

PORTLAND LRT 10 STATION AREA BEST PRACTICES ASSESSMENTS AND RECOMMENDATIONS

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In Portland, light rail transit is not just about

moving people; it is also expected to leverage private investment to create and support viable neighborhoods. The City has a well earned reputation for accomplishing both objectives. But for all of the development successes in the central city, the results have been less satisfying around many light rail stations, particularly on the Blue Line which was the first extension of MAX to open in 1986.

The purpose of this report is to provide guidance to the City of Portland about how to accelerate desirable development activity around light rail stations. It also recommends techniques for evaluating the potential success of new LRT stations. The guidance and recommendations result from research on best practices and an evaluation of ten Portland LRT stations. Several themes dominate all of the stations:

Following Best Practices makes a difference Cities, counties, and transit agencies around the country are pursuing proactive approaches to promote and support development activity by using a variety of Best Practice tools. The Best Practices used in this report create the foundation for understanding what is missing in under-performing station areas and what might be done to remedy the situation. The fundamentals of the Best Practices are:

- Form a Coherent Vision and Stick to it
- Focus on Implementation
- Get the Land Uses Right
- Promote Density
- Create Convenient, Comfortable Pedestrian & Bicycle Connections
- Create a Place, Not a Project
- Get the Parking Right
- Make Buses Work
- Create Supportive Public Policies
- Focus Public Investments to Support Real Estate Dynamics

Public Interventions leverage private participation Where there has been successful development around LRT stations, public interventions have always been a key factor. There are four types of public interventions:

- Regulations that help facilitate desired development
- Investments in infrastructure such as streets, sidewalks and public spaces
- Development incentives that provide direct financial support for desired development
- Public sector leadership and accountability for implementing development plans

For the most part, the slow pace of development activity in the station areas is not due to zoning. Local policy and code generally supports the density and uses needed for successful transit orient development. However, at a number of station areas, strategic parcels are currently zoned CG (general commercial) with an emphasis on auto-oriented uses. The City should evaluate these sites for a potential change in zoning or provide greater use and density flexibility within the CG development standards.

It's about the pedestrian Transit riders are pedestrians up to the point they board the bus or LRT. It is essential to create environments that encourage pedestrian access to stations. High quality access will mean more transit riders and private investment. Several fundamental principles described in the Best Practices are missing in the station areas. The most glaring is the lack of a good pedestrian network and compact blocks. The degree of the problem varies by station area, but all suffer from poor pedestrian connectivity. Wider sidewalks, planting strips, on street parking, safe crosswalks and a complete network of improved streets would enhance the feasibility of development.

This report is a call to action for City leadership. Portland has done a good job over the last 20 years of defining a general vision for station communities. Place-specific articulation of that vision and implementation has been uneven. The City should use the findings in this report to establish an agenda for change that is compelling to the public and backed by a commitment of leadership and resources.

Study Purpose

The City of Portland and the larger Portland metropolitan region have a national reputation for success with light rail transit (LRT). Since Portland's first light rail line opened in 1986, the region has continued to expand rail transit with additional service to suburban locations and a phased development of a Portland streetcar line. A new extension, the Green Line to Clackamas Town Center, is under construction. Planning is also underway for an extension to the City of Milwaukie.

In Portland, LRT is not just about moving people; it is also about leveraging the public investment to create more sustainable neighborhoods and a more sustainable region. Light rail transit is an important component of the region's growth management program and is a catalyst for higher density development in many areas served by the system. However, the quality and character of new development adjacent to stations is decidedly mixed.

There are numerous examples of LRT stations which are isolated and disconnected from the adjacent neighborhoods. Most new development in these stations is neither high quality nor very dense. Some stations have had negative community impacts, not positive ones. In short, the substantial investment in light rail is not adding value to the communities around many light rail stations.

The City of Portland desires to learn why some stations areas are successful and others fail.. This report evaluates the performance of ten station areas based on best practices and summarizes what works and what can be done to make them better. The information developed in this report past will be used to create an action program to improve existing station areas and to guide future investments in new LRT extensions within the City.

Why Transit Oriented Development is Important

Within the City of Portland, the regional light rail system represents a multi-billion dollar investment. The public will get a maximum return on the investment in light rail if it also functions as a viable building block for adjacent neighborhoods. New investment around transit stations has four major benefits:

→ Accommodating growth: The Portland region is expected to grow by 1 million more residents by 2030. New, higher density development adjacent to transit stations will help accommodate new growth and promote the use of modes other than the automobile.

→ Placemaking: The public investment in light rail can create new interest in a community which means private investment will

likely follow. Through wise public investment, good design and complementary private investment, the areas around stations can become places where people want to walk and gather.

→ Access: LRT moves people and when combined with adjacent new development can provide improved access to services and jobs. That is good for the economy and good for citizens who depend on transit to access health care, retail and social services.

→ Sustainable Communities: By focusing new development around transit stations, communities can help reduce the number of new auto trips and the related impacts on air quality and energy consumption.

Organization of the Report

The organization of the report reflects the steps of the station evaluation process: identification of best practices; evaluation of what is missing in the station areas; identification of public interventions, and an analysis of each station area showing existing conditions, potential redevelopment opportunities and appropriate public interventions.

1. Best practices An inventory of best station practices was developed drawing from research and case studies from other communities. This information was supplemented in the case of each station by a summary of special comprehensive plan or district plan policies applicable to individual stations.

2. Station Assessment In depth evaluation of each station that examines existing conditions, potential redevelopment, what is missing and recommended public interventions.

3. What is missing Each station was evaluated to determine which of the best practices were missing, present or could use improvement.

4. Public Interventions The report provides an overall summary of the public interventions available to the City. For each station area, these interventions form the basis for City-led actions that lead to change.

High-quality urban environments share many of the same physical characteristics. A “good” urban place will contain a mixture of uses and have a variety of services within walking distance, buildings will be oriented to the street rather than inwardly oriented toward parking areas, and there will be good pedestrian connections between destinations to encourage pedestrian activity. These characteristics of a “good” urban place have benefits beyond the mere physical however. High-density, walkable, mixed-use neighborhoods create the conditions and provide the necessary “critical mass” that allow mass transit to thrive. A transit station is only viable if there are enough potential riders within the transit stop’s ridershed to ensure patronage. This is typically measured in terms of residential density (and in many cases, employment density). Unfortunately, residential densities in many urban and suburban areas often fall far below the threshold number of households per acre needed to support high quality transit service.

In many cases, however, transit agencies are not sitting idly by and waiting for densities to reach this critical mass before extending transit service, but rather, they are looking to leverage the transit itself in order to encourage increased development and increased density around existing stations. Rather than waiting on developers to create the type of walkable, mixed-use environments that planners and architects have been advocating for, and extending transit services to these areas once transit supportive densities have been established, transit agencies (in cooperation with city and county planning departments) are increasingly pursuing a proactive approach and using various planning tools to encourage higher density development around existing transit stations. The result is twofold: Cities are able to use the transit station as a tool for implementing various Smart Growth and urban design goals, and transit agencies are able to maximize ridership through the increase in density.

Development pressures around transit stops are by no means automatic. However, many jurisdictions have had great success in encouraging transit-oriented development, and research has shown that targeted planning efforts generally results in accessibility-related price premium for land surrounding transit stations. The purpose of this literature and case study review is to examine best practices in TOD planning and development, from visioning to implementation, in order to maximize existing (often underperforming) transit stations along Portland’s MAX line, as well as to guide planning efforts around future MAX stations.

Form a Coherent Vision

It has been noted that the concept of planning for transit districts is not a new one: The streetcar suburbs of the 1920’s and 1930’s were not mere happenstance, but were (privately) master planned communities.¹ Ensuring that real estate surrounding transit stops is developed in a manner that creates an asset for the surrounding community, therefore, relies upon creating a coherent planning vision. This is particularly true when transit-oriented development is desired in areas where the market may not necessarily incite development (or the type of development desired) on its own.²

Along with adopting the zoning necessary to allow for the desired type of development, the adoption of master plans for the corridor or station areas where transit-oriented development is desired can do much to encourage development. Because a plan can outline ahead of time the type of developments that are desired for the area, developers can be certain that their projects will be approved from the outset. This explicit communication to developers of what exactly the community wants for the area will prevent lengthy (and costly) holdups during the development review process, and expedite projects. This increased security and decreased delay and cost can serve as a significant incentive to develop in these station areas.³

Like all planning efforts, planning for station areas must be the result of extensive public process. Public participation is crucial in order to ensure that development occurs in a manner consistent with the community’s goals: Development around transit should be the vision of the larger community, not just the developer’s vision. Stakeholders that should be involved in the planning process include citizens, landowners, developers, local businesses, the transit agency, local elected officials, and local government departments. While the vision should look toward the future and be focused on bringing quality development to the community, it is important that it also be grounded in current economic reality. Community members should understand the financial realities of development, and integrate this understanding into their planning work. This will help to ensure that the vision is not so impractical as to render it impossible.⁴

The Local Context: Forming a Coherent Vision

Rezoning is not enough Portland has been very successful in planning for station areas, in including the community in that process and identifying goals that represent the vision of the larger community. The Portland approach has historically been regulation-driven, mostly in the form of rezoning. What is missing at the conclusion of these planning efforts is a more

complete “master plan” for station areas that is place-specific, that identifies the street and block structure and desired urban form on a block-by-block basis.

In Lents Town Center, transformation to a transit oriented development has gone beyond rezoning. Portland Development Commission (PDC) partnered with TriMet and other agencies to ensure that connections to the transit station were constructed, including sidewalk improvements along 92nd and future improvements on Ramona, and recommended improvements to the multi-use path. PDC also acquired important properties, such as the Lents Little League site, in order to control the character and mix of development. Center Commons development to the south of the station at 60th is another example of PDC-led transformation consistent with a TOD vision.

Where the regulation-driven approach produces the least reliable results are in those places where increase in density and transit oriented development is anticipated to occur primarily through infill, such as at 148th and 162nd station areas. Here the transit plan upzoned lots to RH and R1 high density residential that sit directly adjacent to existing R5 and R7 zones. There is no assurance of compatibility beyond setback requirements included in the base zoning development standards. Furthermore, much of the lot-by-lot infill cannot support the through street infrastructure improvements that are necessary to improve district connectivity.

Focus on Implementation

Part of the planning process includes focusing on the planning and zoning tools needed to implement the final vision. This includes having a zoning ordinance in place that supports transit-oriented development, as well as discussing any financing tools needed (these and other implementation tools will be discussed at length later in this report).⁵ Remaining aware of the various implementation tools within a city or transit agency’s planning “tool kit” during and throughout the planning process helps to ensure that the final vision is in fact realistic and implementable.

One important consideration to keep in mind regarding the eventual practicality and implementability of a final plan is its flexibility. Oftentimes, if development regulations are too stringent (particularly in areas where the market may not be particularly strong) development may be inadvertently deterred. Once a vision has been adopted, there should ideally be some flexibility within it to allow the community to change the plan over time as market conditions change.⁶

The Local Context: Focus on Implementation

Flexible zoning Certain base zone development standards and parking requirements don’t allow enough flexibility to respond to changing market conditions. A couple of examples:

CG (General Commercial) requires parking. The parking requirement is exempt for development within 500 feet of the station. But outside of 500’ projects are still required to provide parking to City-set set ratios, whether or not the market or the development type requires it. This is a particular hardship for mixed use buildings.

Some city base zones require residential on top of commercial, such as the CM zone (Mixed Commercial/ Residential). The required residential limitation may prohibit redevelopment on sites where single-use retail may be desirable over a vacant lot. An example is the CM lot on the SW corner of the 148th.

The planning and development process for Cascade Station provides an example of the importance of maintaining flexibility once a plan has been adopted. Initially, the area was planned as a traditional urban village retail center, with a mixture of office and retail. Part of the original plan’s urban village concept involved minimizing retail footprints. Big-box stores greater than 50,000 square feet were not permitted by the plan. These size constraints coupled with slowing in retail markets after September 11 made it difficult to appeal to national retailers. The City eventually increased these square footage caps, and allowed as many as three much larger stores to locate in the area. This shift created a significantly different development than the original plan envisioned. However, although a plan had already been adopted, the City’s flexibility allowed development to adequately respond to the retail economics, and ultimately cleared the way for development to occur.

Get the Land Uses Right

Make Retail Strategy Market-Driven, not Transit-Driven Transit access alone is oftentimes not enough to initiate development pressures, particularly when transit stations are located in areas where the market has not spurred development on its own. Retail development is particularly susceptible to considerations regarding location, market, and design, issues which are oftentimes entirely independent of transit access. While transit access may strengthen a retail market, the retail must be viable independent of it.⁷

The planning axiom that “retail follows rooftops” must also hold true within transit-oriented developments. Retail development must have supportive residential densities surrounding it to thrive. For this reason, retail development cannot be counted upon to drive development around transit. Because retail is so sensitive to development context, the Urban Land Institute suggests that public agencies refrain from requiring retail components as part of a transit-oriented development without adequately analyzing its market support. The ULI notes that if retail fails within a development, the whole development may be tagged a failure.⁸

The Local Context: Make Retail Strategy Market-Driven

A local example of the principle described above is Orenco Station, in Hillsboro. The retail component of the development is more than 1/4 mile from the MAX station itself, however, pushing the development a bit further away allowed the developers to maximize the existing arterial. Accordingly, the development’s retail component fronts Cornell Road, where it is able to take advantage not only of transit traffic, but of arterial visibility as well. Furthermore, although not specific to retail, the developer’s decision to phase the lower-density, single-family housing component before the multi-family component is a testament to the importance of following local markets, a principle especially crucial in retail development. The lack of precedent for attached product in the suburban market, let alone the high densities encouraged by planners, significantly increased the project’s risk. Developing the single-family product first enabled the developers to minimize that risk, and this flexibility helped to make the project work.

Develop Mixed-Income Housing and Encourage Every Price Point to Live Around Transit As with any neighborhood, developments around transit that support and provide for diversity are oftentimes the most vibrant (and the most desired) urban neighborhoods. In fact, the urban resurgence currently visible in many cities is often attributed to this search for diversity.⁹ Providing a mixture of housing types and targeting homeowners at multiple price points (as well as renters) is therefore crucial to creating a vibrant, eclectic community. Beyond the incentive to increase the market appeal for a development, the motivation to provide for affordable housing close to transit is strengthened when considering the greater dependence that lower-income citizens often have on transit. Homes in close proximity to transit may help to ease household budgets as transportation expenses are eased.¹⁰

The Local Context: Develop Mixed-Income Housing

Demographic information for the ten station areas indicates that, for the Red and Blue Line Stations, the mix of owner-occupied housing to rentals is close to fifty-fifty within one mile for most of the stations and that this mix has remained somewhat level between 2000 and 2007.

Looking at new development, however, mixed-income housing projects are somewhat rare. One exception is the PDC-led mixed-income Center Commons development at 60th, which combines 288 for-rent units including senior housing and 26 for-sale townhomes.

The reason new mixed-income projects and infill are rare in the Red and Blue Line station areas may have to do with the 1980s rezoning to higher densities—at 60th for instance, the Comprehensive Plan allows zone changes for infill from R5/R7 to R1/RH. While this substantially increases density potential, higher density zones encourage rental housing in the form of low-, medium- and high-rise apartments, especially where the median income is low and condominiums are not viable. Additionally the higher density zones such as RH actually prohibit the development of ownership units such as cottage clusters, courtyard apartments and townhomes,

Rezoning to high-density zoning has another downside: it is impossible to assure compatibility with existing development or transitions in density from station center to edge. At 60th for example, the Comprehensive Plan allows zone changes from R5/R7 to R1/RH on a lot-by lot infill basis. The result can be 6-8 dwelling units per acre right next to 43-65 dwelling units per acre (R1) or 80-125 dwelling units per acre (RH).

The future Green Line station areas are dominated by owner-occupied housing units. Planning and re-zoning around the Green Line Stations may spur the addition of more rental units, especially if the predominant residential zoning in the area, R5, R1 and R2 (with “a” overlay) is switched to a higher density zoning such as RH.

The challenge for all station areas may be ensuring maintenance/redevelopment and development of ownership units, to raise area incomes to a level that will support desired retail.

Allow Single Uses Where Appropriate (Mixed Uses Don’t Have to be in the Same Place) Encouraging a broad mixture of uses within close proximity often helps to create vibrant, active neighborhoods. However, it should be remembered that not every neighborhood needs to have multiple uses in order to be successful. Station areas along a transit line may in fact benefit from focusing more intently on particular uses. A successful transit line may have stations that are primarily residential, primarily commercial, or primarily employment-centered. Because transit creates opportunities to travel between these distinct nodes, the corridor itself benefits from the mixture of uses spread across it. Additionally, diversity of use along a transit corridor can help to smooth out peak-demand travel patterns.¹¹ The Urban Land Institute notes that “[r]etail and entertainment uses that encourage transit trips to downtown at lunchtime, after work, or on weekends help take advantage of excess transit capacity at those times. Similarly, locating jobs at suburban stations creates demand for reverse commuting.” They go on to note other land uses that support two-way travel, including schools, hospitals, airports, and destination retail.¹²

Promote Density

Density, and the increased accessibility that it allows for, is crucial to transit ridership: “[A]ll else being equal, the more housing and jobs within a short walk of the transit station, the greater the ridership.”¹³ A report by the Transit Cooperative Research Program reports that “a ten percent increase in population density around transit stations was found to increase ridership by 5 percent, while doubling density was shown to reduce vehicle travel by up to 20 percent.”¹⁴ Increasing density is therefore crucial to increasing transit ridership, and encouraging more intense development around transit should be a key strategy in ensuring the success of new transit investments. Furthermore, in addition to increasing transit ridership, residential densities help to create a retail market base, as discussed in Section III above.

Maximizing Transit Ridership: Recommended Transit-Supportive Densities Research conducted by the New York Regional Plan

Association shows that a minimum residential density of seven housing units per acre is needed to support basic bus service with 30 to 60 minute headways, and 15 units per acre is needed to support premium bus service with a 15 minute or lower headway. Additionally, a minimum of nine residential units per acre along a 40 to 150 square mile corridor is needed to support light rail, and 12 units per acre along a 150-200 square mile corridor to support heavy rail.¹⁵ Indeed, these numbers have become “widely used rules of thumb among transit planners.”¹⁶

These suggestions are mere minimums, however, and density recommendations within certain jurisdictions often far exceed these numbers. In fact, according to a number of studies, transit ridership increases markedly when the density of residential development reaches at least 15 dwelling units per acre.¹⁷ Along its Bus Rapid Transit Corridor, the Santa Clara Valley Transportation Authority suggests an average residential density of 40 units per acre.¹⁸ These density recommendations, though targeted at BRT corridors, do not differ significantly from density recommendations proffered for rail TOD’s. Reid Ewing suggests that residential densities around light rail should be from 20-30 units per acre¹⁹, and in fact, surveys administered by the Transit Cooperative Research Program to transit agencies, local governments, and redevelopment agencies across the country indicate that outside of the Washington D.C. area, the typical TOD does in fact range from 20 to 30 dwelling units per residential acre.²⁰ San Diego, Metropolitan Portland, and Washington County, OR, have adopted guidelines for TOD densities, calling for a minimum gross residential density of 18 units per acre in station areas, and even higher densities in urban TOD’s.²¹ Residential density around the BART Pleasant Hill station in Contra Costa County, California averages approximately 40 units per acre.²² The Santa Clara Valley Transit Authority has “one of the more aggressive [density] recommendations,” encouraging development at 80 units per acre around rail stations within regional core areas.²³

The Local Context: Promote Density

The City of Portland’s density targets around LRT station areas far exceeds the minimum densities needed to support transit as described above. The City generally zones residential areas around LRT station areas R1, RH, or EX. The R1 zone carries a minimum density of approximately 43 units per acre, and the RH zone requires a minimum of 80-125 units per acre. The EX zone is intended to allow mixed-uses with predominantly industrial and commercial uses. Although residential uses are allowed, EX is not intended as a residential zone, and no minimum densities are set.

