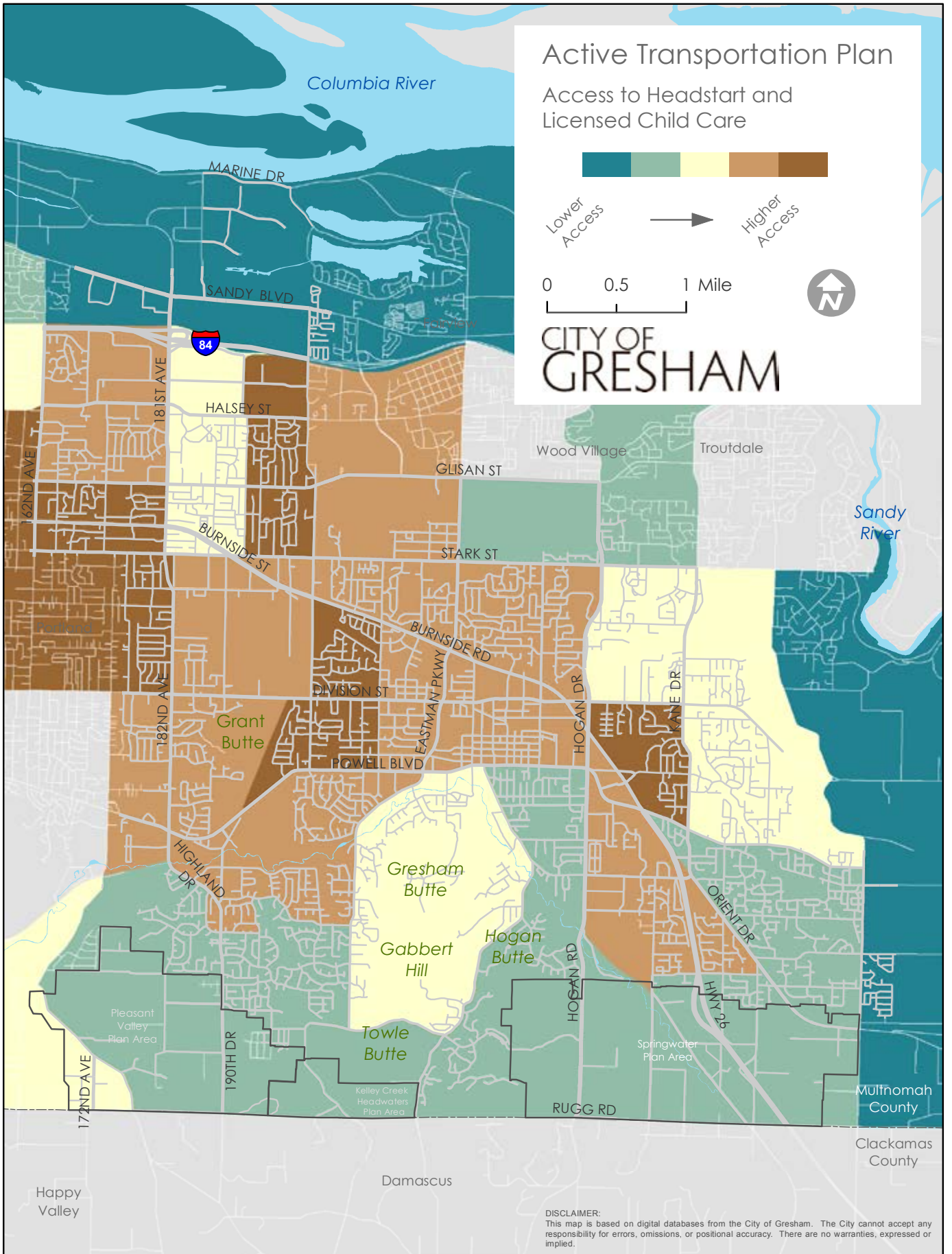
The blue colors represent lower access to child care facilities, while the tan and brown colors represent higher access to those facilities. Majority of Gresham residents have moderate to high access to child care facilities.

Active Transportation Plan

Access to Headstart and Licensed Child Care



CITY OF GRESHAM



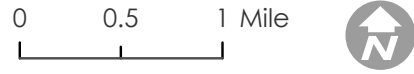
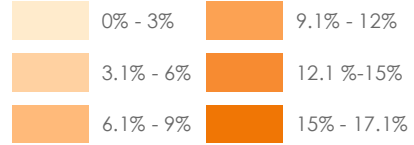
DISCLAIMER:
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POPULATION ON PUBLIC ASSISTANCE INCOME

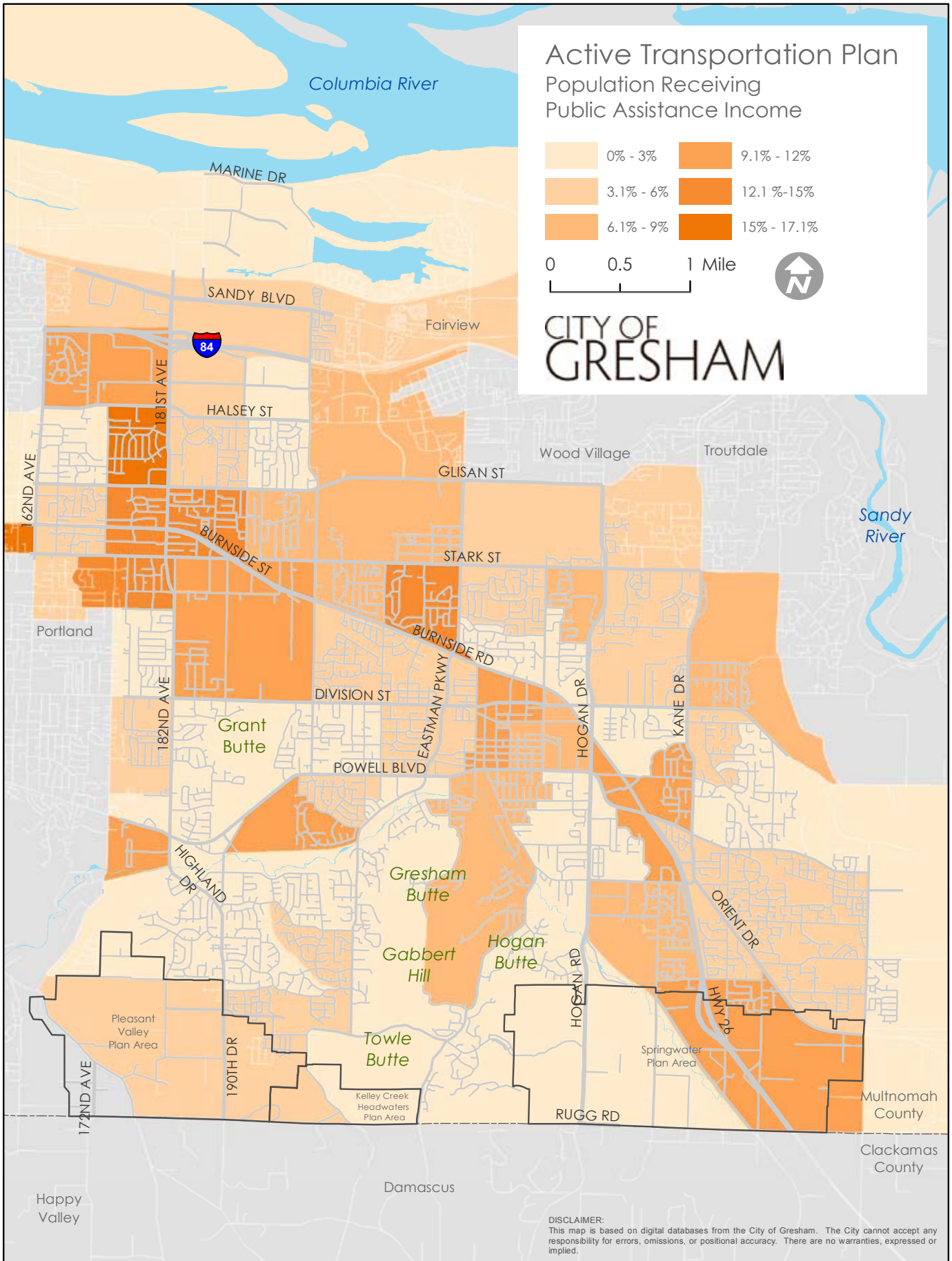
The Population on Public Assistance Income Map shows the percentage of the population in Gresham who utilize public assistance income programs, which provide cash payment to low income households through the Temporary Assistance to Needy Families (TANF) and General Assistance (GA) programs.