Create Convenient, Comfortable Pedestrian & Bicycle Connections

The success of any TOD can largely be measured by the degree of pedestrian-orientation created within the development. Pedestrian environments strongly rely upon the connectivity of the area, and for this reason, transit-oriented developments should typically be constructed on a traditional grid street pattern. Compact, well connected blocks help to maximize pedestrian connectivity and convenience by providing multiple routes to and from destinations. They also serve to disperse automobile traffic thereby minimizing the impact of cars on the pedestrian environment. Ideally, block perimeter should be limited to no more than 1,350 feet.²⁴

Because access to the transit station is paramount, a successful TOD should integrate its pedestrian and bicycle network into the surrounding neighborhood to the highest degree possible. Unconnected, curvilinear streets and cul de sacs should be prohibited in those areas around transit stops, as they seriously impair pedestrian and bicycle connections. Additionally, station areas should mandate narrower streets, so as to minimize automobile speed and calm traffic, and more of the streetscape should be devoted to pedestrian uses. These approaches ensure that pedestrian level of service dominates the physical environment, and relegating automobile level of service to a secondary consideration.²⁵

Because the cost of providing this fine-grained infrastructure can be very expensive, and in many instances may deter development, local governments may consider incentivizing development around transit by dedicating some degree of public funds to such infrastructure improvements. Assisting with the provision of crucial pedestrian and bicycle infrastructure not only helps to alleviate some of the costs (and risk) associated with transit-oriented development, but assures developers that political will is allied behind the area's development.²⁶

Finally, pedestrian comfort and safety should be maximized through the use of lighting, and ground floor building design should create interest along the sidewalk through the use of fenestration, awnings and canopies, inviting building entries, and quality materials. Furthermore, developments should provide bicycle parking that is sheltered, well-lit, secure, and highly visible.²⁷

The Local Context: Create Convenient Connections

Public contributions toward crucial infrastructure improvements can help increase the viability of private projects. Outside of an Urban Renewal Area, a Local Improvement District (LID) is the primary vehicle by which a local jurisdiction may dedicate public funds to these types of improvements. Subsidizing the building of City standards streets with a LID was highly successful for a project at 122nd station area (not included in this report).

Create a Place, Not a Project : Ensure Good Urban Design

The most successful transit-oriented developments create an amenity for the community, and serve as a “center” to the surrounding neighborhood. Creating development that evokes a real “sense of place” is therefore crucial. This means paying careful attention to and placing great importance on those urban design details that help to create unique places. Creating places that engage the public includes incorporating space-defining elements such as plazas and courtyards, as well as public art pieces that serve as landmarks or beacons. Ideally, the transit station itself should be designed as the center of the development. The Urban Land Institute's publication “Developing Around Transit” suggests that the most successful TOD's employ the following, place-making design principles:

- Design and position the station to foster the creation of an activity center that surrounds the station on all sides
- Ensure that the design of the station is of high quality and reflects the character of the surrounding community
- Include engaging public spaces, attractive street furniture, and public art. Public space is important in the creation of place; among other functions, it allows for events such as concerts, markets, exhibits, and celebrations – events that bring people and vitality to the area and stimulate economic activity.
- Promote pedestrian connections by creating compact blocks, pleasant walkways, and comfortable, well-marked, and continuous streetfront experiences. An appealing pedestrian environment strengthens the sense of place and supports retail spending.
- Create attractive landmarks and gateways to the development
- Incorporate a variety of residential uses to ensure round-the-clock activity.²⁸

Also crucial to creating quality environments around transit stops are regulations controlling such features as setbacks, lot size, and frontage. In order to create quality walking environments, buildings in the TOD should be oriented to the street, and zoning regulations

for the area should establish maximum setback, or “build-to” lines. These maximum setback lines will force parking to the rear of the environment and help to generate a more interesting street wall for the pedestrian. Frontage and lot size should also be reduced in the TOD in order to encourage higher densities and to bring buildings closer together (and thereby more walkable). However, careful attention should be placed on ensuring that these higher station area densities “step down” as the development transitions into the surrounding neighborhood. This helps to ensure a seamless, gentle transition into existing neighborhoods. It also helps to ensure that any negative impacts associated with development are minimized, and that neighborhood character is preserved.

Get the Parking Right

The provision of automobile parking is perhaps one of the most critical issues in the planning of any transit-oriented development. As has been noted many times over, environments which are designed primarily for a high automobile level of service tend to be overtly hostile to the pedestrian. Wide roads with speeding cars are a serious threat to pedestrian safety, and large expanses of surface parking artificially spread the built environment, making travel by foot impractical. Furthermore, a built environment defined by fields of asphalt provides little visual interest to the pedestrian and therefore does little to entice people out of their cars. For all of these reasons, it would seem that providing a high level of service for the driver is often mutually exclusive of creating a pedestrian-oriented development. If the success of transit-oriented development hinges largely on creating an inviting, walkable environment, too much consideration paid to automobile access will certainly spell failure for the project.

Park and Ride Facilities The need to balance parking availability with “place-making” is critical, and one that transit agencies continuously struggle with according to Belzer and Autler in their report for the Brookings Institution, *Transit Oriented Development, Moving from Rhetoric to Reality*.²⁹ They point out that parking availability is closely tied with the station's role in the larger regional system, and as a result the transit agency is strongly pressured to ensure adequate parking for riders out of a desire to ensure access to the largest number of riders possible. However, the transit agency's desire to create a transit “node” greatly conflicts with the TOD vision of creating a “place.” Lund, Cervero, and Willson echo this point in their report *Travel Characteristics of Transit-Oriented Development in California*, stating that while providing station area parking can provide an important ridership base to the transit agency, too much station area parking can inhibit TOD's by taking up land close to the station that could otherwise be used for development,

thereby missing the opportunity to maximize development potential and undermining regional land-use benefits.³⁰ The balance of parking provision, they point out, is a delicate one. If station area parking is too low, parking will likely spillover into surrounding neighborhoods, possibly causing anger and contention. Additionally, if a station is serving a large, automobile-oriented commuter shed, insufficient parking could mean that the transit agency will not reach its ridership potential.

The authors suggest that a common solution for this dilemma is to replace surface lots with multistory structured parking, thereby maximizing parking capacity within the station and freeing up developable land. Ideally, these parking structures should be located within a five-minute walk of the platform, rather than directly in front of, or next to the platform, thereby allowing commuters to continue to park within walking distance of the station while simultaneously freeing the most critical land for development.

Parking Structures It should be noted, however, that parking structures should be carefully designed so as not to detract from the pedestrian environment. Ideally, they should employ the same high quality materials and architectural design practices as surrounding buildings. In particular, great attention should be placed on the design of the ground floor. Oftentimes, parking structures located along the street create large empty walls, which negatively impacts the pedestrian environment. To combat this, parking structures should ideally be “wrapped” within buildings, or alternatively, structures themselves should be wrapped with ground floor commercial or other uses which will maintain street level interest and activity. For example, San Diego’s central business district requires parking structures to have retail space and architectural features facing the street.³¹

Shared Parking Policies Setting lower minimum parking requirements, or setting maximum parking limits that reflect the development’s access to transit is certainly the first step in minimizing parking within the transit-oriented development. Other strategies for further minimizing parking supply are also suggested by much of the literature, however. The most mentioned approach is shared parking. The California Department of Transportation defines shared parking in their report as publicly or privately owned parking that is shared by two or more individual land uses without conflict. “Combining land uses with different peak parking demands results in a demand for parking that is less than the demand generated by separate free standing developments, allowing more land to be used for other purposes.”³² It is the difference in peak parking periods in a mixed land use, such as the transit-oriented development, that makes shared parking possible. The authors

call shared parking one of the most promising tools in reducing aggregate parking levels in TOD’s. Shared parking, they report, depends on the specific uses within the site and the particular combination and interaction of those uses. Uses with different activity periods work best in a shared parking scenario. For example, an office unit generates peak parking demand during the daytime, which can reasonably share parking facilities with a movie theater, which generates peak parking demand during the evening.³³

One very promising application of this shared parking approach is the creation of public parking districts, which basically serve as a large-scale approach to the site specific, privately shared parking idea. The report on TOD’s and parking by the California Department of Transportation recommends this approach. The authors note that most parking districts are established by local business associations working in partnership with city governments.³⁴ They work by allowing developers to contribute cash to the parking district in lieu of providing the required parking spaces themselves. The money is then used to construct structured parking which is strategically located so as to serve many uses simultaneously. Because parking demand is aggregated among different uses, these structures can provide fewer overall parking spaces than if each development provided parking individually. Furthermore, because fewer parking spaces are required, the fee required from the developer is typically less expensive than providing the required parking onsite. Parking districts therefore serve as a developer subsidy, and encourage development in those areas where density goals and land costs tend to increase the cost of development, such as in the transit-oriented development. Not only does the parking district reduce the cost to the developer, but aggregated structured parking creates better urban design by creating a “park once and walk” built environment. The absence of surface parking enables this pedestrian activity.³⁵

Maureen McAvey argues that “a coordinated parking strategy has been a key element in the implementation of the downtown Bethesda [TOD] plan.”³⁶ The county established a parking taxing district to provide for public parking throughout the downtown area. This parking exaction along with the ready transit access allowed the city to reduce off-street parking requirements, significantly lowering development costs for individual projects.

Embrace TDM to maximize trip reduction Transportation Demand Management (TDM) is “the establishment of measures to influence travel behavior so as to make more efficient use of the transportation system.”³⁷ These policies typically focus on reducing the number of single-occupancy vehicle trips. Reducing the amount of (free) parking within a transit-oriented development is a crucial first

step toward inducing modal shift and increasing transit ridership, and accordingly, the City of Portland currently waives parking requirements for all new developments located within 500 feet of a light rail station or frequent service bus stop. However, the planning literature and case studies suggest a few additional means by which transportation demand may be managed and transit ridership encouraged.

The first of these strategies is to offer transit passes to employees or residents within transit-oriented developments in lieu of providing (non-required) parking spaces. The idea works by giving the employer or the multifamily housing provider the option to buy transit passes in bulk from the transit agency for each of its employees or residents. Transit agencies are able to sell these passes at bulk rates that are significantly cheaper than purchasing individual transit passes. The employer or housing developer then offers free transit passes to all of their employees or residents as a free amenity. The individual then has the option of saving money on the commute by using the free transit pass. As a result, many individuals will in fact decide to forego the costs of the commute and use the free transit pass. Although new TOD developments in Portland are not required to provide off-street parking, many suggest that the market requires that parking be provided (especially for residential development). By offering free transit passes, a developer/employer is able to reduce the overall amount of parking perceived as necessary. The cost to the developer / employer of providing free transit passes to all employees or residents is typically far lower than the alternative cost of providing those parking spaces that may be removed as a result of the program. Donald Shoup cites case studies which suggest that developers can save at least \$46 on the capital cost of parking provision for each \$1 a year they spend on transit passes. Furthermore, he points out that in addition to the cost savings and the policy goals accomplished via these transit pass programs, the employer gets to boast of the added benefit to current and future prospective employees³⁸. The transit agency is able to sell large quantities of passes, albeit at a discounted rate. But this can hardly be considered a loss when viewed as a means to increase both revenue and ridership.

A 2002 report points to transit pass programs instituted in the Portland area as an example of the success of this approach. A Pilot TOD transit pass program was instituted at Orenco Station in 1998 to test the effectiveness of transit pass incentives. In the nine months following the institution of the program, transit use for commuting purposes increased 22%. Furthermore, the LaSalle Apartments, another MAX TOD reported a 79% increase in transit use after transit passes were offered to its residents there. The

authors also point to a survey of commuters who were offered ‘Eco Transit Passes’ by the Santa Clara Valley Transportation Authority, which found that the number of people driving a vehicle by themselves declined from 76 to 60 percent after passes were given away, and that transit’s mode share increased from 11 to 27 percent while parking demand declined by roughly 19%.³⁹

Another strategy heavily advocated to reduce parking demand is employer parking cash out programs. In their report on TOD and joint development in the United States, the Transit Cooperative Research Program points to California legislation, enacted out of air quality concerns, which requires large employers who subsidize employee parking to offer their workers a cash equivalent to the cost of renting a parking space.⁴⁰ The employee can take either the space or the cash, “thus eliminating a built-in bias that favors driving.”⁴¹ By offering the cash value of the parking subsidy, the employer is effectively placing a monetary value on parking, and this elimination of the concept of “free” parking serves to reveal the real costs associated with driving. Transit, therefore, is more able to compete on a level playing field.⁴²

In 1989, Arlington County (Virginia) made implementation of a TDM program a condition for site plan approval for proposed commercial projects in the Courthouse Station area, and since then has required TDM plans for all major commercial and residential developments that go through the site plan review process. The county has also established a program to provide employer transportation program assistance. In its study of the effectiveness of its TDM program, the county found that while employers offering no or low employee TDM incentives generated 2.17 vehicle trips per 1,000 square feet of gross floor area (GFA), employers offering incentives generated 1.97 vehicle trips per 1,000 square feet of GFA, a reduction of ten percent.⁴³

Studies increasingly reveal that these types of demand management strategies have a far greater effect on mode choice than land use considerations. The Transit Cooperative Research Program cites a study in which the author argues that parking charges and free transit for work trips are much more effective determinants of mode choice than land use.⁴⁴ Additionally, Lund, Cervero, and Willson ran regression analyses for several transportation-related programs at the workplace in order to determine their relationship to mode choice. They found several practices with strong associations with transit usage. The availability of free parking showed a -0.346 correlation value with transit usage, and if an employer helped with transit-related costs (through the provision of transit passes, for example) there is a positive correlation with transit use of 0.158. In fact, the availability of free parking seems to be one of the most

influential factors affecting mode choice to work. The authors report that of their survey of California TOD’s, fewer than one out of twenty station area residents take transit to work if they can park for free at work. If free parking is not available, the transit- commuting share jumps to nearly 45 percent.⁴⁵

Make Buses Work

Provide Feeder Transit Ensuring efficient transit connections to and from rail stations is crucial in the development of a well-integrated transit network. For this reason, transit-oriented developments must integrate bus stops and bus transfer areas into their design. In order to maximize convenience and ensure quality connections, local and workplace shuttles may also be provided. The BART Station Access Guidelines outlines several points regarding the physical integration of bus stops into rail-based TOD’s.⁴⁶ These include:

- Transit stops should be immediately visible upon exiting the faregates.
- Locate bus stops to minimize walking distances to faregates and avoid the need to cross roadways, particularly busy arterials.
- Bus stops should not be located where they will block crosswalks, obstruct traffic signals, or be obscured from motorists, bicyclists, and pedestrians.
- Generally, discourage bus layovers at rail station areas; layover areas should not occur along key curbspace at the station entrance.
- Locate services with high volumes of transfer activity so that passengers perceive both to lie within the same station, where possible.
- Bus stops with the highest rate of bus – rail transfers should be located closest to the station faregates.
- Facilitate bus – bus transfers and simplify bus – rail transfers by minimizing distances between bus stops.

Create Supportive Public Policies

When determining the feasibility of pursuing any TOD strategy it is important to consider the economic realities of real estate development. The attractiveness of developing around transit is primarily a function of two factors: the premium in land prices that occurs as a result of the increased access that properties near transit offer, and the incentive or disincentive to develop created by the existing regulatory system.

Although evidence shows that land near transit generally experiences a premium, this phenomenon is by no means automatic, and several factors outside of the transit itself must also be in place for these premiums to occur. The literature repeatedly stresses the importance

of a healthy economy with a healthy real estate market. “For premiums to accrue, it seems important that the transit facilities be located in neighborhoods with a reasonably healthy real estate market and free from signs of stagnation or distress.”⁴⁷ Experience shows that transit stops in neighborhoods with stagnating real estate markets do not typically result in strong land value premiums. TOD benefits generally occur during upswings in the local economy. Additionally, for more compact, mixed-use developments centered around transit access to be attractive to both developers and potential residents, areas need to be growing rapidly and traffic congestion needs to be worsening in the area for demand for transit-oriented living to increase.

Additionally, public policies favoring development near transit, such as zoning bonuses designed to leverage TOD, overlay zoning encouraging a mix of uses, and targeted infrastructure investments, also affect land values around stations.⁴⁸ Robert Cervero notes that in San Diego, for example, increases in land values have been recorded for commercial properties in the Mission Valley corridor, where such pro-development policies have been implemented. This phenomenon is in stark contrast to San Diego’s South Line, where little public effort has been made to leverage or initiate development. As a result, no remarkable increases in value, nor any meaningful land use changes have occurred along this line.⁴⁹

It would seem, therefore, that not all properties witness development pressures as a result of transit access, and that encouraging transit oriented developments may require a carefully crafted regulatory program. In fact, Frederick C. Dock and Carol J. Swenson assert that

development opportunities around transit that are so compelling that the private market will seize them without the public sector needing to play a role are the exception, not the rule. “Because [many transit locations] are not the ones that the market would select, especially for housing development, deliberate planning is required to ensure that an appropriate mix of land uses occurs in the right locations to provide for successful development around transit.”⁵⁰

Although development pressures may occur along new transit investments, transit agencies and planners cannot passively depend upon the market alone to trigger development. Rather, supporting land use policies such as appropriate zoning regulations, development incentives, public sector investment, and station area plans, should be in place to help create the desired type of development.

Joint Development While establishing the requisite zoning which allows for and communicates the desired type of development is certainly the first step in encouraging transit-oriented development, there are certainly more proactive measures that have been taken in other jurisdictions which have been shown to stimulate and incentivize TOD's. One such approach used increasingly in the United States is Joint Development, which relieves some of the risk associated with this newer, still experimental type of development from the developer.