The lighter colors represent a lower percentage of the population receiving public assistance income, while the darker colors represent a higher percentage. The areas with the highest percentage of the population on public assistance income are located in the Rockwood area along 181st Ave and along Burnside Street/Road.

Active Transportation Plan Population Receiving Public Assistance Income



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CHANGE IN JOBS

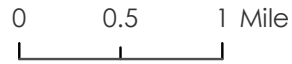
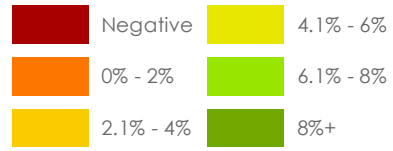
The Change in Jobs Map shows the change in the number of jobs from 2010 to 2015 at the block group level throughout Gresham. This map illustrates how the location of employment opportunities and employment density has changed and where opportunities have relocated.

Several block groups throughout Gresham have experienced a negative change in jobs over a five year period, including along 182nd Ave, north of Powell Boulevard, between Hogan Drive and Kane Drive, and in the southern part of the city along Highway 26.

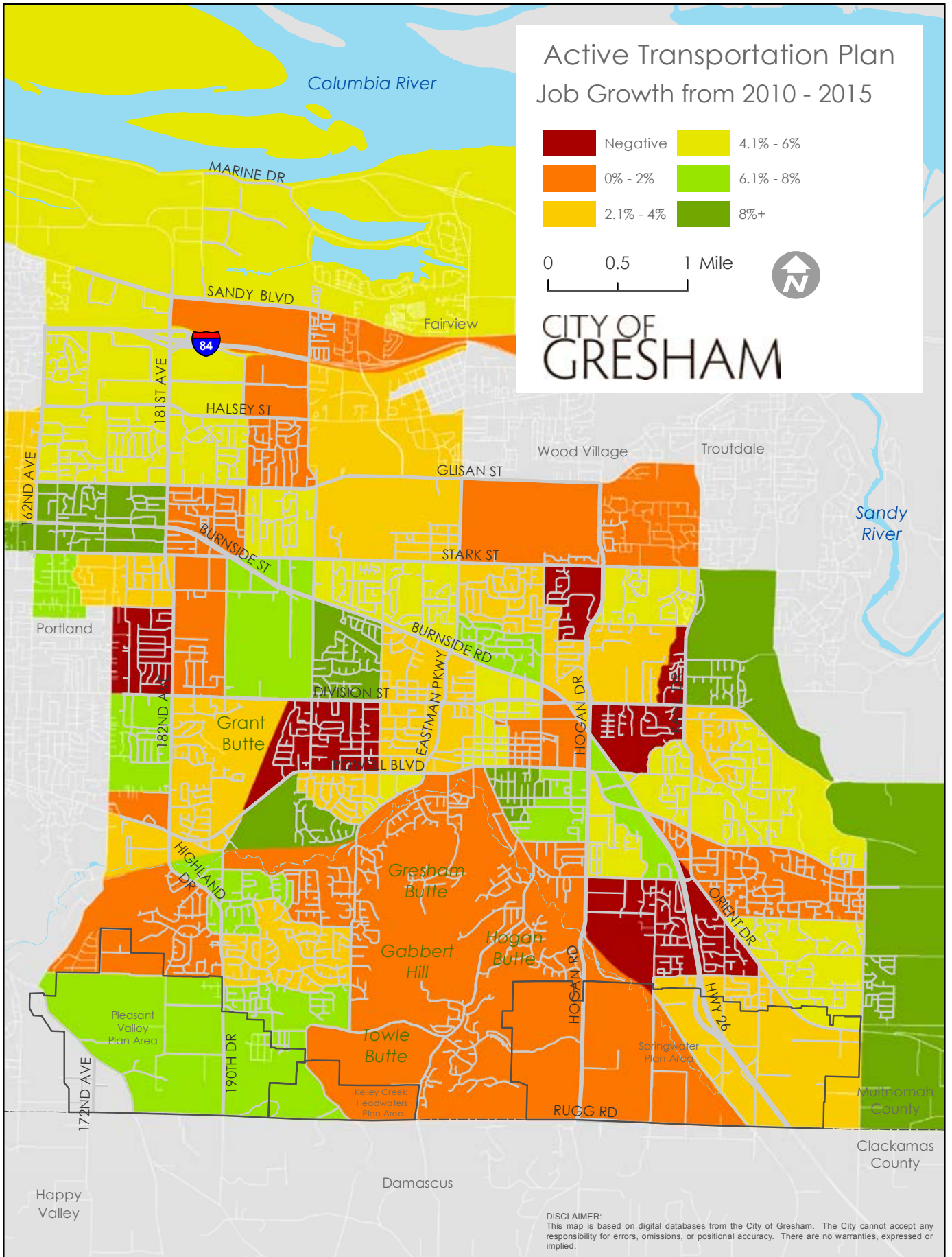
Several areas have also seen an increase in jobs during that same period, with several block groups along the eastern edge of the city experiencing an over eight percent increase in the number of jobs. There are also a few areas in the central city that have experienced over 8% increases, including block groups along Burnside Street at 162nd Ave and 181st Ave, and between Burnside and Division Streets, near downtown.

Much of Gresham has experienced an increase in the number of jobs from 2010 to 2015, with most block groups in the 2.1% to 8% range.

Active Transportation Plan Job Growth from 2010 - 2015



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STUDENTS ELIGIBLE FOR FREE OR REDUCED LUNCH

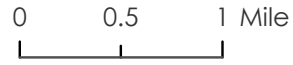
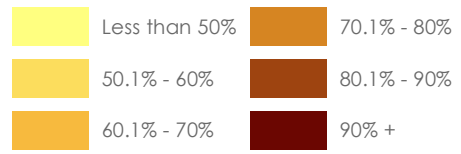
The Students Eligible for Free or Reduced Lunch Map shows the percentage of kindergarten through 12th grade students eligible for the free and reduced cost lunch program. This indicator is often used as a proxy for household poverty.

Each school location throughout Gresham is color coded to represent the percentage of students eligible for this program. The darker colored schools have a higher percentage of students eligible, with three Gresham schools where over 90% of the students qualify. Every school in Gresham has a student body population where at least half of the students are eligible for free or reduced lunch.