Joint Development is essentially private development on, above, or adjacent to a transit agency's property, "a pairing of public and private resources to achieve a project that will benefit both sectors."⁵¹ Cervero defines transit joint development as "any formal agreement or arrangement between a public transit agency and a private individual or organization that involves either private-sector payments to the public entity or private-sector sharing of capital costs in mutual recognition of the enhanced real estate development potential or market potential created by the siting of a public transit facility."⁵²

Joint Development typically takes the form of cost-sharing (or revenue-sharing) agreements. Costing-sharing agreements include "sharing construction expenses, incentive-based programs that provide benefits (e.g. density bonuses) in return for off-loading construction costs, and joint use of equipment like air-conditioning systems." Revenue-sharing agreements include "air-rights and property leasing, connection fees (for physically linking a retail store to a station), and benefit assessment financing."⁵³

This approach typically involves the transit agency capitalizing on its real property assets along the transit route, and may include leasing land or air rights to a developer, negotiating private-sector investment in transit station capital costs, connection fees for direct tie-ins from private projects to transit stations, and concessions at transit stations.⁵⁴ Joint development serves essentially two purposes: it allows the transit agency to proactively seek out development opportunities and to recapture some of the accessibility benefit conferred on adjacent land as a result of their transit investment. It also serves to spread out some of the financial risk (both real and perceived) with these still new, more experimental TOD developments, thereby encouraging public sector investment.

The BellSouth – Lindbergh City Center TOD in Atlanta is an excellent case study in joint development. The funding structure of the BellSouth – Lindbergh City Center TOD exemplifies why joint development can be advantageous to the developer community. Because MARTA (the local transit agency) contributed \$81 million

dollars (funded through the issuance of bonds) toward infrastructure provision, the developer was able to limit much of the project's financial risk. MARTA's financial motive for its involvement in this joint development project was largely the \$13.3 million in annual revenue stream that it receives from the project. This revenue stream represents a significant source of operating revenue for MARTA.⁵⁵

The Local Context: Joint Development

Metro administers a Transit-Oriented Development Implementation Program, which is designed to use public resources to minimize private sector costs for transit-oriented development. The program operates through a series of cooperative agreements between Metro, local jurisdictions, and private developers. Program funds are primarily used for site acquisition. After property is acquired, assembled, and planned, it is sold to private developers and/or dedicated to local jurisdictions. The land value may be written down when the cost of a particular project is large enough to prevent development.

Focus Public Investments to Support Real Estate Dynamics

Targeted, public sector infrastructure investments can also serve as a significant incentive to develop around transit. Public provision of streetscape improvements, utilities, and other infrastructure components can effectively subsidize an expensive, and risky infill project.

Tax increment financing (TIF) is a popular method of funding infrastructure improvements for TOD projects. Local governments may establish TIF districts around transit station areas in effort to provide a stimulus for private investment. The revenue generated by increased property tax revenue within TIF districts is diverted from the municipalities' general fund to repay bonds floated to fund infrastructure improvements. Because TIF is currently a high profile form of financing, much attention has been paid to the criteria used for the determination of TIF districts. Cervero points out that "since revenue in-take relies on an increase in property values, [TIF] districts should only be considered in areas where there is a reasonable expectation that new development will occur."⁵⁶

Expedited Review The approval process for infill developments can oftentimes take years, during which time costs continue to escalate for developers. In fact, Marueen McAvey reports that "many developers complain about the 'brain damage' and long development periods associated with urban infill and say that the uncertain profits

are not worth the aggravation."⁵⁷ Local officials can eliminate this disincentive to introducing TOD projects by aggressively assisting projects which comply with city TOD goals through the approval process. As previously noted, adopted station area master plans can assist with this issue, as city TOD goals are explicitly stated and formally voted upon by council. Projects which clearly comply with these plans should be expeditiously approved.

Other Financial Incentives Direct financial incentives can also be used to great effect to encourage transit-oriented development. Tax-abatement or tax-credit programs can be an attractive incentive to develop in a transit-supportive locale that the market may not necessarily naturally select (such tax abatement programs currently exist in Oregon). Leveraging impact fees and applying them on a sliding scale in the context of TOD may also help to minimize sometimes prohibitive development costs.

The Local Context: Other Financial Incentives

PDC currently administers a TOD Property Tax Exemption program to support high density housing and mixed-use developments on vacant or underutilized sites within ½ mile of MAX station areas. Eligible projects receive a ten-year property tax abatement on newly constructed residential projects if applicants can show that the property tax exemption is necessary to make the project financially feasible.

An SDC fee waiver program currently exists for affordable housing development, though not for transit-oriented development specifically. The program is administered by PDC.

The Effect of Supportive Public Policy on Transit Adjacent Land Values

In their study of land value benefits conferred on transit adjacent land, Certero et al note that in several instances, land value premiums can at least partially be attributed to these sorts of supportive public policies targeted at encouraging TOD. The authors note that at The Commons (Denver), PUD zoning was a major factor in the master developer's ability to sell land at a premium. Research on Portland, Oregon's Westside light rail line found that announcements of the planned siting of stations and the use of zoning tools such as overlays and interim restrictions to promote TOD resulted in land value increases even before the system began to be built.⁵⁸ Finally, a study of TOD planning in Atlanta found that TOD policies such as parking waivers and minimum FAR requirements "interacted with proximity to stations to yield rent premiums."⁵⁹

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BEST PRACTICES EVALUATION CRITERIA

Station Area Best Practices Checklist

Form a coherent vision

- Articulate a plan; look to the future but build on current conditions
- Involve stakeholders
- Focus on implementation
- Maintain flexibility
- Understand market demographics
- Engage corporate attention

Get the land uses right

- Make retail strategy market driven, not transit driven
- Develop mixed-income housing and encourage every price point to live around transit
- Segregate uses where appropriate—mixed uses don't have to be in the same place

Promote density

- Maximize transit ridership and access—peak and off-peak demands
- Build retail market base
- Locate employment areas near the station to promote reverse commuting

Create convenient, comfortable pedestrian & bicycle connections

- Connect the grid; provide well-designed sidewalks
- Develop compact blocks to disperse traffic; use block faces for on-street parking to support retail
- Create seamless access to neighborhoods, develop more small streets and create quiet, intimate thoroughfares
- Maximize safety and comfort through lighting, design of buildings, plazas and streets
- Build bike parking
- Calm traffic and eliminate minimum traffic LOS standards

Build a place not a project; ensure good urban design

- Design with the station as the center
- Use high quality urban form to support mixed incomes and uses
- Make places that engage the public
- Create landmarks and beacons
- Preserve and invest in existing neighborhoods
- Taper density and height from stations to neighborhoods

Get the parking right

- Locate Park & Ride within a 5 minute walk of the platform but not directly in front of the station; locate utility structures so as not to preclude redevelopment of prime station-proximate sites
- Develop shared parking policies
- Design structured parking well—wrap structures with commercial and residential uses and with active ground floor uses

Make bus transit and TDM work

- Provide feeder transit and make buses attractive
- Provide local and workplace shuttles
- Embrace TOD and TDM to maximize trip reduction

Create supportive public policies

- Pursue joint development
- Focus public investments to support market/real estate dynamics

BEST PRACTICES COMPARATIVE EVALUATION

	60th	82nd	Parkrose/ Sumner	148th	162nd	Division	Powell	Foster/ Lents	Flavel	Hayden Island
Form a coherent vision										
Articulate a plan	Present	Missing	Missing	Missing	Missing	Present	Missing	Present	Missing	Present
Involve stakeholders	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Present
Focus on implementation	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Present
Maintain flexibility	Present	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Present
Understand market demographics	Present	Missing	Missing	Missing	Missing	Present	Present	Present	Missing	Present
Engage corporate attention	Present	Missing	Missing	Missing	Missing	Missing	Missing	Present	Missing	Present
Get the land uses right										
Make retail strategy market driven	Present	Present	Missing	Present	Present	Present	Present	Missing	Missing	Present
Develop mixed-income housing	Present	Present	Present	Present	Present	Present	Present	Missing	Present	Present
Segregate uses where appropriate	Present	Present	Present	Missing	Missing	Missing	Missing	Present	Missing	Present
Promote density										
Maximize transit ridership and access	Present	Missing	Missing	Present	Present	Missing	Missing	Missing	Missing	Missing
Build retail market base	Present	Present	Missing	Present	Present	Missing	Missing	Missing	Missing	Present
Locate employment areas near the station	Present	Present	Missing	Present	Present	Present	Present	Present	Missing	Present
Create convenient, comfortable pedestrian & bicycle connections										
Connect the grid; provide well-designed sidewalks	Present	Present	Missing	Present	Present	Missing	Present	Present	Missing	Present
Develop compact blocks; provide on-street parking	Present	Present	Missing	Present	Present	Present	Present	Present	Missing	Present
Create seamless access to neighborhoods	Present	Missing	Present	Present	Present	Missing	Present	Present	Missing	Present
Maximize safety & comfort through design	Present	Missing	Present	Present	Present	Missing	Present	Present	Missing	Present
Build bike parking	Present	Present	Missing	Present	Present	Missing	Missing	Missing	Missing	Missing
Calm traffic; eliminate minimum LOS standards	Missing	Missing	Missing	Present	Present	Missing	Missing	Missing	Missing	Missing
Build a place not a project; ensure good urban design										
Design with the station as the center	Missing	Missing	Missing	Present	Present	Missing	Missing	Missing	Present	Present
Use high quality urban form to support mixed incomes & uses	Present	Missing	Present	Present	Present	Missing	Missing	Missing	Present	Present
Make places that engage the public	Present	Missing	Present	Present	Present	Missing	Missing	Missing	Missing	Present
Create landmarks and beacons	Present	Missing	Present	Present	Present	Present	Present	Present	Missing	Present
Preserve and invest in existing neighborhoods	Present	Missing	Missing	Present	Present	Missing	Present	Present	Missing	Present
Taper density and height from stations to neighborhoods	Missing	Missing	Missing	Present	Present	Missing	Missing	Missing	Missing	Missing
Get the parking right										
Do not locate Park & Ride or utility structures in front of station	Missing	Present	Present	Missing	na	na	Missing	na	Missing	na
Develop shared parking policies	Present	Present	Present	Missing	Missing	Missing	Missing	Missing	Missing	Missing
Design structured parking well	na	na	Present	Missing	Missing	Missing	Missing	Missing	Missing	Missing
Make bus transit and TDM work										
Provide feeder transit and make buses attractive	Present	Present	Present	Present	Present	Present	Present	Present	Missing	Missing
Provide local and workplace shuttles	Present	Present	Present	Present	Present	Missing	Missing	Missing	Missing	Missing
Embrace TOD and TDM to maximize trip reduction	Present	Present	Missing	Present	Present	Missing	Missing	Present	Present	Missing
Create supportive public policies										
Pursue joint development	Present	Missing	Present	Present	Present	Missing	Missing	Missing	Missing	Missing
Focus public investments to support market dynamics	Present	Missing	Present	Present	Present	Missing	Missing	Missing	Missing	Missing

Present
 Opportunity for improvement
 Missing

ACHIEVING LRT STATION DEVELOPMENT GOALS PUBLIC INTERVENTIONS

Portland exemplifies the range of experiences possible with regard to development around rail transit. The Portland Streetcar has been phenomenally successful in stimulating development in the Pearl District and all along the alignment. Light rail has had mixed result, and some notable failures, as a development stimulator.

Where there is success, public intervention has always been a key factor. There are specific public actions that can make a real difference in the development success of a station area. Still, it is important to remember that public interventions are just one of many conditions needed to create a successful station area. Portland's Pearl District is an example. Public investment and a positive regulatory framework were necessary for the district to succeed, but by themselves these public actions were not sufficient. The success of the Pearl District also required smart developers, supportive market conditions, the overall attraction of the area to young creative professionals and a little serendipity.

High rise condominiums won't be coming any time soon to the stations at 148th or 162nd and Burnside. But there are important actions that the public can take at many stations to help build community and leverage the public investment in light rail. Like in the Pearl district, public actions are necessary but not sufficient. The likelihood of success will be much enhanced by smart land owners/developers, market conditions and the inherent opportunities that exist around a station.

Public interventions fall into four categories:

Regulatory

The City's zoning code, building code and development standards regulate private development. The regulations address allowed uses, structure height, setback, building bulk, external features, construction type and many other development conditions. From the community's perspective, these regulations help achieve development that is consistent with community preferences. For the owners, development regulations have financial implications. For example, the community may prefer ground floor windows on the street side of the building; the owner may prefer cheaper smaller windows or no windows at all.

Regulatory intervention can help to facilitate desired development. This can be done in several ways. Zoning and development regulations can be changed to improve financial feasibility, such as by raising building height limit to allow for more square footage or units. They can also be tailored to fit the needs of a peculiar site or a specific geographic area through a plan district or other zoning tool so that a developer is not subject to a "one size fits all" regulation that may discourage development. Building codes can be changed to allow more efficient materials or building techniques which can reduce development and maintenance costs.

Infrastructure Investment

Public infrastructure—streets and sidewalks, water and sewer pipes, parks, bicycle paths and transit—are the bones of a community. The quality, location and character of infrastructure influences the cost feasibility of development. A park is an amenity that increases the value of adjacent land. Streets that provide access to property and connections to transit enhance the marketability of commercial and residential development.

Public infrastructure intervention is the public bearing the cost of essential infrastructure instead of relying on private parties to finance. Of particular importance for transit stations is high quality pedestrian connections to the station from the adjacent neighborhood. Safe, attractive pedestrian connections improve ridership and boost the development potential of property that is well connected to transit. Many stations are located within close proximity to major arterials. Safe, efficient and attractive street crossing can turn the arterial from a barrier into a bridge, opening new neighborhoods to the station.

Development Incentives

There are many publicly financed incentives for private development. Tax credits and low interest loans are financing mechanisms that are made available by a state or local agency to stimulate the development of desired development, usually affordable housing. A more proactive approach is for the development agency to acquire land that is then conveyed to a developer often at a below market price. The difference between market value and the developer's price is a subsidy that improves the financial feasibility of a proposed development.

Leadership

Public agencies and public officials are in a unique position to provide leadership which result in good development and essential infrastructure around station areas. Only a public agency like PDOT or a public official like the Mayor have the institutional responsibility to advocate the interests of the community. Property owners and developers have narrower interests and no authority to provide public resources for public good.

Leadership is too often overlooked. It is easy to spend money. It is much harder to develop and implement a development strategy. Good development is the result of many factors—markets, demographics, smart property owners. Sometimes it takes someone whose job is to try to integrate these factors. This kind of public intervention leadership can go even further than money or regulations.

BLUE LINE STATIONS WEST OF I-205 60TH AVENUE 82ND AVENUE

RED LINE STATIONS PARKROSE SUMNER

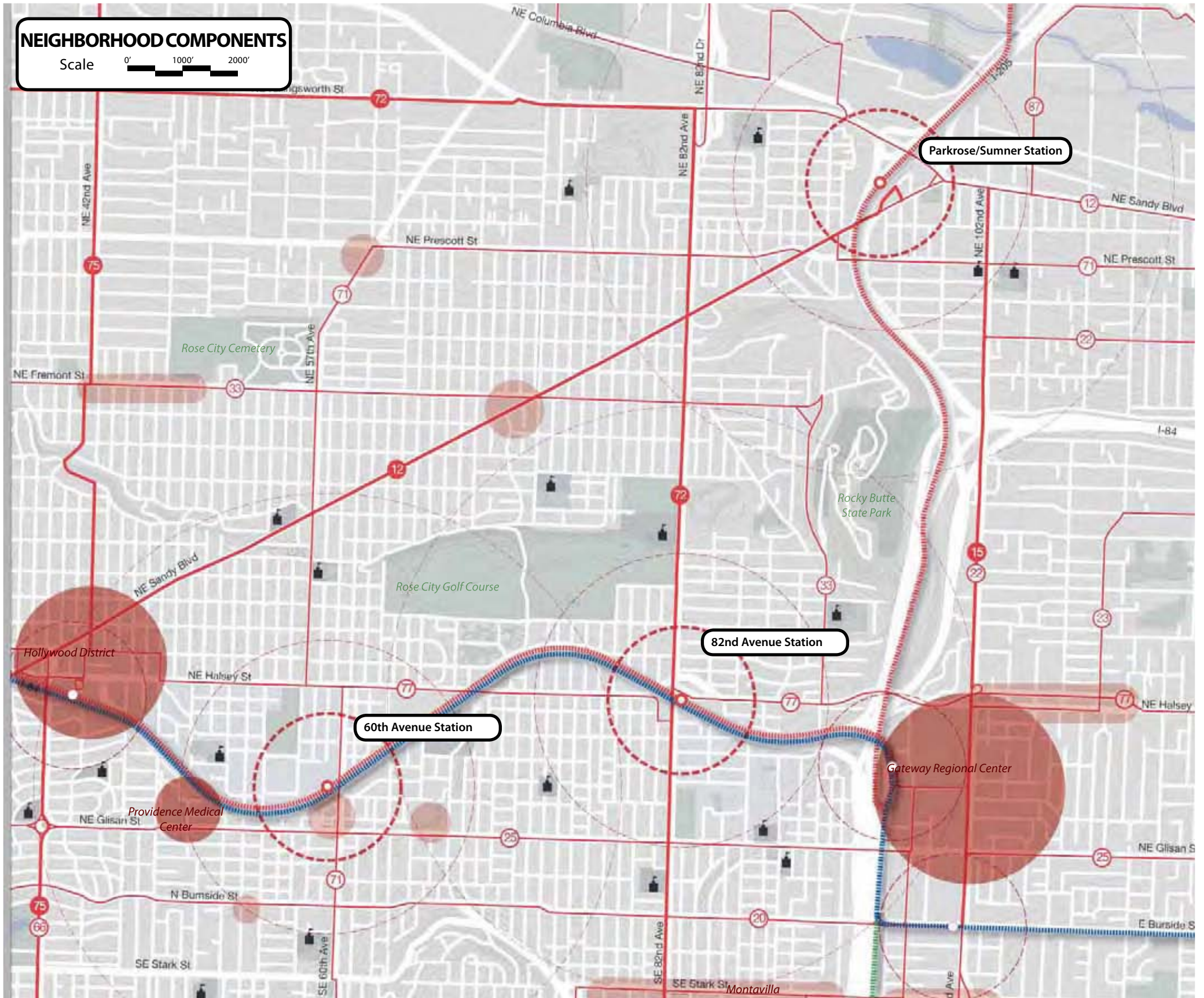
EXISTING CONDITIONS AND ASSESSMENT

NEIGHBORHOOD COMPONENTS

→ The 60th Avenue and 82nd Avenue Stations serve the red and blue MAX lines and are situated on the north side of Interstate 84. The 60th Avenue station serves the Rose City Park, Center, and Mt. Tabor neighborhoods, including a transit-oriented, mixed income housing development immediately south of the freeway, the Providence Medical Center campus, and retail and office uses along 60th Avenue and NE Glisan. Normandale Park lies within a ¼ mile radius of the station. The 82nd Avenue station is bounded by the Madison South neighborhood to the north, and the Montavilla neighborhood to the south. The land uses along 82nd Avenue, a major north-south arterial, are characterized as strip-style auto-oriented retail and services. Hancock Park and Montavilla Park are within ½ mile of the station; Madison High School and Vestol Elementary School is within a one-mile radius.