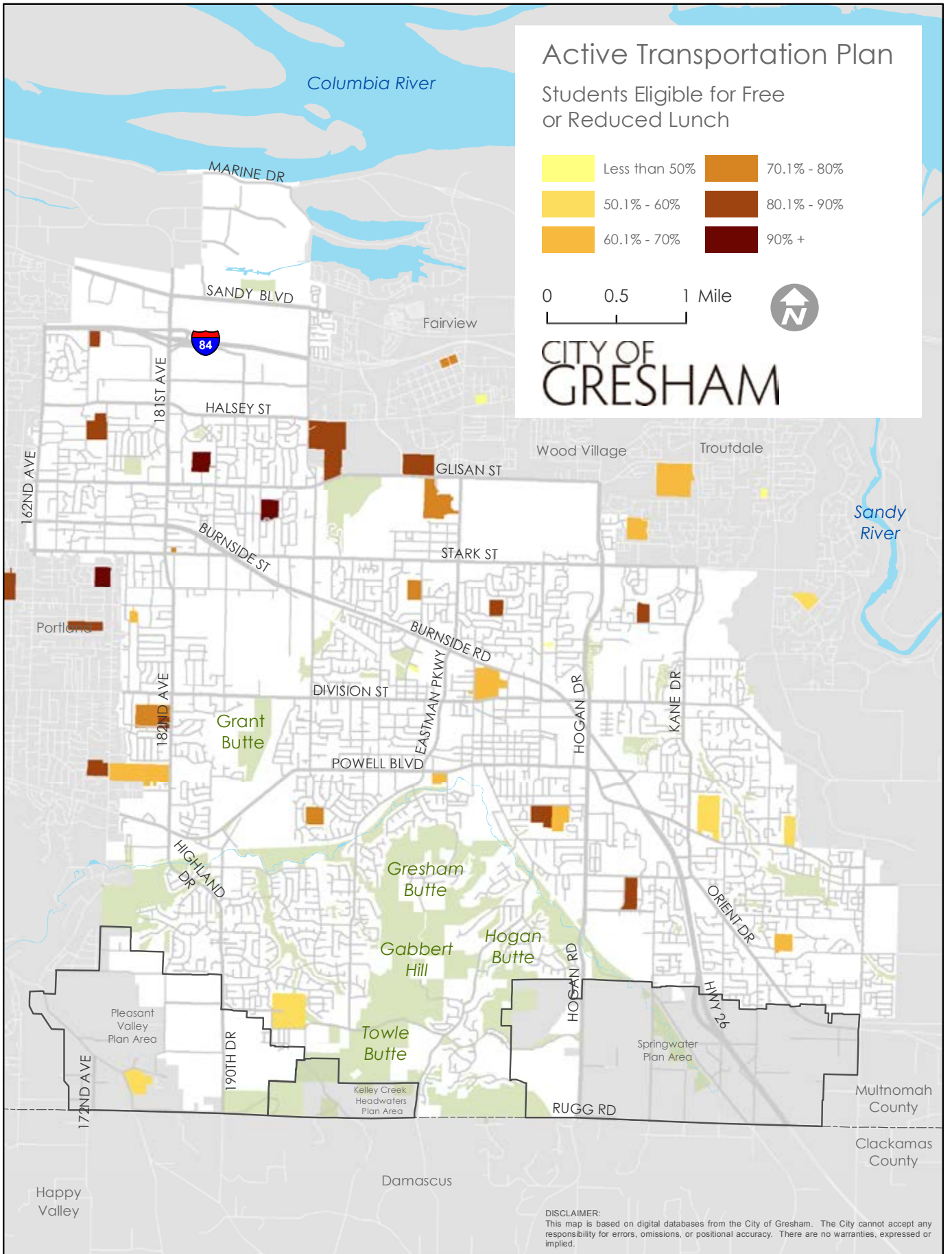
Source: State of Oregon data, 2016.

Active Transportation Plan

Students Eligible for Free or Reduced Lunch



CITY OF GRESHAM



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STREET LIGHTING

The Street Lighting Map shows the location of street lighting throughout Gresham. Improved street lighting is associated with a decrease in crime rates, as perceived surveillance is increased. Studies have also found that increased street lighting may lead to an increase in community pride and social cohesion, which can further increase crime prevention.¹

1 http://www.campbellcollaboration.org/news_/improved_street_lighting_reduce_crime.php

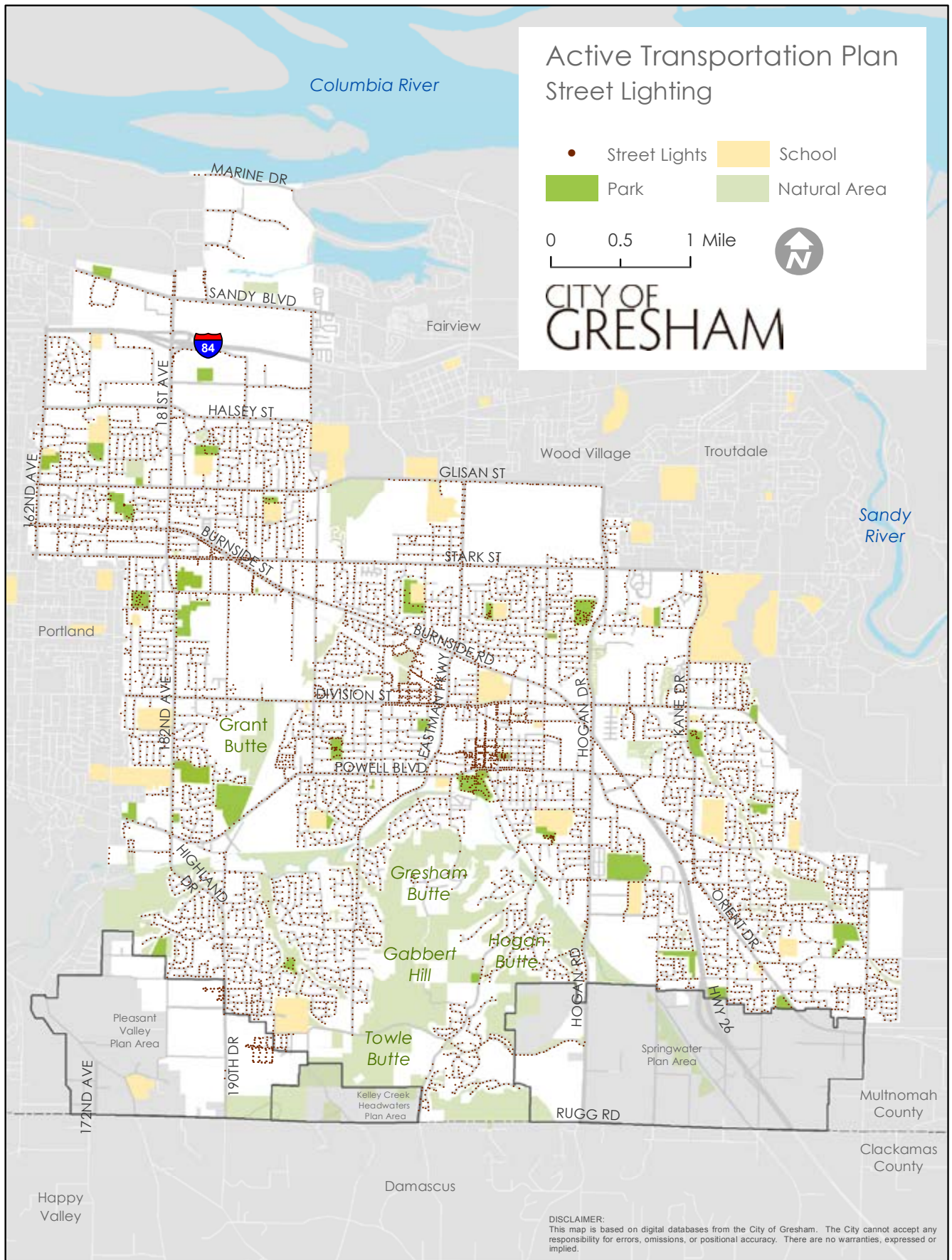
Active Transportation Plan Street Lighting

- Street Lights
- School
- Park
- Natural Area

0 0.5 1 Mile



CITY OF GRESHAM



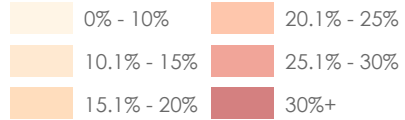
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COMMUNITIES OF COLOR WITH BIKE NETWORK OVERLAY

The Communities of Color with Bike Network Overlay Map illustrates the locations where there are concentrations of non-white populations, overlaid with the locations of bicycle infrastructure. Much of the bicycle facilities available to people in the areas with higher concentrations of non-white populations are only comfortable to strong and fearless cyclists. Majority of the all ages and abilities facilities are located in the southern parts of Gresham, where there are less concentrations of non-white populations.