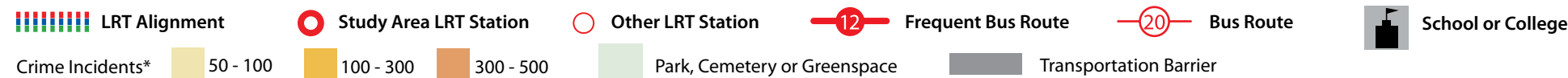
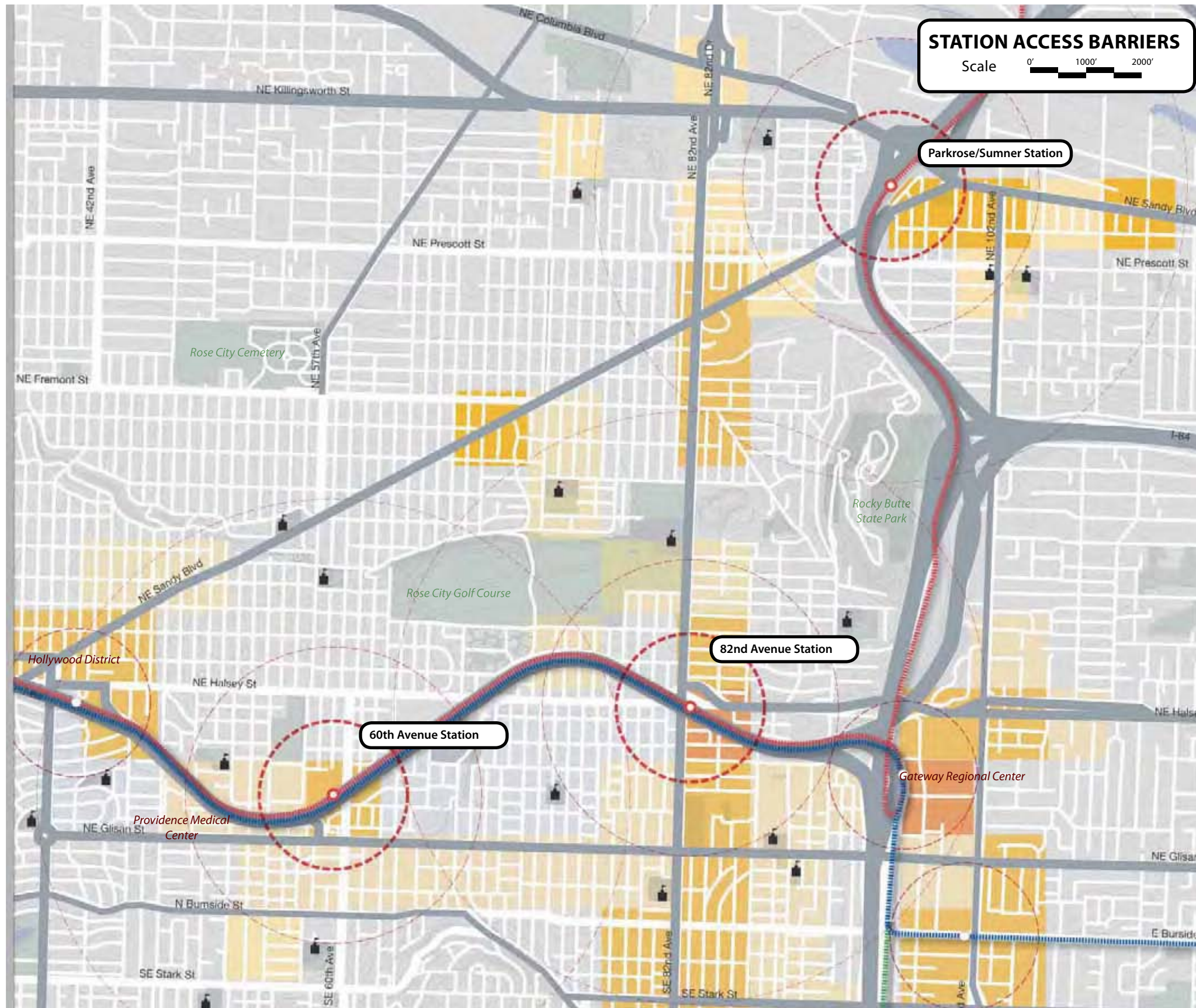
The Parkrose Sumner station is situated at the junction of I-205 and NE Sandy Boulevard, and serves the Parkrose neighborhood to the east of the freeway, and the Sumner neighborhood to the west. Land uses along NE Sandy, a major arterial and state highway, includes hospitality, auto-oriented retail and services, and light manufacturing and distribution. The Parkrose station is difficult to access from the west due to limited connections over I-205. There is a Special Program school (Sacajawea) within a ½ mile radius of the station.

NEIGHBORHOODS



- LRT Alignment
- Study Area LRT Station
- Other LRT Station
- Frequent Bus Route
- Bus Route
- School or College
- Mixed Use Cluster or Retail/Institutional Attractor
- Potential Attractors
- Park, Cemetery or Greenspace

OVERVIEW 60TH AVENUE 82ND AVENUE PARKROSE SUMNER



STATION ACCESS BARRIERS

There are a number of barriers that pedestrians and bicyclists face when trying to access public transportation stations and their adjacent land uses. Some barriers are physical, like freeways, railroads, waterways, or steep topography. Other barriers are gaps between points, like cul-de-sacs, dead end roads, and large properties that are fenced or otherwise barricaded. Another barrier, though harder to quantify, is a social barrier whereby the pedestrian or bicyclist perceives that they could be threatened or harmed in the environment. This last barrier is often the hardest barrier to mitigate for, as it involves changing more than the physical environment.

The stations along major limited-access transportation corridors (i.e., interstate freeways) tend to have more challenging access issues than stations on transit lines with their own dedicated corridor. Stations adjacent to freeway interchanges are perhaps the most problematic, as the transit user must navigate an often complex network of on- and off-ramps that do not have appropriate pedestrian and bicycle crossing facilities. These interchanges are engineered to move motor vehicles quickly and efficiently and are a threat to pedestrians trying to cross multi-lane roadways. Additionally, stations adjacent to freeways are often isolated from adjacent land uses, which can create uncomfortable or unsafe environments for transit users from lack of “eyes on the street.” The 60th Avenue, 82nd Avenue and Parkrose Station Areas are all situated immediately adjacent to or within the Interstate right-of-way. Specific barriers to these stations include:

- I-84 and I-205
- Railroad corridor
- High-volume arterial and major collector roadways with limited pedestrian and bicycle facilities
- Few signalized or properly marked pedestrian crossings
- Large, fenced private or quasi-public properties
- Rocky Butte
- Perception of crime along NE 82nd Avenue and the existing light rail corridors

*Illustrates the number of total crimes in a half mile grid. Crimes include: arson, assault, burglary, homicide, larceny, rape, robbery, theft from auto, vehicle theft, drug laws, embezzlement, forgery, fraud, prostitution, vandalism, weapons laws, curfew, disorderly conduct, DUII, gambling, kidnapping, liquor laws, offense against family, runaway, and trespass.

DEMOGRAPHICS

Demographic analysis completed for the 60th Avenue Station reveals that there are just fewer than 11,000 households within a 1-mile radius of the station with a median household income of \$53,895 (2007). About 11% of the households have an income of less than \$15,000. More than half (54%) of the households are owner-occupied. The median value of owner-occupied housing units jumped 55% between 2000 and 2007, from a median value of \$169,216 to \$305,008. The area is largely white (78%) and older – 59 % of people are over the age of 45; the area’s median age is 39.2. The one-mile radius captures a significant portion of the Center, Laurelhurst, and Hollywood neighborhoods which may account for its overall higher median household income and age.

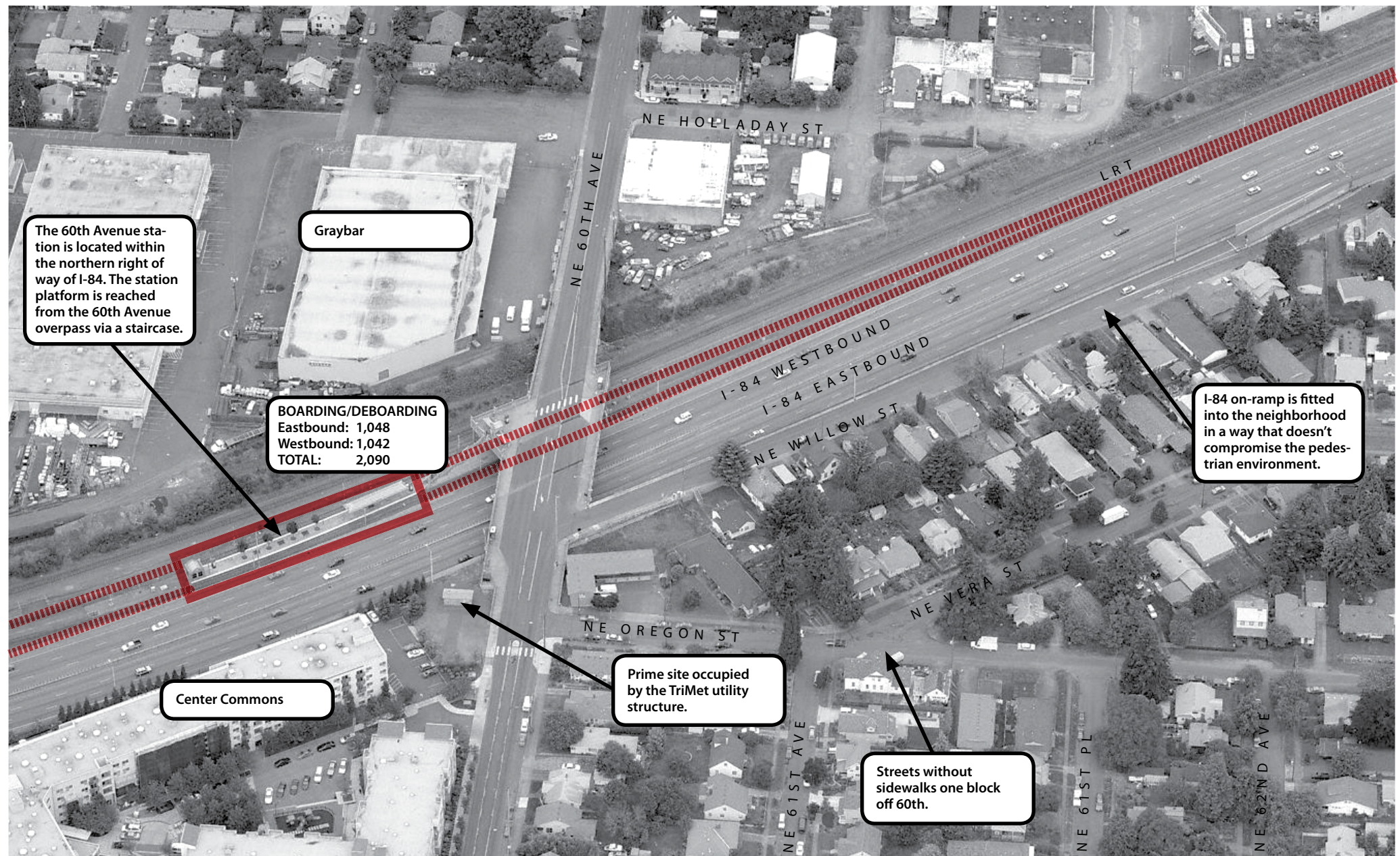
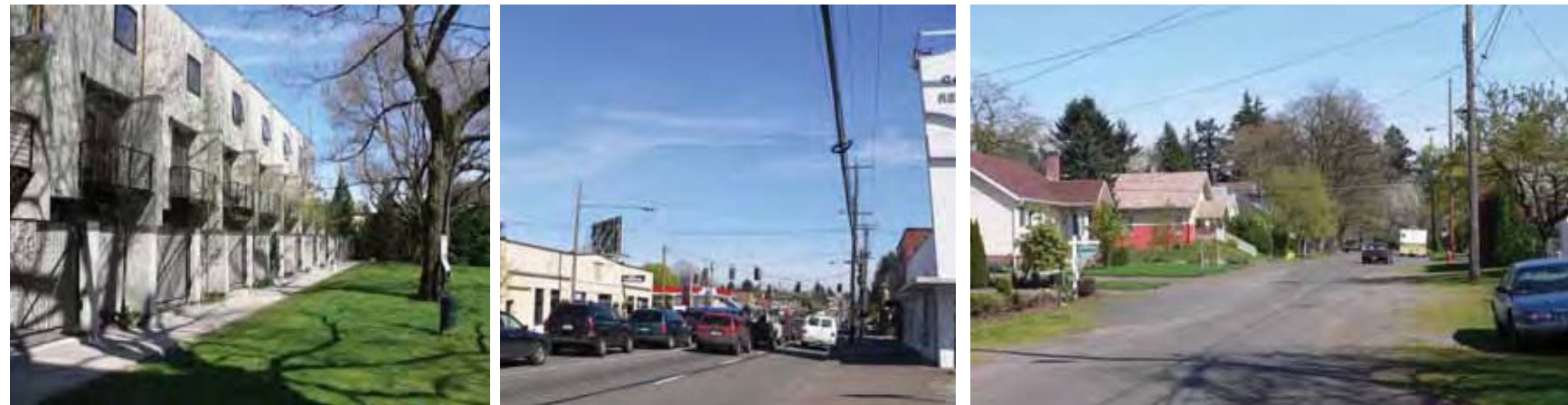
LRT STATION DESIGN AND ACCESS

The 60th Avenue station is located within the northern right of way of I-84. The station platform is reached from the 60th Avenue overpass via a staircase. There is no direct neighborhood connection to this station. A PDOT assessment of this station area indicated that the station area has an almost complete pedestrian network, but that the streets designated as city walkways needed to be improved to city standards. The study also identified the need for a north/south bicycle connection to the station.

- The pedestrian environment connecting Glisan/60th retail node and Center Commons is pedestrian-supportive, with adequate sidewalks, crossings with pedestrian refuges.
- Streets without sidewalks one block off 60th.
- I-84 on- and off-ramps are fitted into the neighborhood in a way that doesn't compromise the pedestrian environment.

LAND USE AND DEVELOPMENT

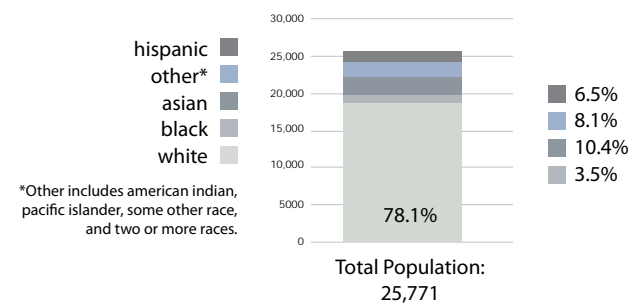
- Parcels adjacent to the station are developed, except for a prime site occupied by the TriMet utility structure. The areas to the north and south of the station are established residential neighborhoods. Directly north of the station are several large parcels with low intensity employment uses.
- Center Commons mixed-use, mixed-income residential development consists of 288 units of apartments, including senior housing, and 26 townhomes.
- Neighborhood-serving retail on Glisan Street, concentrated at the intersection of Glisan and 60th, provides a historic neighborhood center with a main street character.



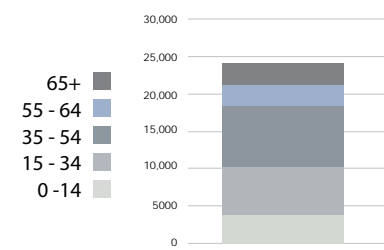
DEMOGRAPHIC PROFILE

	2000	2007
Population	23,782	24,189
Households	10,695	10,942
Families	5,513	5,559
Average Household Size	2.18	2.17
Owner Occupied HUs	5,823	6,238
Renter Occupied HUs	4,872	4,704
Median Age	37.0	39.2

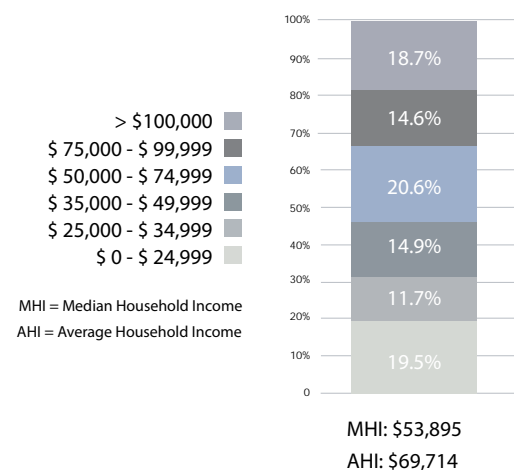
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

Notes

Category	Item	Status	Notes
Form a coherent vision	Articulate a plan	Present	
	Involve stakeholders	Present	Stakeholders involved as part of 1980's rezoning effort
	Focus on implementation	Present	
	Maintain flexibility	Present	
	Understand market demographics	Present	
Get the land uses right	Engage corporate attention	Present	
	Make retail strategy market driven	Opportunity for improvement	Main street retail on Glisan; new retail as part of Center Commons project
	Develop mixed-income housing	Opportunity for improvement	Center Commons project on Glisan
Promote density	Allow single uses where appropriate	Opportunity for improvement	
	Maximize transit ridership and access	Present	
	Build retail market base	Opportunity for improvement	Main street re-emerging on Glisan Street
Create convenient, comfortable pedestrian & bicycle connections	Locate employment areas near the station	Opportunity for improvement	Engage employers
	Connect the grid; provide well-designed sidewalks	Opportunity for improvement	Pedestrian connections not to city standards; many streets without sidewalks
	Develop compact blocks; provide on-street parking	Opportunity for improvement	Small inner eastside blocks
	Create seamless access to neighborhoods	Opportunity for improvement	Platform access via stair & elevator only; City studies cite gaps in ped/bicycle infrastructure
	Maximize safety & comfort through design	Opportunity for improvement	
Build a place not a project; ensure good urban design	Build bike parking	Opportunity for improvement	
	Calm traffic; eliminate minimum LOS standards	Opportunity for improvement	
	Design with the station as the center	Opportunity for improvement	The station, because of its location and I-84 as a barrier, will never be a center
	Use high quality urban form to support mixed incomes & uses	Opportunity for improvement	Design of infill projects could destroy neighborhood character
	Make places that engage the public	Opportunity for improvement	
Get the parking right	Create landmarks and beacons	Opportunity for improvement	
	Preserve and invest in existing neighborhoods	Opportunity for improvement	Design of infill projects could destroy neighborhood character
	Taper density and height from stations to neighborhoods	Opportunity for improvement	Recent infill detracts from neighborhood character
	Do not locate Park & Ride or utility structures in front of station	Opportunity for improvement	LRT utility structure occupies prime redevelopment site
	Develop shared parking policies	Opportunity for improvement	
Make bus transit and TDM work	Design structured parking well	na	na
	Provide feeder transit and make buses attractive	Opportunity for improvement	
	Provide local and workplace shuttles	Opportunity for improvement	
Create supportive public policies	Embrace TOD and TDM to maximize trip reduction	Opportunity for improvement	
	Pursue joint development	Opportunity for improvement	
	Focus public investments to support market dynamics	Opportunity for improvement	