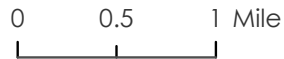
Active Transportation Plan

Non-White Population

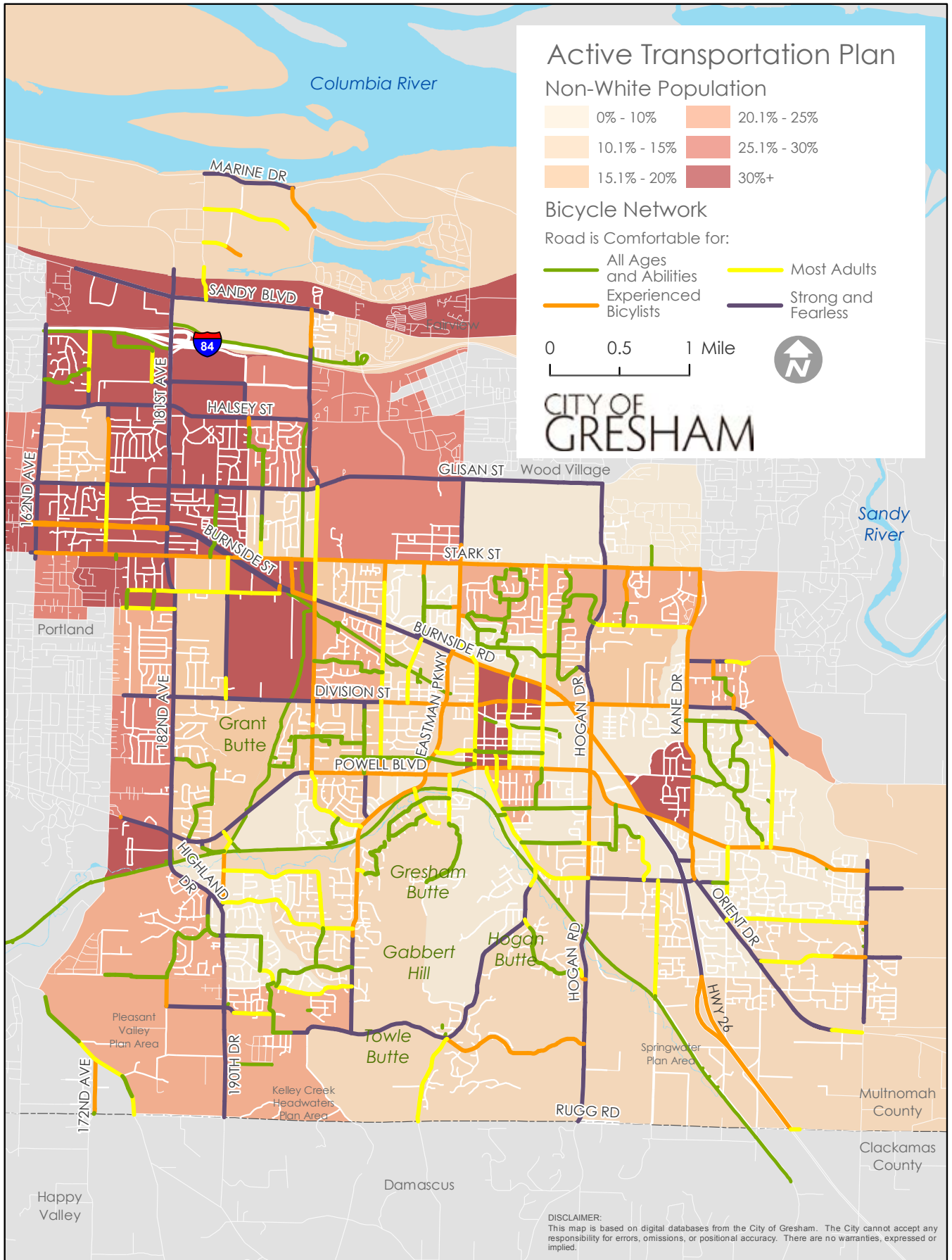


Bicycle Network

Road is Comfortable for:



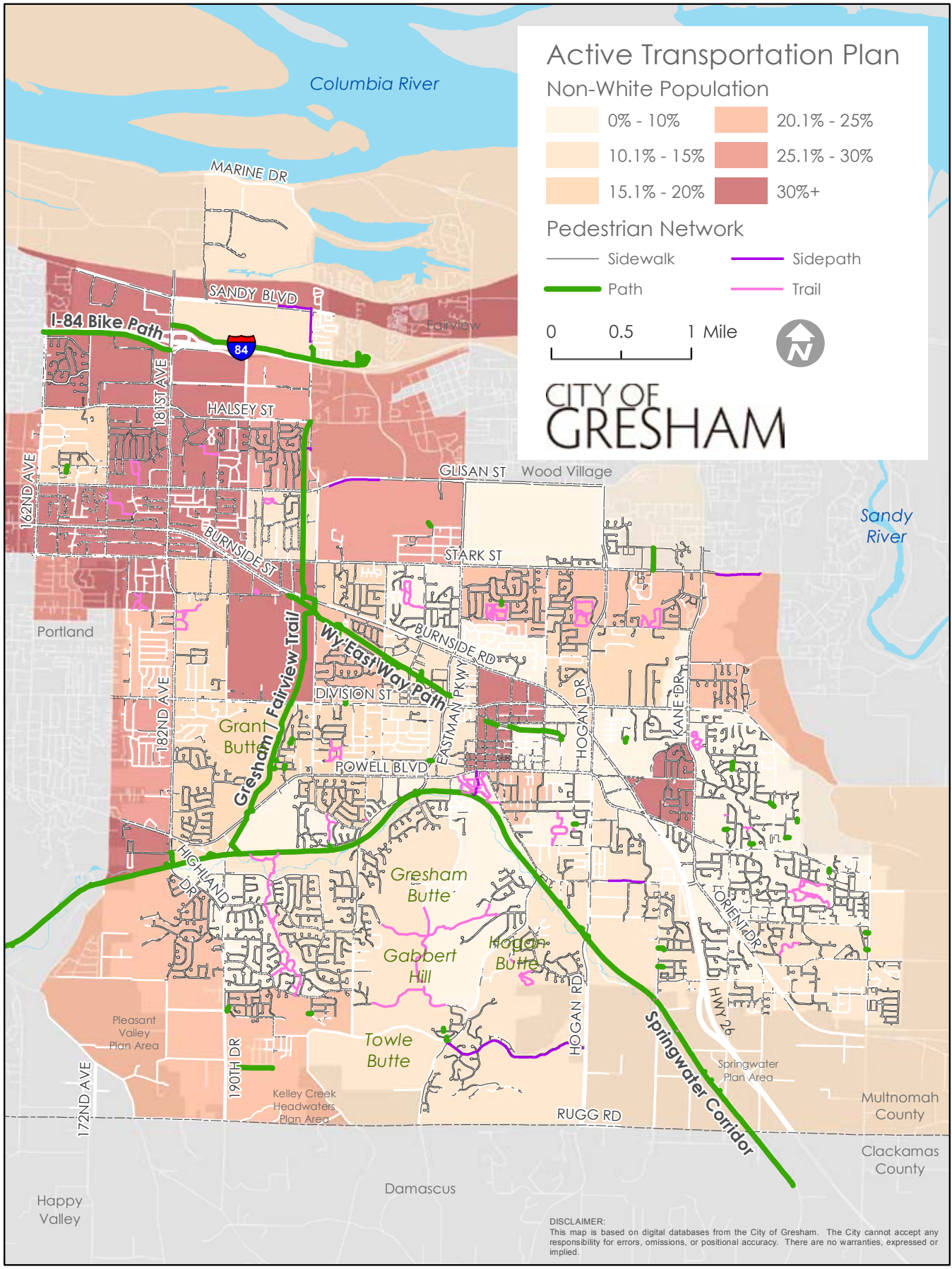
CITY OF GRESHAM



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COMMUNITIES OF COLOR WITH PEDESTRIAN NETWORK OVERLAY

The Communities of Color with Pedestrian Network Overlay Map illustrates the locations where there are concentrations of non-white populations, overlaid with the locations of pedestrian infrastructure, including sidewalks, sidepaths, trails and shared use paths. While the sidewalk network is well distributed across Gresham, there is less coverage of pedestrian facilities in locations with higher concentrations of non-white populations.



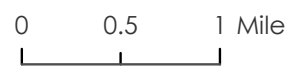
Active Transportation Plan

Non-White Population

0% - 10%	20.1% - 25%
10.1% - 15%	25.1% - 30%
15.1% - 20%	30%+

Pedestrian Network

— Sidewalk	— Sidepath
— Path	— Trail



CITY OF GRESHAM

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THE CURRENT STATUS OF EXISTING BIKE AND PEDESTRIAN INFRASTRUCTURE

EXISTING PEDESTRIAN NETWORK

Understanding where sidewalks and trails currently exist and where there are gaps in coverage is an important first step in creating a more connected walking network in Gresham. Safe, comfortable facilities are needed to promote active transportation. If the physical infrastructure is missing, incomplete, or uncomfortable, the trip is unlikely to be made by walking.

A complete network of walking and biking routes that connects people from where they live to where they work, shop, and play is the cornerstone of an active community. These facilities should be constructed to a high standard and be provided in response to the adjacent roadway context. Streets with increased levels of traffic should have a more separated walking facility to maintain user comfort.

The Existing Pedestrian Network Map illustrates where there are existing facilities for walking in Gresham. Gresham's pedestrian network consists of sidewalks, paths (also known as shared-use paths, these are paved and designed for both pedestrians and cyclists), sidepaths (no consistent design, but typically a sidewalk buffered from the roadway), and trails (natural surface networks primarily in parks and natural areas). Several areas in the city have significant sidewalk coverage, such as:

- the historic downtown and the neighborhoods of Northwest and Central City
- the residential neighborhoods of Gresham Butte and Southwest
- South of Stark Street in the North Central neighborhood
- the residential neighborhoods of Powell Valley and Kelly Creek

While many parts of Gresham have adequate sidewalk coverage, there are some areas in the city with little to no sidewalks, including:

- the southeast portion of the North Central residential neighborhood between NE Burnside Road, SE Stark St, SE 223rd Ave, and NE Hogan Road
- the residential neighborhoods directly north and south of Centennial High School
- the residential neighborhood between the City of Portland and 182nd Ave, and between Stark Street and Division Street

The City of Gresham has many trails providing connections to city parks, natural areas, and residential neighborhoods. A few of these trails include:

- Gresham Butte Saddle Trail and Gabbert Hill Trails
- Butler Creek Park Trail, which connects residential neighborhoods to the Springwater Corridor,
- several small, soft surface trails throughout city parks, such as the Nadaka Loop Trail

Active Transportation Plan

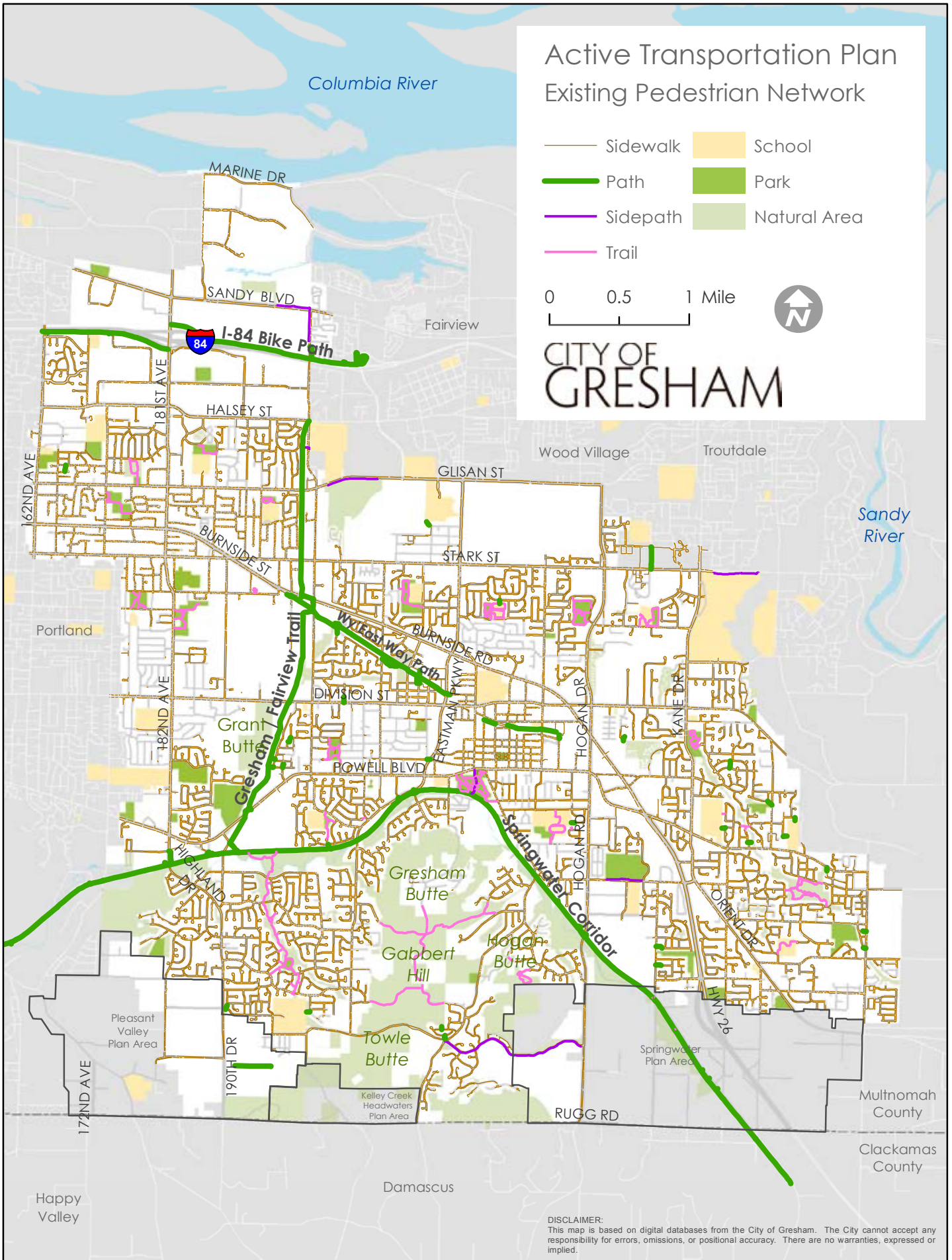
Existing Pedestrian Network

- Sidewalk
- Path
- Sidepath
- Trail
- School
- Park
- Natural Area

0 0.5 1 Mile



CITY OF
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TRANSIT NETWORK

All transit trips are also pedestrian trips between the transit stop and the destination. Transit service allows pedestrians and bicyclists to travel longer distances than they could on foot or bike. The Transit Network Map shows where existing and planned/future public transportation facilities and infrastructure are located in Gresham.