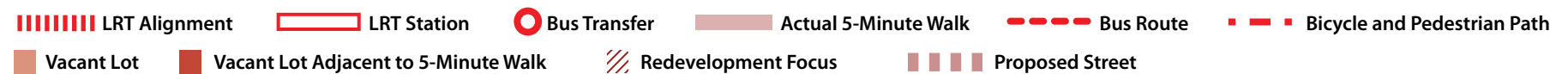
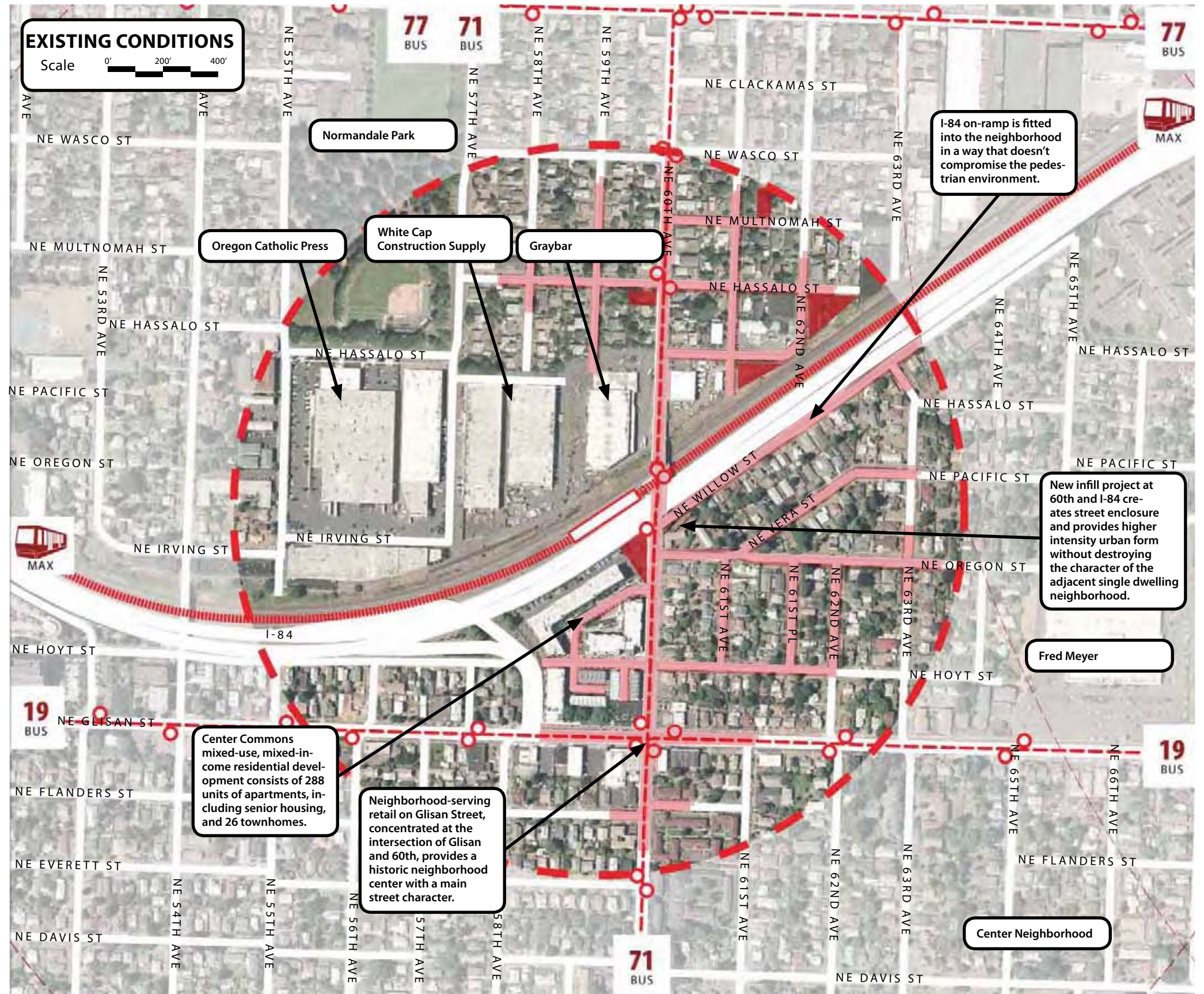
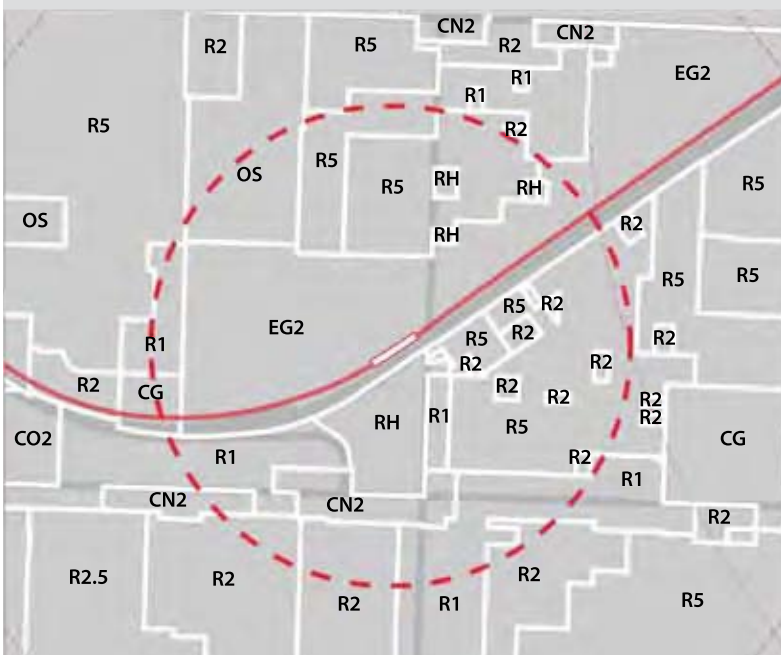
Present
 Opportunity for improvement
 Missing

ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

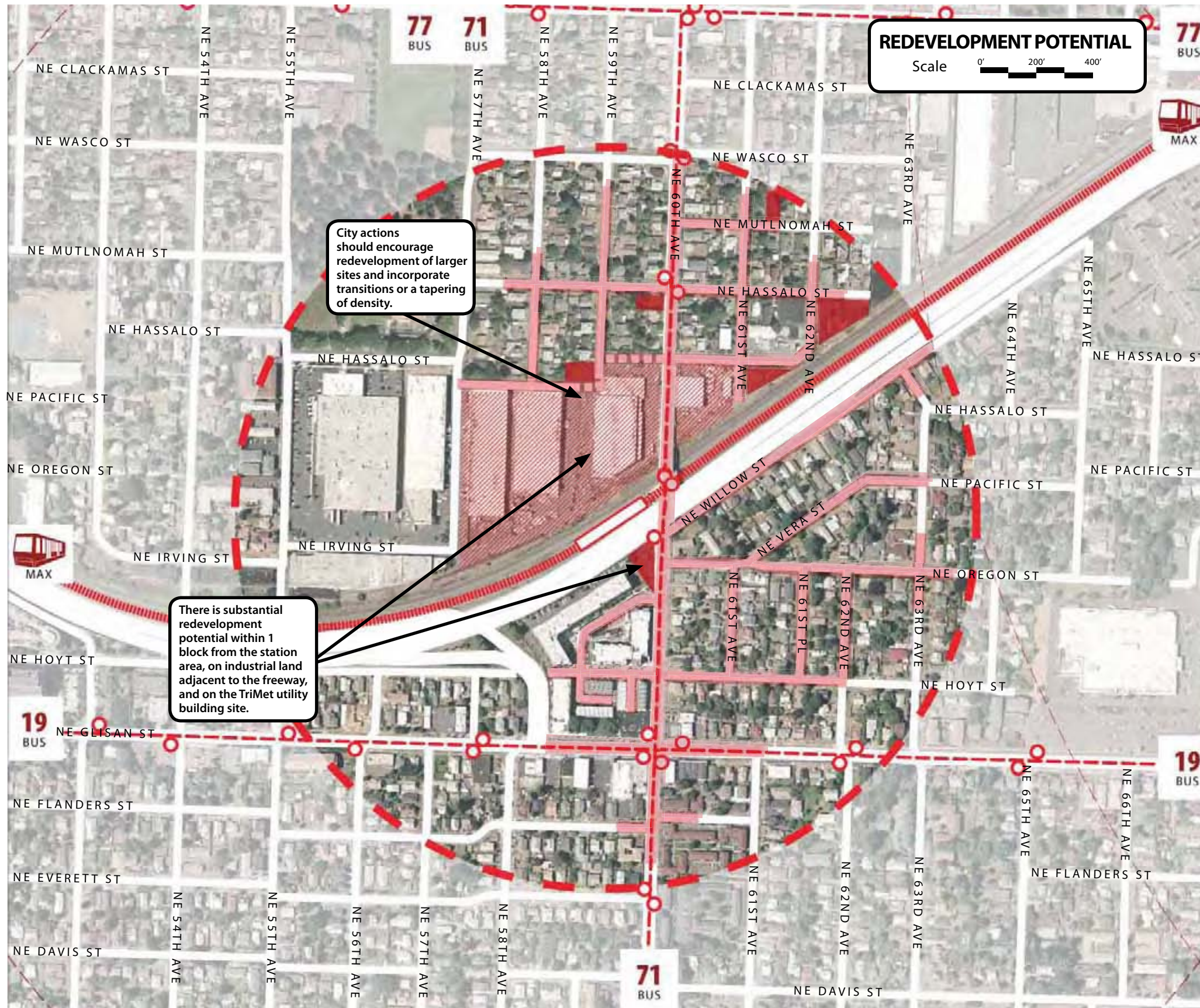
The neighborhoods north and south of the station were rezoned in the 1980s to designations that supported the light rail investment. The area directly to the north of the station, which consists of several large parcels zoned for employment uses, was not changed. Under the existing zoning, the employment uses could intensify to a FAR of 3 to 1. Farther north, across NE Hassalo, is a neighborhood park with a ball field. In the transition area between the employment use and the single-family residential uses is higher density housing which is fully developed. Redevelopment opportunities near the station are limited to a few parcels, a change of use and a change in zoning. No demographic information is available for this station area.

The residential areas were designated in the comprehensive plan as higher density housing in the 1980s to support the light rail investments. Current zoning is R5 with higher density designations in the comprehensive plan of RH, R1, and R2. Directly north of the station are several large parcels zoned for employment and currently occupied by employers such as Graybar, White Cap, and Oregon Catholic Press; these sites could be redeveloped to an FAR of 3 to 1. In addition, development within 500 feet of a transit street (20 min service) is exempt from minimum parking standards.

ZONING



STATION ASSESSMENT 60TH AVENUE



REDEVELOPMENT POTENTIAL
Scale 0' 200' 400'

City actions should encourage redevelopment of larger sites and incorporate transitions or a tapering of density.

There is substantial redevelopment potential within 1 block from the station area, on industrial land adjacent to the freeway, and on the TriMet utility building site.

- REDEVELOPMENT POTENTIAL**
- Zoning supports redevelopment, mostly in the form of infill, with a Comprehensive Plan allowing zoning changes from R-5/R-7 to R-1/RH.
 - There is substantial redevelopment potential within 1 block from the station area, on industrial land adjacent to the freeway, and on the TriMet utility building site.
 - In the area 1-2 blocks away from the station area there is predominantly single dwelling residential, with some older multi-dwelling mixed in.
 - Blocks are small, of the Portland Inner Eastside scale (generally 200' x 350'). For the most part, the older multi-dwelling buildings fit in and are compatible with the character of the neighborhood.
 - New infill project at 60th and I-84 creates street enclosure and provides higher intensity urban form without destroying the character of the adjacent single dwelling neighborhood.
 - Other infill minimally increases density while detracting from the urban environment. Neighborhood character would be destroyed with several of these types of projects.
 - City actions should encourage redevelopment of larger sites and incorporate transitions or a tapering of density.

||||| LRT Alignment
 LRT Station
 ○ Bus Transfer
 Actual 5-Minute Walk
 - - - Bus Route
 - · - · - Bicycle and Pedestrian Path
 Vacant Lot
 Vacant Lot Adjacent to 5-Minute Walk
 Redevelopment Focus
 Proposed Street

DEMOGRAPHICS

Diversity is the most striking characteristic of the 1-mile radius around the 82nd Avenue Station. Asians account for nearly 16% of the population; Hispanics account for 9%. Median household income is \$51,706 (2007). Nearly 56% of all housing units are owner-occupied. Median value of owner-occupied housing units increased from \$135,673 to \$244,562—an increase of just over 55%. The highest percentage of people are between the ages of 25 and 44 (32%), indicating that there are perhaps more young families and first-time home owners in the area.

LRT STATION DESIGN AND ACCESS

The 82nd Avenue station is located within the northern right-of-way of I-84. The station platform is reached from the 82nd Avenue overpass via a staircase.

The station area is challenged by a pedestrian-hostile environment on 82nd and topography. Sidewalks lack street trees, park/plant strip and on-street parking. Sidewalks range between 6-8' wide, and sometimes narrower.

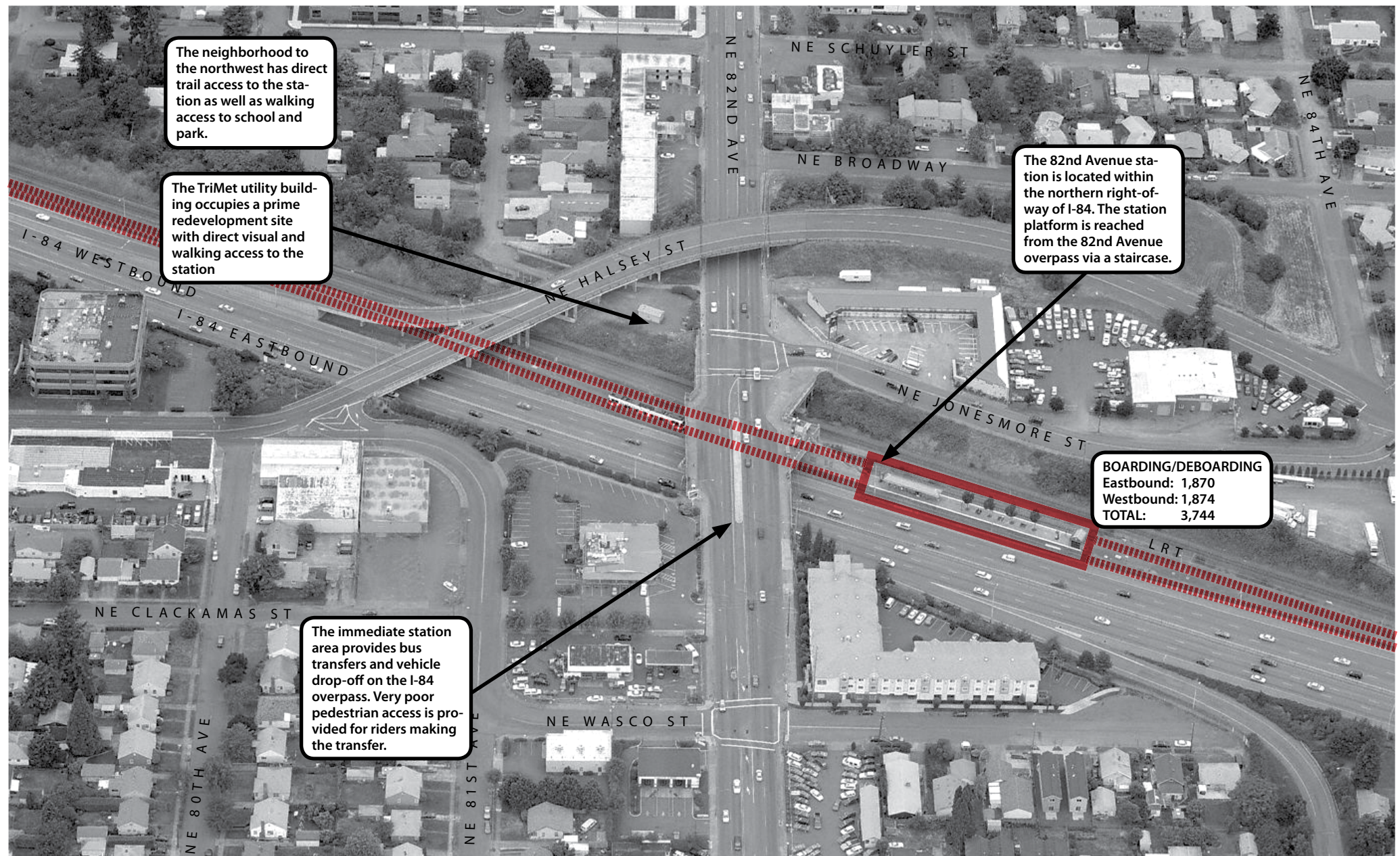
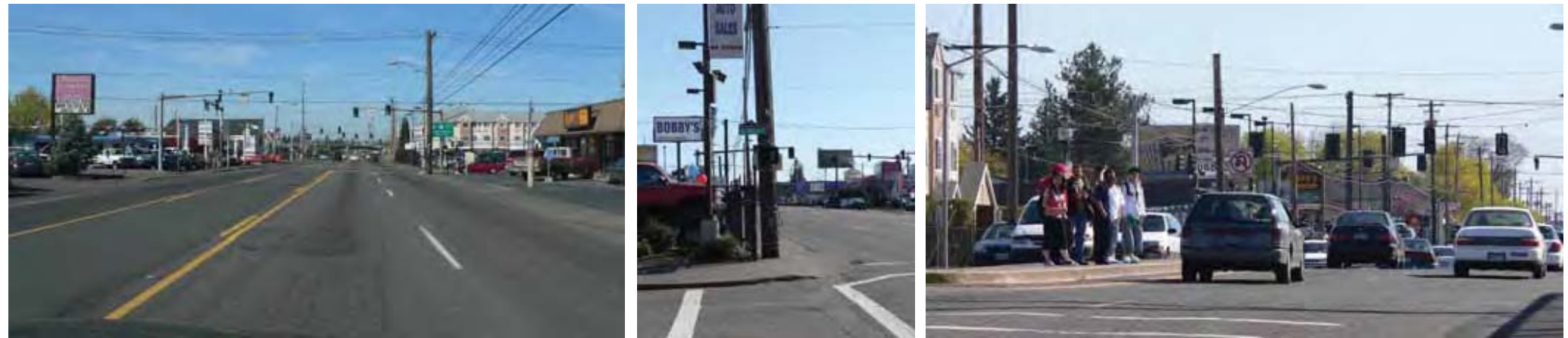
- The immediate station area provides bus transfers and vehicle drop-off on the I-84 overpass. Very poor pedestrian access is provided for riders making the transfer.
- Cars move through this area at a high rate of speed. There is no pedestrian refuge or central protected crossing.
- The neighborhood to the northwest has direct trail access to the station as well as walking access to school and park.

LAND USE AND DEVELOPMENT

82nd is an auto-dominated corridor and historic highway (Hwy 213) lined with typical highway land uses—motels, auto shops, large format retail.