Many bus routes serve Gresham, including the following:








- #4 - Division Street (the only frequent service bus, running every at least every 15 minutes most of the day)
- #9 - Powell Boulevard
- #12 - Sandy Boulevard
- #20 - Burnside/Stark
- #25 - Glisan/Rockwood
- #27 - Market/Main
- #77 - Broadway/Halsey
- #80 - Kane Road/Troutdale Road
- #81 - Kane Road/257th Avenue
- #82 - Eastman/182nd Avenue
- #84 - Kelso/Boring
- #87 - Airport Way/181st Avenue

Gresham is also served by a light rail transit system, known as MAX, which runs along Burnside Street from Portland, ending at the Cleveland Station.

Existing bus service does not serve parts of Gresham, and north-south service in some locations is not frequent. In addition, a previous study showed that evening and weekend bus service in Rockwood makes it difficult for residents to access healthy food options using TriMet buses.

In addition to the existing bus and MAX networks, a planned Bus Rapid Transit line is included in the Transit Network Map. This BRT line would provide faster transit service in the Powell/Division corridor, between downtown Portland, and Mt. Hood Community College. Within Gresham, the route is along Division/Hogan/Stark, terminating at Mt. Hood Community College.

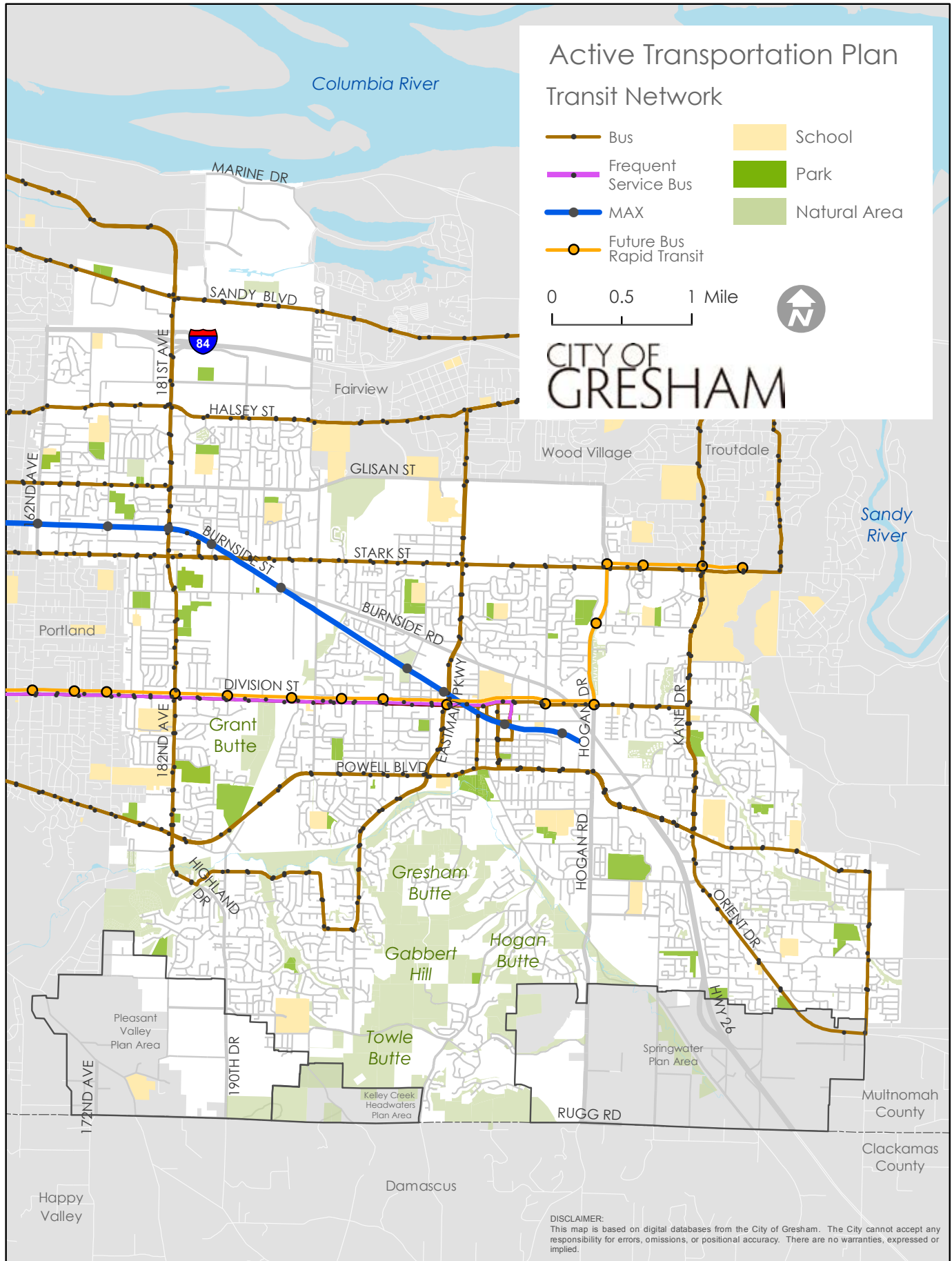
Active Transportation Plan Transit Network

-  Bus
-  Frequent Service Bus
-  MAX
-  Future Bus Rapid Transit
-  School
-  Park
-  Natural Area

0 0.5 1 Mile



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PEDESTRIAN INVOLVED CRASHES

Understanding where vehicle crashes involving people walking or using mobility devices have occurred throughout Gresham provides insight into locations and conditions that may need to be addressed to improve safety and comfort.

The Pedestrian Involved Crashes Map displays the locations of collisions and fatalities in Gresham from 2006 to 2013. While crashes have occurred across the city, the result shows corridors where pedestrian involved crashes occur most frequently. These locations and corridors tend to be streets with high volumes of cars and high levels of walking activity, such as:

- Stark Street
- Division Street
- Powell Boulevard
- Burnside Street/ Burnside Road/Highway 26
- 181st/182nd Avenue
- Eastman Parkway
- Hogan Drive
- Kane Drive

Some of the locations that have a higher amount of pedestrian-involved crashes coincide with locations that rate highly on the equity index map because they have larger numbers of people of color; lower-income residents; and younger and older residents. These include:

- Areas along 182nd from Powell to Division
- Areas between Stark and Halsey in northwest Gresham, particularly along 181st and west to the city limits.
- The western side of Downtown Gresham along Eastman Parkway and Division
- Areas near the intersection of Powell, Burnside and U.S. 26

Active Transportation Plan

Pedestrian Involved Crashes (2006 - 2013)

- Crash
- Fatal Crash
- School
- Park
- Natural Area

0 0.5 1 Mile



CITY OF GRESHAM



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EXISTING BICYCLE NETWORK

The Bicycle Network Map shows existing and planned bicycle facilities across Gresham. The existing bicycle network in Gresham is made up of various bicycle infrastructure types, including on-street bike lanes, off-street multi-use paths, and shared roadways. Safe, comfortable facilities are needed to promote active transportation. If the physical infrastructure is missing, incomplete, or uncomfortable, the trip is unlikely to be made by bike. A complete network of biking routes that connects people from where they live to where they work, attend school, shop, and play is the cornerstone of a bikeable community. Bicycle facilities should be constructed to a high design standard and be provided in response to the adjacent roadway context. Streets with increased levels of traffic should have a more separated walking and biking facility to maintain user comfort.

BIKE LANES

Bike lanes are narrow lanes designated exclusively for bicycle travel, separated from vehicle travel lanes by striping, pavement stencils, and signs. Majority of the high volume, high speed arterial streets, such as NE Glisan Street, SE Stark Street, and E Burnside Road, have existing bike lanes, although the level of comfort of many routes may not be adequate for users of all ages and abilities. This is due to a variety of factors, including proximity to high speed, high volume traffic, and the lack of a physical buffer.