The areas to the north and south of the station are stable single dwelling neighborhoods. The existing land uses within one block of the station are mostly motels, which are two-story buildings setback across parking lots.

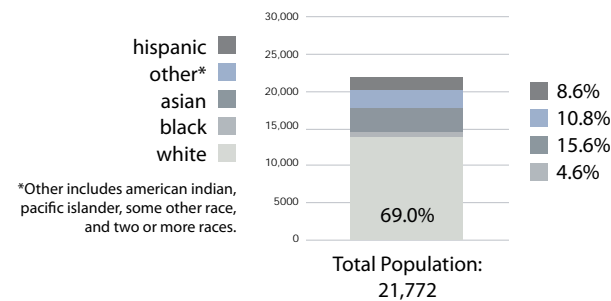
Significant features in this neighborhood are the Rose City Golf Course and the adjacent Madison High School.



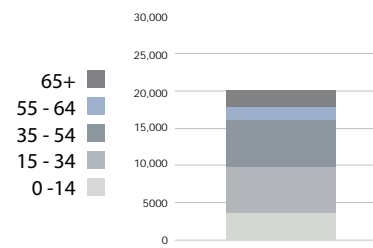
DEMOGRAPHIC PROFILE

	2000	2007
Population	19,308	20,041
Households	7,370	7,646
Families	4,367	4,483
Average Household Size	2.49	2.5
Owner Occupied HUs	4,243	4,563
Renter Occupied HUs	3,127	3,083
Median Age	33.8	35.4

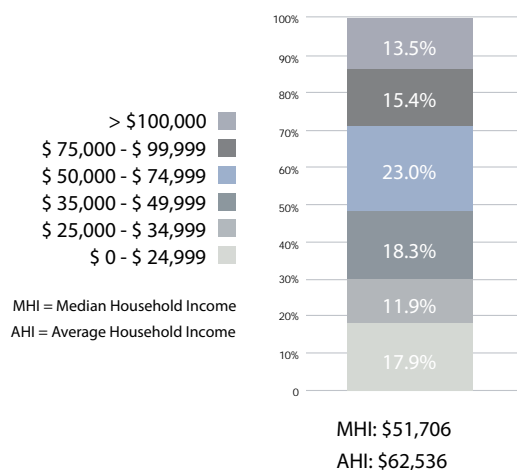
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

Form a coherent vision

Articulate a plan	Missing
Involve stakeholders	Missing
Focus on implementation	Missing
Maintain flexibility	Missing
Understand market demographics	Missing
Engage corporate attention	Missing

Get the land uses right

Make retail strategy market driven	Opportunity for improvement
Develop mixed-income housing	Opportunity for improvement
Allow single uses where appropriate	Opportunity for improvement

Promote density

Maximize transit ridership and access	Missing
Build retail market base	Opportunity for improvement
Locate employment areas near the station	Opportunity for improvement

Create convenient, comfortable pedestrian & bicycle connections

Connect the grid; provide well-designed sidewalks	Opportunity for improvement
Develop compact blocks; provide on-street parking	Opportunity for improvement
Create seamless access to neighborhoods	Missing
Maximize safety & comfort through design	Missing
Build bike parking	Opportunity for improvement
Calm traffic; eliminate minimum LOS standards	Missing

Build a place not a project; ensure good urban design

Design with the station as the center	Missing
Use high quality urban form to support mixed incomes & uses	Missing
Make places that engage the public	Missing
Create landmarks and beacons	Missing
Preserve and invest in existing neighborhoods	Missing
Taper density and height from stations to neighborhoods	Missing

Get the parking right

Do not locate Park & Ride or utility structures in front of station	Opportunity for improvement
Develop shared parking policies	Opportunity for improvement
Design structured parking well	na

Make bus transit and TDM work

Provide feeder transit and make buses attractive	Opportunity for improvement
Provide local and workplace shuttles	Opportunity for improvement
Embrace TOD and TDM to maximize trip reduction	Opportunity for improvement

Create supportive public policies

Pursue joint development	Missing
Focus public investments to support market dynamics	Missing

Notes

No plan for connectivity or urban form
CG on redevelopment sites may limit flexibility

Retail in the area auto oriented
Area dominated by low density auto uses

Retail in the area auto oriented
Engage employers

82nd Avenue and adjacent residential areas lack complete sidewalks
Residential neighborhood has small-sized blocks; no on-street parking on 82nd
Platform access via stair & elevator only
82nd Avenue traffic, speed and street design major barrier to pedestrians and TOD

The station, because of its location and I-84 as a barrier, will never be a center
Urban form varies in quality; is the the result of zoning, not intentional planningl
Single-dwelling areas zoned R1a—potential infill compatibility
Single-dwelling areas zoned R1a—potential infill compatibility

LRT utility structure occupies prime redevelopment site

Transit transfer on the overpass, but poor pedestrian access across 82nd;

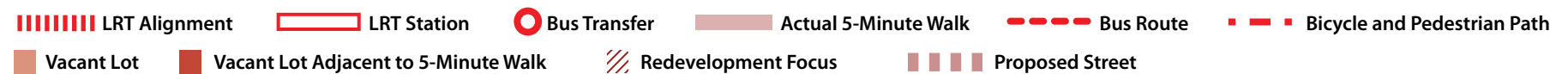
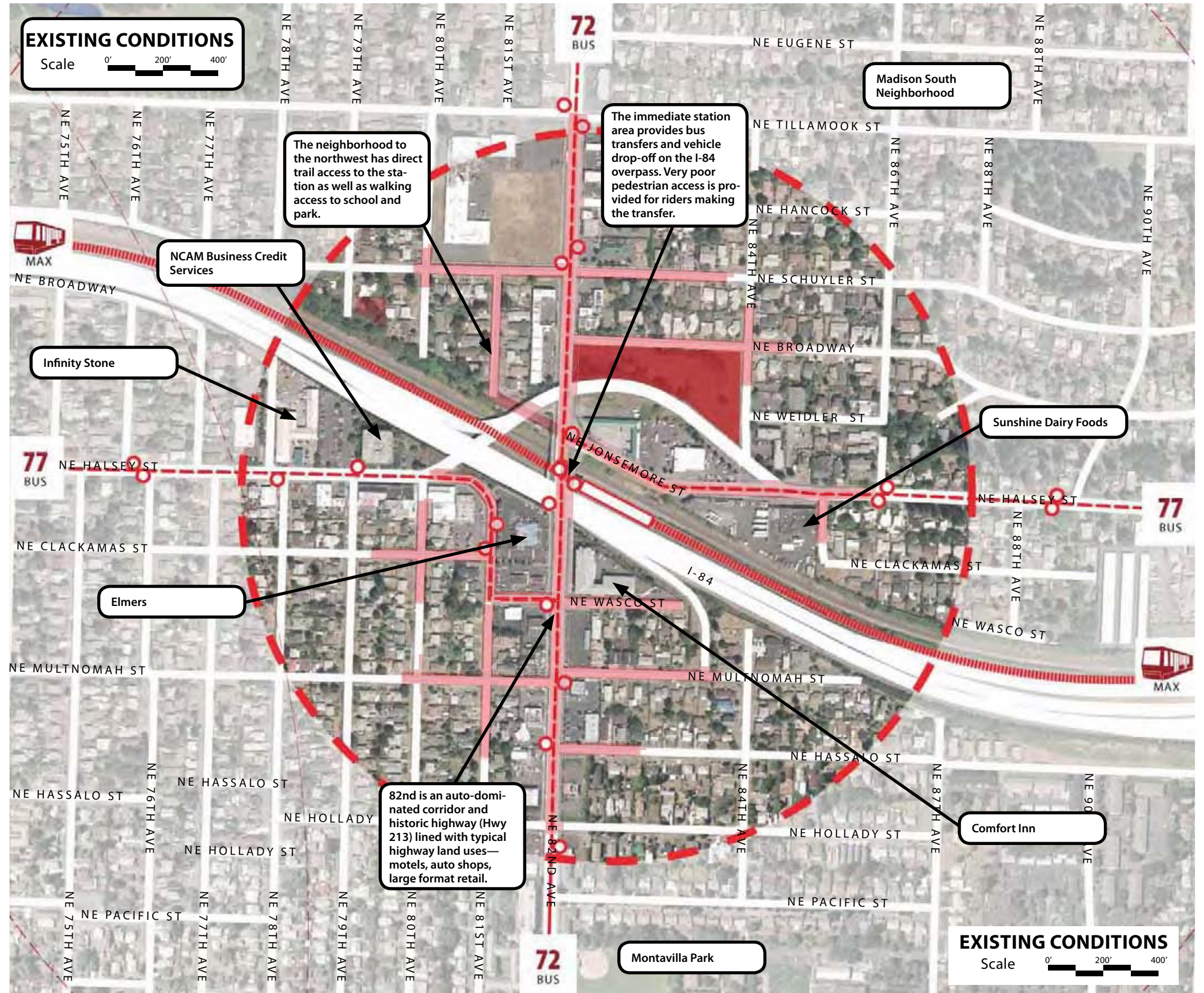
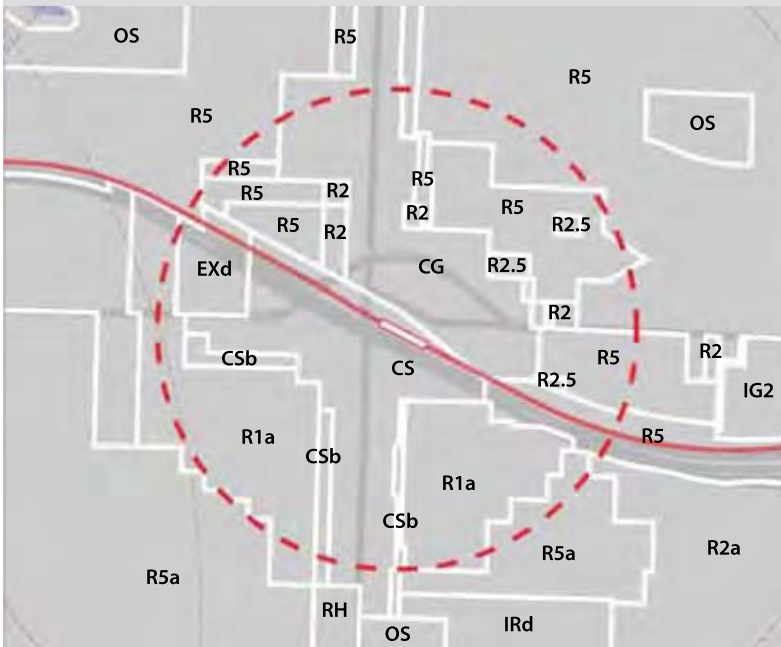
Present
 Opportunity for improvement
 Missing

ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

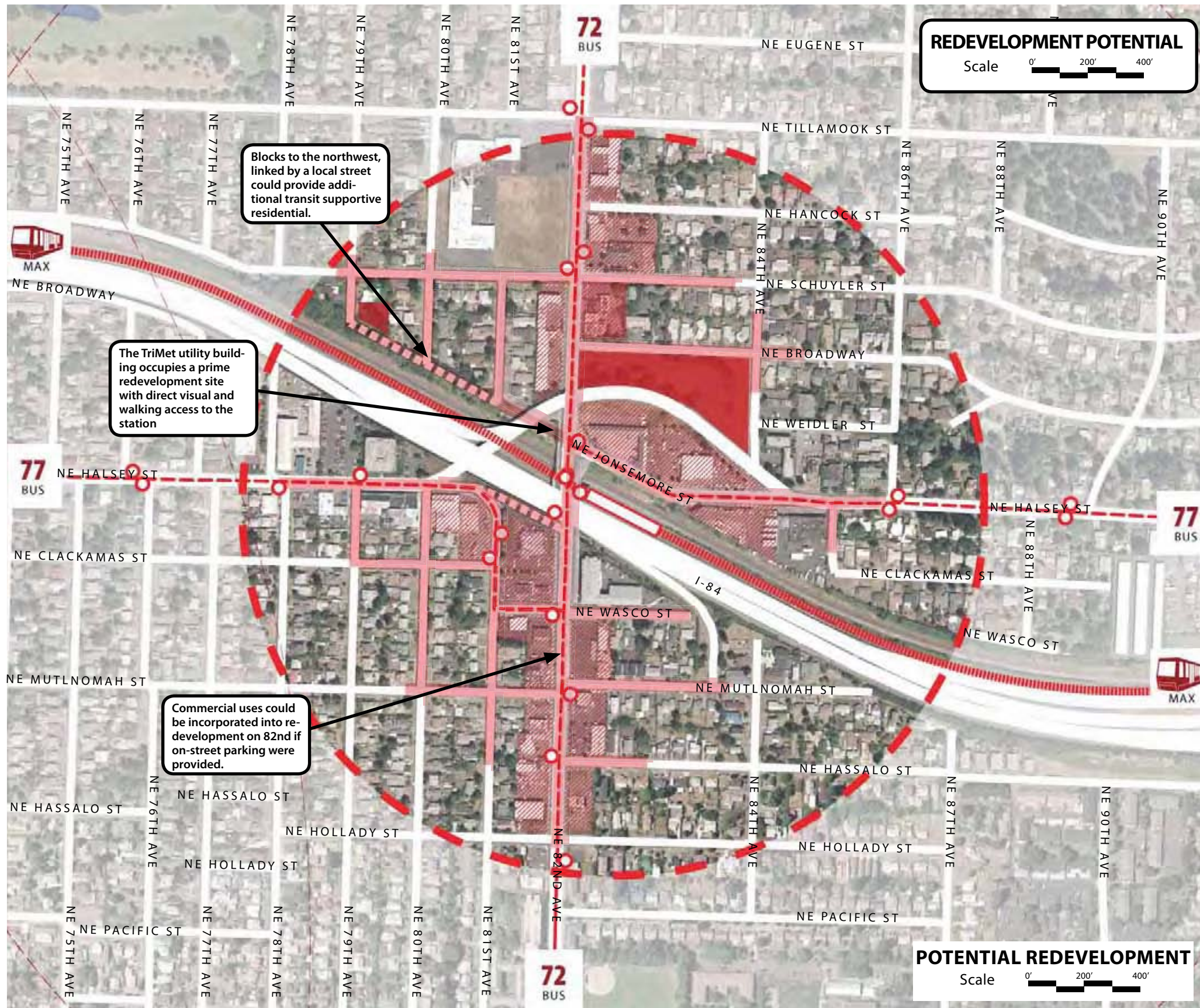
This area was rezoned in the 1980s to support the light rail investment. Current zoning in the area to the north includes CG, R2, and R5 with comprehensive plan designations of R1, R2 and CG. The area to the south of the station, across I-205, was part of the Outer Southeast Plan which targeted 82nd Avenue for revitalization. The areas to the north and south of the station are stable single dwelling neighborhoods. For some of these areas the Outer Southeast Plan established higher density zoning with an "a" overlay zone allowing for increased density with compatibility standards. The area on the west side of 82nd just north of I-84 has residential zoning with a comprehensive plan designation for commercial or higher density residential. Development within 500 feet of a transit street is exempt from parking minimum standards.

According to a PDOT study of the station area, the commercially zoned land along 82nd is the primary opportunity for redevelopment in the area. The same PDOT study found that the future improvement in the area should focus on upgrading the city walkways to the city standards and improving intersection crossings. The study also noted that the station was lacking a north/south bicycle connection.

ZONING



STATION ASSESSMENT 82ND AVENUE



REDEVELOPMENT POTENTIAL
Scale 0' 200' 400'

POTENTIAL REDEVELOPMENT
Scale 0' 200' 400'

Blocks to the northwest, linked by a local street could provide additional transit supportive residential.

The TriMet utility building occupies a prime redevelopment site with direct visual and walking access to the station

Commercial uses could be incorporated into redevelopment on 82nd if on-street parking were provided.

- REDEVELOPMENT POTENTIAL**
- Commercial uses could be incorporated into redevelopment on 82nd if on-street parking were provided.
 - Blocks to the northeast, linked by a local street could provide additional transit supportive residential.
 - The TriMet utility building occupies a prime redevelopment site with direct visual and walking access to the station

||||| LRT Alignment
 LRT Station
 Bus Transfer
 Actual 5-Minute Walk
 --- Bus Route
 - - - Bicycle and Pedestrian Path
 Vacant Lot
 Vacant Lot Adjacent to 5-Minute Walk
 Redevelopment Focus
 Proposed Street

DEMOGRAPHICS

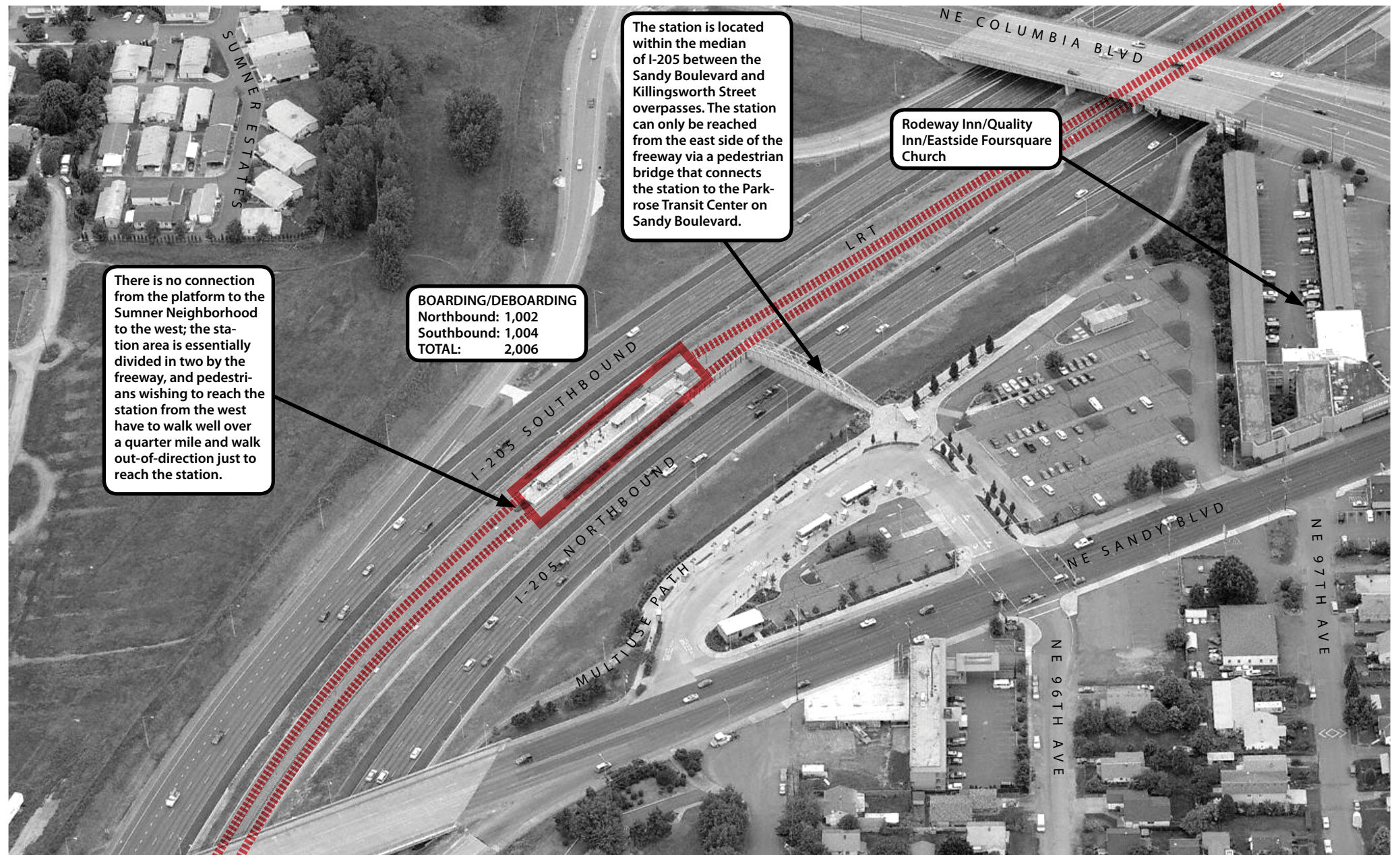
There are only 4,128 households within a 1-mile radius of the Parkrose Station Area but the majority of them (65%) are homeowners. Most people are white (73%), but there appears to be a healthy population of Asians (11%), Hispanics (8%), and African-Americans (5.2%). The median household income is \$51,645 and the median age is 37.9. Median property values have increased 54% since 2000, from \$128,757 to \$236,597.

LRT STATION DESIGN AND ACCESS

The station is located within the median of I-205 between the Sandy Boulevard and Killingsworth Street overpasses. The station can only be reached from the east side of the freeway via a pedestrian bridge that connects the station to the Parkrose Transit Center on Sandy Boulevard. The area has a very challenging, pedestrian-hostile environment on Sandy Boulevard and Killingsworth Street.

There is no connection from the platform to the Sumner Neighborhood to the west; the station area is essentially divided in two by the freeway, and pedestrians wishing to reach the station from the west have to walk well over a quarter mile and walk out-of-direction just to reach the station. The pedestrian environment along this route, traversing Sandy Boulevard or Killingsworth Street, is hostile. Sidewalks along these roads lack street trees, landscape strip, and on-street parking. The sidewalks themselves range between 6 and 8 feet wide, and in some places are narrower or missing. Many local streets not only lack sidewalks, but are also unpaved.

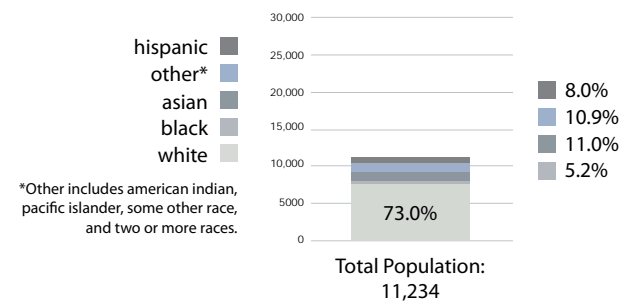
There are no sidewalks on the primary north-south street leading from the neighborhood to the station/park-and-ride.



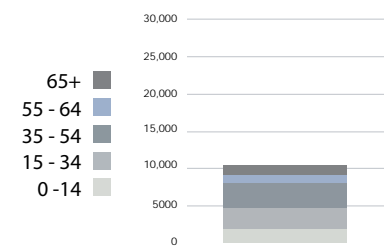
DEMOGRAPHIC PROFILE

	2000	2007
Population	9,772	10,404
Households	3,882	4,128
Families	2,301	2,431
Average Household Size	2.45	2.46
Owner Occupied HUs	2,495	2,780
Renter Occupied HUs	1,387	1,348
Median Age	36.0	37.9

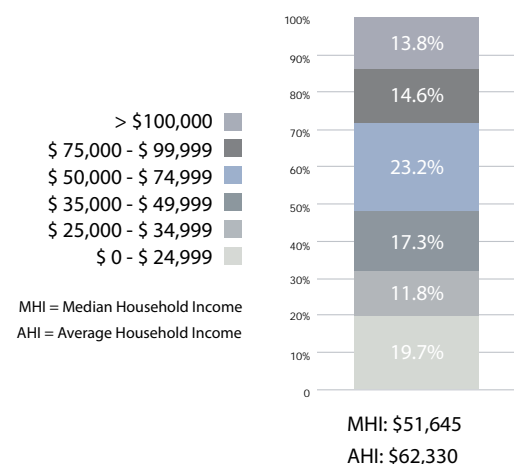
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

Notes

Best Practice	Status	Notes
Form a coherent vision		
Articulate a plan	Missing	Area was not included in Cascade Station planning
Involve stakeholders	Missing	
Focus on implementation	Missing	
Maintain flexibility	Missing	
Understand market demographics	Missing	CG zoning outside of 500' requires parking
Engage corporate attention	Missing	
Get the land uses right		
Make retail strategy market driven	Missing	Sandy Boulevard retail potential; now auto-oriented
Develop mixed-income housing	Opportunity for improvement	New bridge connection to redevelopment potential west of I-205
Allow single uses where appropriate	Opportunity for improvement	
Promote density		
Maximize transit ridership and access	Missing	
Build retail market base	Missing	
Locate employment areas near the station	Missing	Sandy Boulevard has potential but problematic zoning, pedestrian hostile environment
Create convenient, comfortable pedestrian & bicycle connections		
Connect the grid; provide well-designed sidewalks	Missing	Sandy Boulevard and adjacent residential areas lack complete sidewalks
Develop compact blocks; provide on-street parking	Missing	
Create seamless access to neighborhoods	Opportunity for improvement	New bridge connection to residential neighborhood west of I-205 would provide greater access
Maximize safety & comfort through design	Opportunity for improvement	Pedestrian access through Park & Ride direct and visible
Build bike parking	Missing	
Calm traffic; eliminate minimum LOS standards	Missing	Sandy Boulevard traffic, speed and street design major barrier to pedestrians and TOD
Build a place not a project; ensure good urban design		
Design with the station as the center	Missing	Bridge helps connect to east; redevelop park and ride parcels with structured parking
Use high quality urban form to support mixed incomes & uses	Opportunity for improvement	
Make places that engage the public	Opportunity for improvement	
Create landmarks and beacons	Present	I-205 bridge is a landmark
Preserve and invest in existing neighborhoods	Missing	
Taper density and height from stations to neighborhoods	Missing	
Get the parking right		
Do not locate Park & Ride or utility structures in front of station	Opportunity for improvement	Park & Ride occupies prime redevelopment sites
Develop shared parking policies	Opportunity for improvement	na
Design structured parking well	Opportunity for improvement	na
Make bus transit and TDM work		
Provide feeder transit and make buses attractive	Opportunity for improvement	
Provide local and workplace shuttles	Opportunity for improvement	na
Embrace TOD and TDM to maximize trip reduction	Missing	
Create supportive public policies		
Pursue joint development	Opportunity for improvement	
Focus public investments to support market dynamics	Opportunity for improvement	

Present
 Opportunity for improvement
 Missing

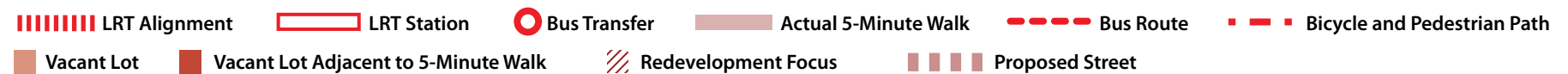
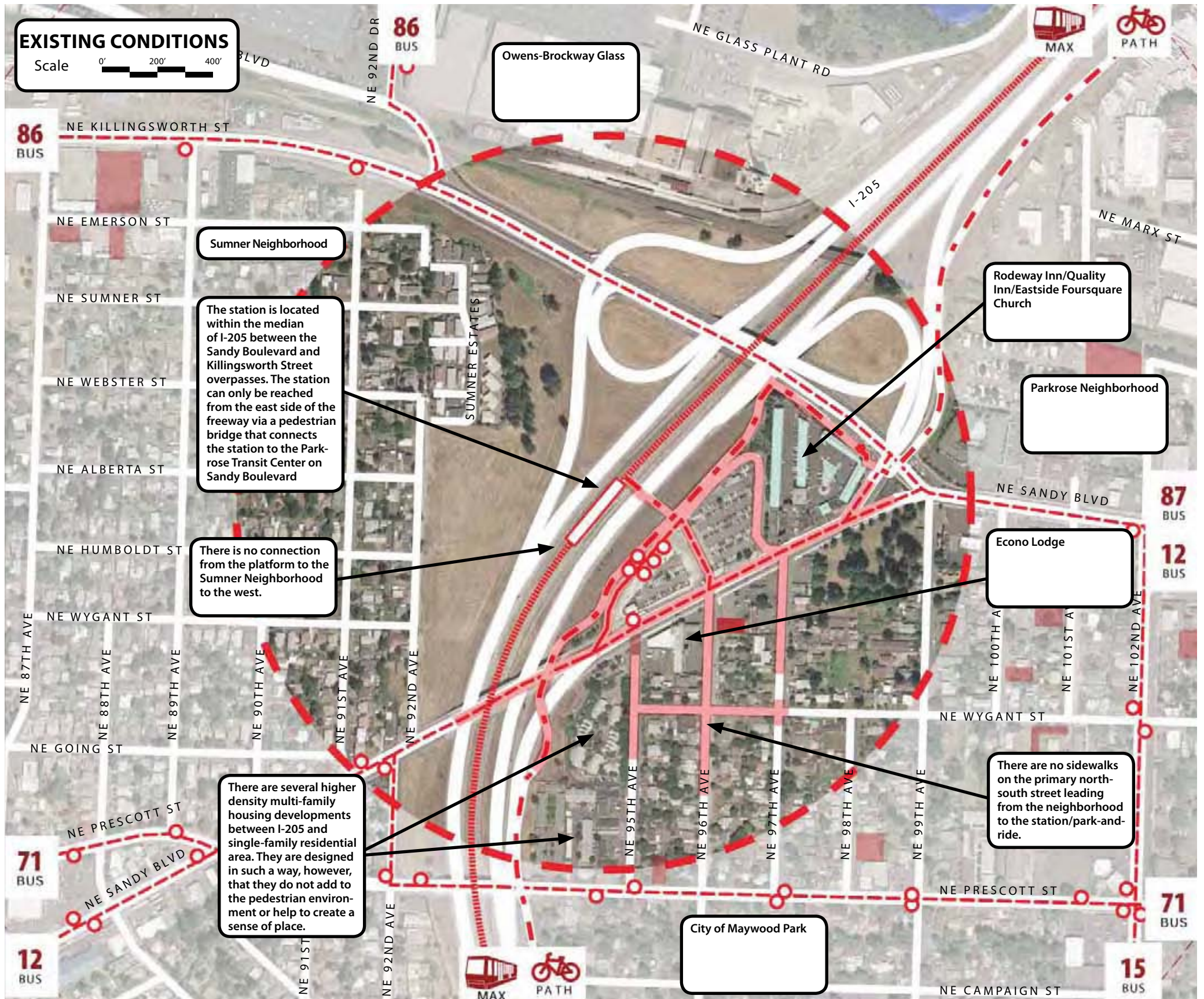
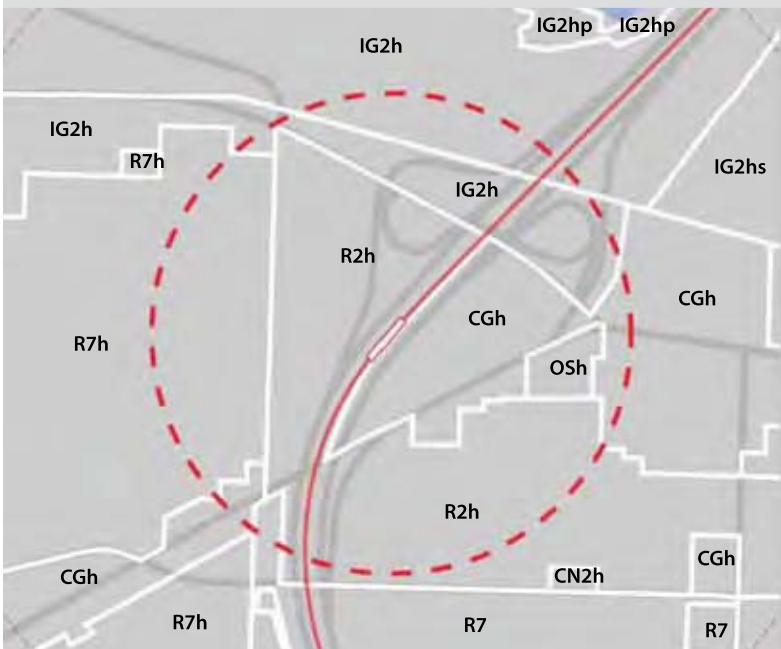
LAND USE AND DEVELOPMENT

The buildings within one block of the station area are mostly motels and auto-oriented retail. The motels are two and three story buildings. The areas to the southeast and west of the station are fairly stable single dwelling neighborhoods with some multi-dwelling near the freeway. Land uses to the north of the station transition into light and heavy industrial uses. Immediately adjacent to the station is a large park-and-ride lot.

ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

Current zoning in the Parkrose Neighborhood to the south and east of the station is R2 and CG. The neighborhoods to the west of the station, across I-205, are zoned R2—which is mostly ODOT land associated with the I-205 right-of-way—and R7—which covers the existing single family housing in the area. This area is zoned R2h and is occupied by manufactured homes. Land to the north of the station is zoned IG2. The entire area is in an airport landing zone—the “h” overlay—which restricts the heights of buildings.

ZONING



STATION ASSESSMENT PARKROSE SUMNER



A large area of potentially developable land on the west side I-205 is part of the freeway right-of-way.

The hotel property could be redeveloped to be oriented better to the transit station.

There is an opportunity, though perhaps quite expensive, to develop a pedestrian/bike connection to station from west side of I-205 via a new pedestrian bridge to connect the Sumner neighborhood to the station.

Transit-oriented mixed-use development is a possibility for the Park-n-Ride lots.

Underdeveloped commercial parcels along Sandy Boulevard could be redeveloped with transit-oriented uses.

REDEVELOPMENT POTENTIAL
 There is potential for redevelopment on these parcels and the Park & Ride lot immediately adjacent to the station, although the market and proximity to the airport may significantly restrict this potential. The location of the station, the transitional nature of the zoning and the proximity to the airport provide little opportunity for additional residential development.

- There are several higher density multi-family housing developments between I-205 and single-family residential area. They are designed in such a way, however, that they do not add to the pedestrian environment or help to create a sense of place.
- A large area of potentially developable land on the west side I-205 is part of the freeway right-of-way.
- The station is located in the median of I-205 with only a connection to the Parkrose neighborhood to the east. There is an opportunity, though perhaps quite expensive, to develop a pedestrian/bike connection to station from west side of I-205 via a new pedestrian bridge to connect the Sumner neighborhood to the station.
- A hotel is located directly adjacent to station on prime land at the corner of NE Sandy Boulevard and NE Killingsworth Street.



Recommended Public Interventions: 60th and 82 Stations

The 60th Avenue and 82nd Avenue stations have similar characteristics. They are both located between I-84 and the Railroad right of way. The stations are accessed by stairs from the street above. The surrounding neighborhood is largely built out with few redevelopment opportunities within one half mile of the station. The block pattern in this area is small, of the inner Portland Eastside Scale.

Leadership The leadership actions needed in this area should focus on ensuring compatible infill development and improved pedestrian connections. As in other stations, it is important that someone have responsibility for monitoring development activity and advocating for public improvements. The job is primarily one of being an internal advocate at the city for infrastructure investment and good design.

Infrastructure Investment The street system in this area is well connected. The station map demonstrates that a 5 minute walk from both stations accesses many addresses. By contrast, a 5 minute walk from the 148th or 162 station accesses fewer addresses because of the large blocks that dominate the area and interfere with good pedestrian connectivity.

Therefore the investment needed is primarily for enhancing the quality of the existing pedestrian network by widening sidewalks and adding a planting strip where possible. There are a few sections of unimproved streets that should be constructed to current city standards.

Regulatory There are no major regulatory changes identified in this area. The zoning in this area supports redevelopment, mostly in the form of infill. The current zoning is dominated by R-5 with possibility of zoning change to a comprehensive plan designation of R-1 or RH. Faster permit processing helps facilitate development, but has not been identified as a major obstacle.

There is an area on the north side of the 60th Station that has industrial zoning and uses. While this would be a good location for a TOD residential development, in the broader context of preserving industrial sites within the City, this area should not be considered to be a redevelopment opportunity.

Development Incentives Like the other stations, there are tax abatements available for development adjacent to transit. Other tax incentive programs are available for affordable housing. No other development inducements are specifically applicable to this area. These two stations are not within an urban renewal area.

Recommended Public Interventions: Parkrose / Sumner Station Area

Leadership Achieving transit supportive development in this station area will be exceptionally challenging. The station is located in the middle of the I-205 freeway with a pedestrian bridge connection only to the east. The current land uses adjacent to the station are very auto oriented. The sites are not very attractive for mixed use development.

Making this area more attractive for development must start with connections and security. The City and/or TriMet should undertake a public safety analysis that reviews crime statistics and capital improvement needs. The business association and neighborhood association should be asked for their suggestions on how to improve the area.

Infrastructure Investment Like many of the other stations examined, this area has unimproved streets and a disconnected pedestrian network. This list of needed improvements is lengthy. The City should inventory the street and sidewalk needs in the area and undertake a capital improvement program that enhances access to the station.

Development Incentives This station is not within an urban renewal district. Therefore, the development assistance available is limited to tax abatements and affordable housing tax incentives. The area immediately adjacent to the station is not appropriate for residential development, so new residential development is likely to be in the form of small scale infill in the neighborhood to the southeast.

Regulatory The station area has not been evaluated by the City for potential zone changes that would be more supportive of transit oriented development. It would be desirable to adjust the CG zoning near the station to facilitate mixed use development, but the current environment is so auto-oriented that new mixed use development is highly unlikely. The R-2 zoning in the residential areas does accommodate some higher density residential types.