PATHS

Paths (also known as shared-use paths) are paved pedestrian and bicycle facilities separated from traffic by a curb or landscaping. There are many paths in Gresham, including:

- Interstate 84 Bike Path
- Wy-East Way Path
- Gresham/Fairview Trail
- Springwater Corridor

SHARED ROADWAYS











Shared roadways are designated bike routes where cyclists and motor vehicles mix within the same roadway space. There are three shared roadway designations:

- Low volume- low traffic volume and/or low speed
- Medium volume- medium traffic volume and/or medium speed
- High volume- high traffic volume and/or high speed

The City of Gresham has designated "Caution Areas" as locations with difficult connections where cyclists should ride on the sidewalk or use a different route. Existing Caution Areas include:

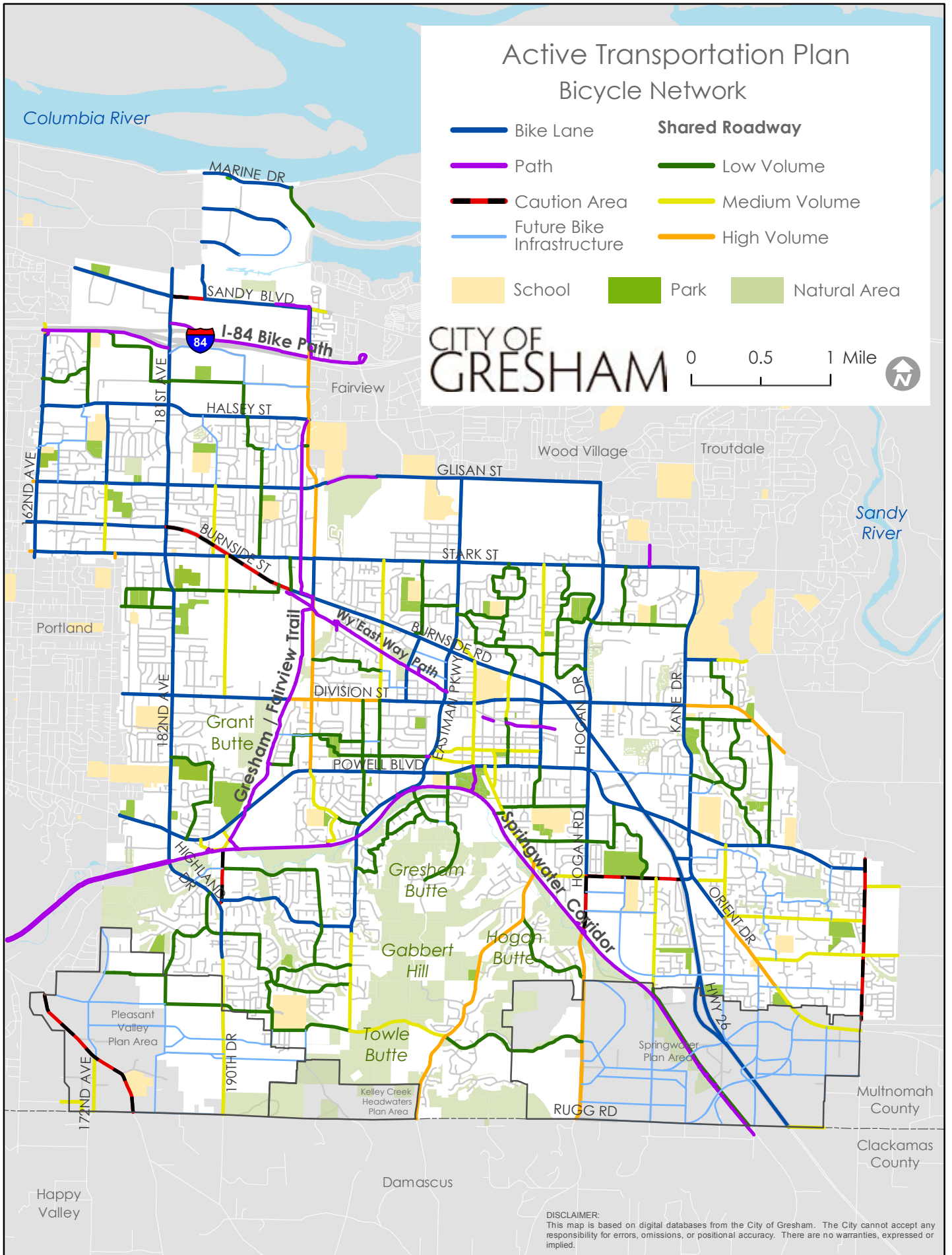
- E Burnside Street from SE 182nd Ave to SE 202nd Ave
- SE 202nd Ave from SE Division Drive to SE Orient Drive
- Sandy Boulevard from NE 181st Ave to NE 185th Ave
- SE Foster Road near SE 172nd Ave

Active Transportation Plan Bicycle Network

- | | |
|--|---|
|  Bike Lane | Shared Roadway |
|  Path |  Low Volume |
|  Caution Area |  Medium Volume |
|  Future Bike Infrastructure |  High Volume |
|  School |  Park |
| |  Natural Area |

CITY OF
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0 0.5 1 Mile



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OFF-STREET NETWORK

The off-street network in Gresham is made up of paths, sidepaths, and natural surface trails. Off-street facilities provide complete separation between people walking or bicycling and motor vehicles, creating a safe and comfortable environment for all users.

The Off-Street Network Map illustrates the locations of paths, sidepaths, and trails throughout the city, with solid lines showing existing facilities and dotted lines showing planned facilities.

Paths (also called shared-use paths) are paved pedestrian and bicycle facilities separated from traffic by a curb or landscaping. There are many paths in Gresham, including:

- Interstate 84 Bike Path
- Wy'East Way Path
- Gresham/Fairview Trail
- Springwater Corridor

There are a many planned paths in Gresham, that have been identified in previous planning documents as important links for the city and the region, including:

- Completing Phases IV and V of the Gresham/Fairview Trail (Halsey to the Marine Drive Trail)
- East Buttes Power Line Corridor Trail
- Kelly Creek Trail
- Sandy River to Springwater Multi-Modal Corridor

Sidepaths are also part of the off-street network and, while there is no consistent design, sidepaths are typically a sidewalk buffered from the roadway. Sidepaths are not considered part of the City of Gresham's bicycle network.

The City of Gresham has many natural surface trails providing connections to city parks, natural areas and residential neighborhoods. A few of these trails include:

- Gresham Butte Saddle Trail and Gabbert Hill Trails
- Butler Creek Park Trail, which connects residential neighborhoods to the Springwater Corridor,
- several small, soft surface trails throughout city parks, such as the Nadaka Loop Trail

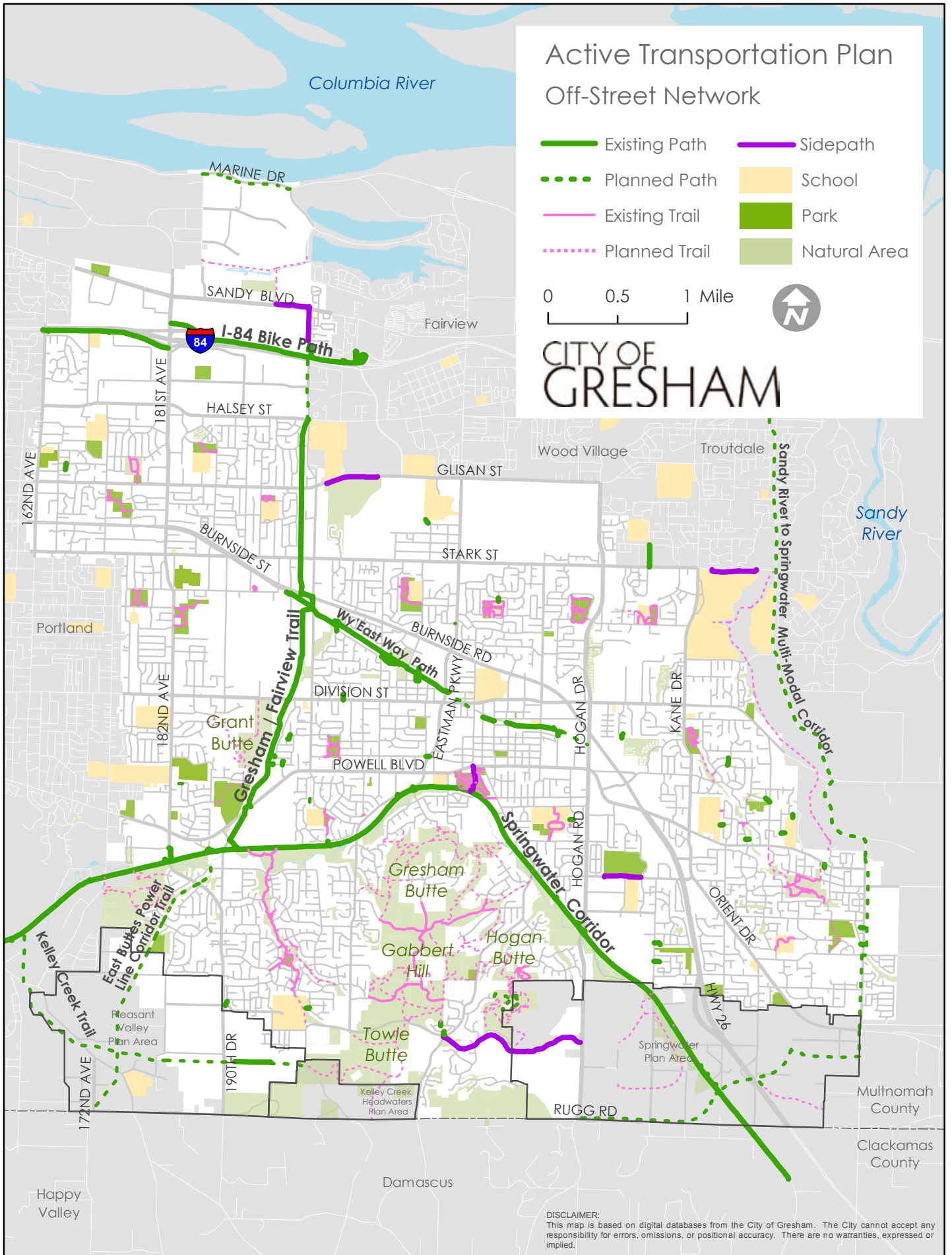
Active Transportation Plan Off-Street Network

- Existing Path
- - - Planned Path
- Existing Trail
- - - Planned Trail
- Sidepath
- School
- Park
- Natural Area

0 0.5 1 Mile



CITY OF GRESHAM



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BICYCLIST INVOLVED CRASHES

Understanding where vehicle crashes involving people traveling by bicycle have occurred throughout Gresham provides insight into locations and conditions that may need to be addressed to improve safety and comfort.

The Bicyclist Involved Crashes Map displays the locations of crashes and fatalities in Gresham from 2006 to 2013. While crashes have occurred across the city, the result shows corridors where bicycle involved crashes occur most frequently. These locations and corridors tend to be streets with high volumes of cars and high levels of bicycle activity, such as:

- Stark Street
- Division Street
- Powell Boulevard
- Burnside Street/ Burnside Road/Highway 26
- 181st/182nd Avenue
- Eastman Parkway
- Hogan Drive

Some of the locations that have a higher amount of crashes involving people riding bicycles coincide with locations that rate highly on the equity index map because they have larger numbers of people of color; lower-income residents; and younger and older residents. These include:

- Areas along 182nd from Powell to Division
- Areas between Stark and Halsey in northwest Gresham, particularly along 181st and west to the city limits.
- The western side of Downtown Gresham along Eastman Parkway, Division and Powell
- Along Kane between Orient and First Street

Active Transportation Plan

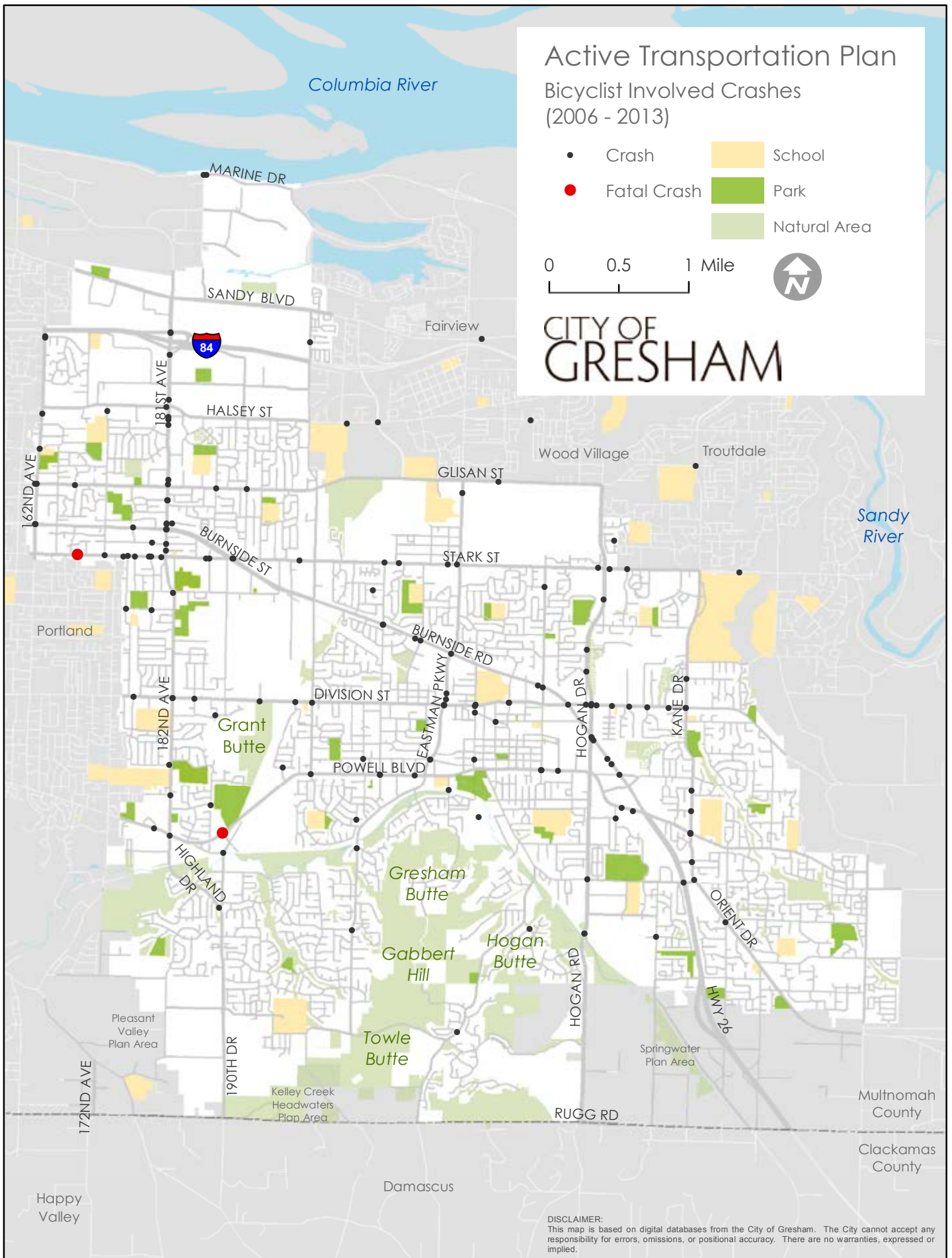
Bicyclist Involved Crashes (2006 - 2013)

- Crash
- Fatal Crash
- School
- Park
- Natural Area

0 0.5 1 Mile



CITY OF GRESHAM



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