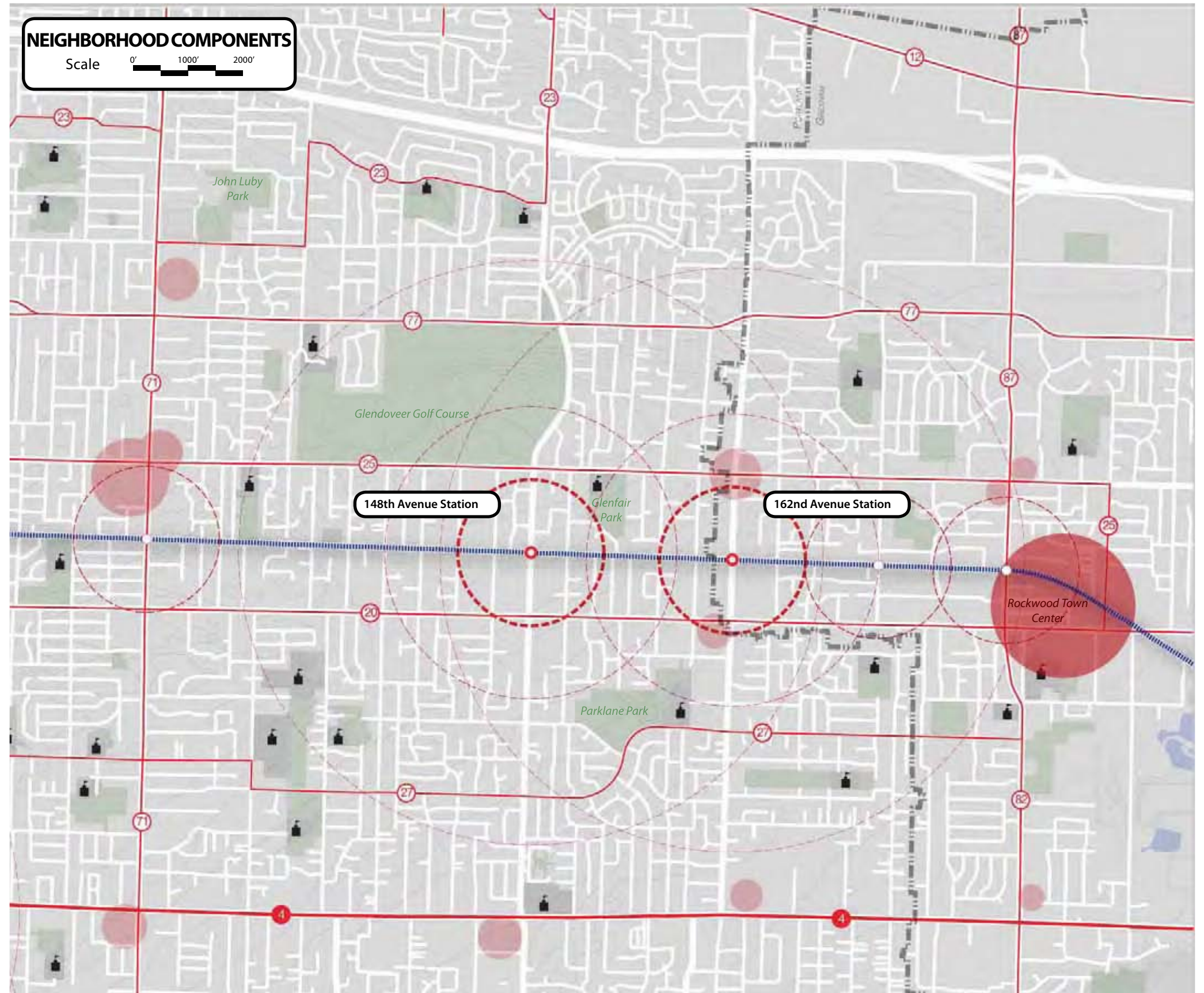
BLUE LINE STATIONS EAST OF I-205 148TH AVENUE 162ND AVENUE

EXISTING CONDITIONS AND ASSESSMENT

NEIGHBORHOOD COMPONENTS

The 148th Avenue and 162nd Avenue Stations are situated along the blue MAX line on E Burnside. The stations serve the Glenfair, Centennial, Hazelwood, and Wilkes neighborhoods in Portland and the western edge of Gresham. Land uses along and in the adjacent areas to E Burnside in this corridor are primarily single-family and multi-family residential developments. 148th Avenue and 162nd Avenue are primary roadways that do not connect to I-84; adjacent land uses are primarily residential. Local parks include Glenfair Park, Parklane and the Glendoveer Golf Course. There are numerous schools within a 1-mile radius of the stations: Glenfair Elementary, Menlo Park Elementary, Harold Oliver Intermediate, Hauten B Lee Elementary, and Alder Elementary.

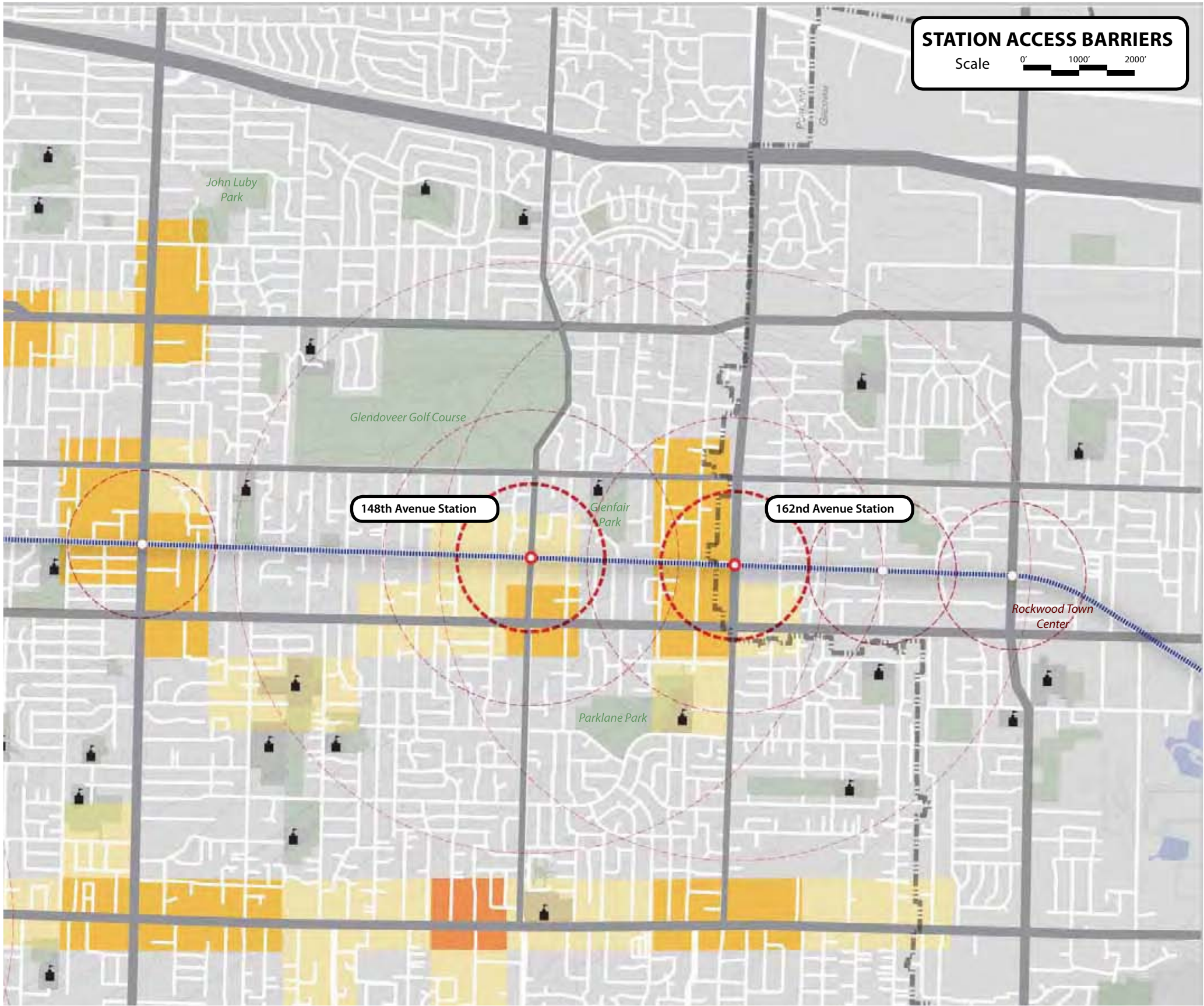
NEIGHBORHOODS



OVERVIEW

148TH AVENUE 162ND AVENUE

STATION ACCESS BARRIERS
 Scale 0' 1000' 2000'



STATION ACCESS BARRIERS
 As the transit lines move through increasingly suburban land uses, the transportation network itself becomes an access barrier. The urban grid gets bigger, with longer distances between intersections. More and more local streets do not connect to one another. Walking distances between points are longer than their straight-line distances, which are disincentives for people to walk to destinations. The Blue Line travels in the middle of E Burnside on a curb-height, above-grade platform that is barricaded on both sides of the corridor. Vehicle access is provided at selected intersections; pedestrian crossings are provided intermittently—roughly every two to four blocks. In this case, the transit corridor itself is a major barrier between neighborhoods and destinations. Other barriers to the stations at NE 142nd and NE 162nd include:

- High-volume arterial and major collector roadways with limited pedestrian and bicycle facilities
- Long distances between signalized or marked pedestrian crossings
- Few properly marked mid-block pedestrian crossings
- Light rail tracks are set slightly above-grade and are barricaded
- Poor local street connectivity
- Large, fenced private or quasi-public properties
- Perception of crime along the existing light rail corridor and station areas

LRT Alignment
 Study Area LRT Station
 Other LRT Station
 Frequent Bus Route
 Bus Route
 School or College
 Park, Cemetery or Greenspace
 Transportation Barrier

*Illustrates the number of total crimes in a half mile grid. Crimes include: arson, assault, burglary, homicide, larceny, rape, robbery, theft from auto, vehicle theft, drug laws, embezzlement, forgery, fraud, prostitution, vandalism, weapons laws, curfew, disorderly conduct, DUII, gambling, kidnapping, liquor laws, offense against family, runaway, and trespass.

DEMOGRAPHICS

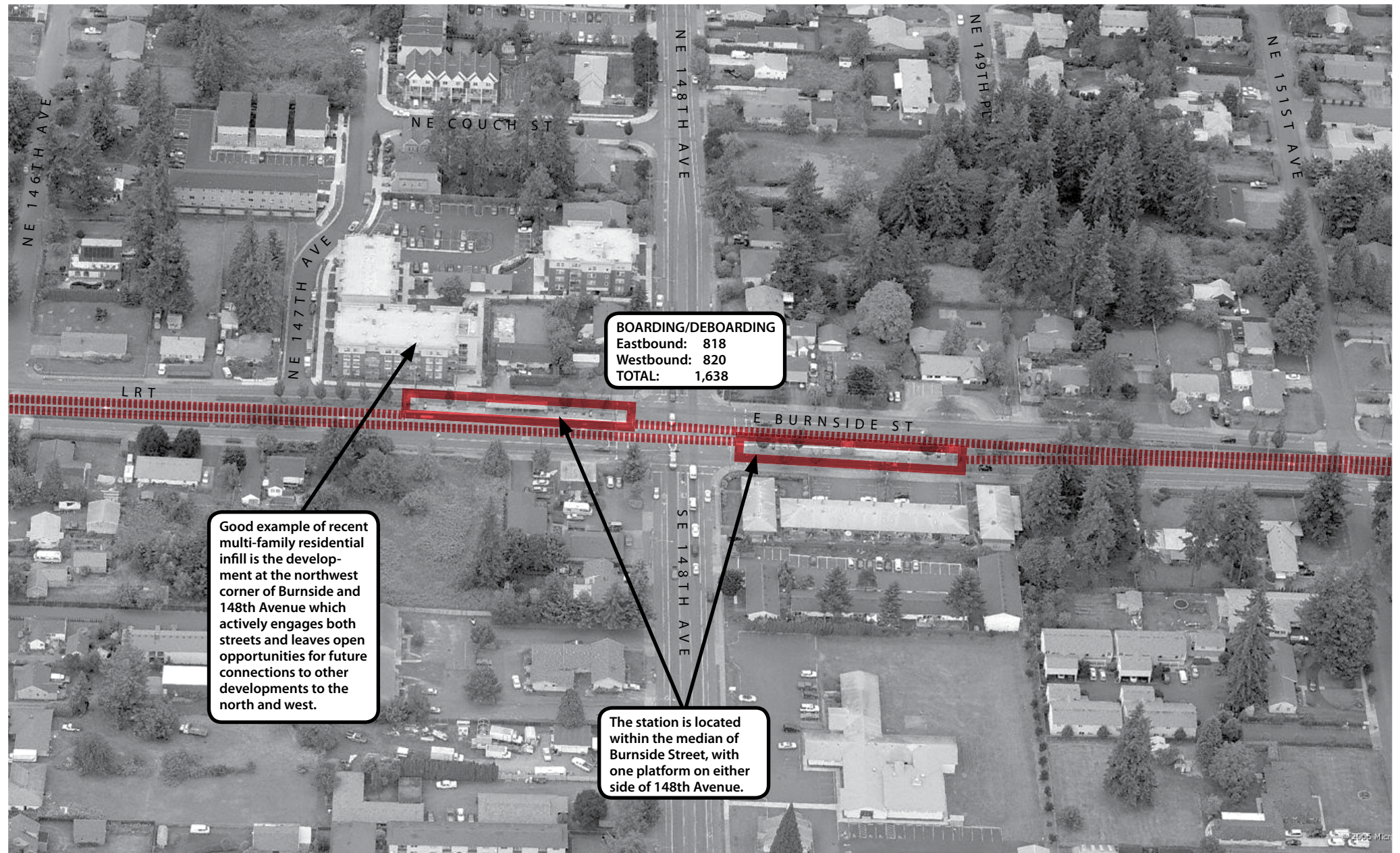
One of the most striking facts about the area around 148th Avenue Station is the (relatively) high percentage (29%) of children under 19 years of age. The majority of people are between the ages of 25 and 54 (42%) and the median age is 33.4. This data indicates that the area may be popular with young families. Just over 54% of the units are owner-occupied. Median household income is \$50,027, which is the second lowest of the station areas.

LRT STATION DESIGN AND ACCESS

The station is located within the median of Burnside Street, with one platform on either side of 148th Avenue.

A PDOT assessment has indicated a deficiency in the quality of the pedestrian environment at the 148th Avenue station. The study found that even though the existing streets are connected, the large-scale grid negatively impacted pedestrian circulation and access to the station. Blocks are very long in the north-south direction. None have new connections from east to west mid-block. Only a handful of new developments appear to have planned for future connectivity. The street network does not meet the City's pedestrian design standards. Local streets do not have sidewalks, and the width of the sidewalks on East Burnside and 148th Avenue vary from 6 feet to 8 feet, which is below the recommended 12 feet guideline. Additionally, sidewalks along Burnside and 148th Avenue generally lack street trees and a landscape strip. Bike lanes on Burnside and 148th Avenue and on-street parking on 148th Avenue do provide some improvement to the pedestrian environment, however.

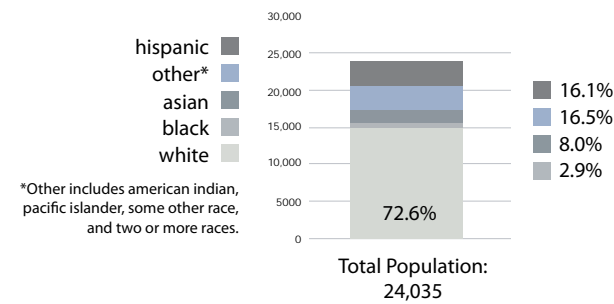
New internal streets are built in conjunction with redeveloped and replatted parcels and generally have no connections, pedestrian or vehicular, to other internal streets. Many newer developments associated with these streets appear to be completely internally focused with little thought given to the pedestrian environment or creating a sense of place.



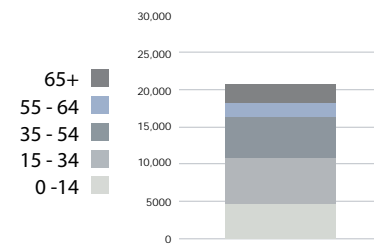
DEMOGRAPHIC PROFILE

	2000	2007
Population	19,596	20,709
Households	7,216	7,578
Families	4,796	4,989
Average Household Size	2.70	2.72
Owner Occupied HUs	4,004	4,410
Renter Occupied HUs	3,212	3,168
Median Age	33.1	33.4

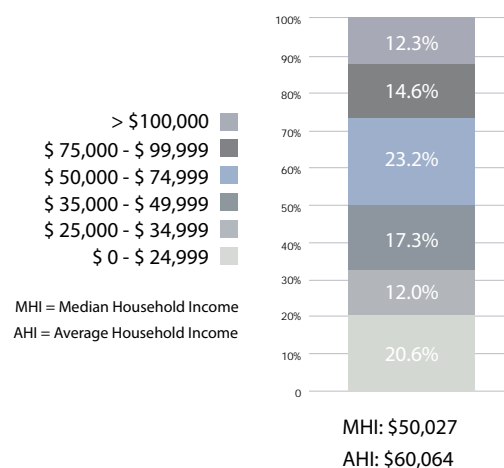
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

Category	Item	Status
Form a coherent vision	Articulate a plan	Present
	Involve stakeholders	Present
	Focus on implementation	Present
	Maintain flexibility	Present
	Understand market demographics	Present
Get the land uses right	Engage corporate attention	Present
	Make retail strategy market driven	Opportunity for improvement
	Develop mixed-income housing	Opportunity for improvement
Promote density	Allow single uses where appropriate	Present
	Maximize transit ridership and access	Present
	Build retail market base	Present
Create convenient, comfortable pedestrian & bicycle connections	Locate employment areas near the station	Present
	Connect the grid; provide well-designed sidewalks	Present
	Develop compact blocks; provide on-street parking	Present
	Create seamless access to neighborhoods	Present
	Maximize safety & comfort through design	Present
Build a place not a project; ensure good urban design	Build bike parking	Present
	Calm traffic; eliminate minimum LOS standards	Present
	Design with the station as the center	Present
	Use high quality urban form to support mixed incomes & uses	Present
	Make places that engage the public	Present
	Create landmarks and beacons	Present
	Preserve and invest in existing neighborhoods	Present
Taper density and height from stations to neighborhoods	Present	
Get the parking right	Do not locate Park & Ride or utility structures in front of station	Present
	Develop shared parking policies	Present
	Design structured parking well	Present
Make bus transit and TDM work	Provide feeder transit and make buses attractive	Present
	Provide local and workplace shuttles	Present
	Embrace TOD and TDM to maximize trip reduction	Present
Create supportive public policies	Pursue joint development	Present
	Focus public investments to support market dynamics	Present

Notes

Challenging demographics: aging population with large family immigrant influx
Low income rental housing predominates; demographics make mixed-income housing difficult
Regulations requiring vertical mixed-use have proven difficult for developers
Demographics and predominance of low income rental housing drives current retail
TOD-supportive grid missing; incomplete sidewalks typical of Outer Southeast
On-street parking missing in portions of 148th
148th Avenue traffic, speed and street design major barrier to pedestrians and TOD
Well-designed residential project in northwest quadrant (Hazelwood Station)
Utility structure located on prime northwest corner of intersection (Burnside/148th)

Present
 Opportunity for improvement
 Missing

LAND USE AND DEVELOPMENT

Single dwelling and multi-dwelling residential are the primary land uses within the station area. Lot and block patterns are typical of county pre-annexation development of Outer Southeast (east of I-205), with large blocks, deep lots and flag lots, low level residential structures dominated by stands of half-century-old Douglas fir trees.

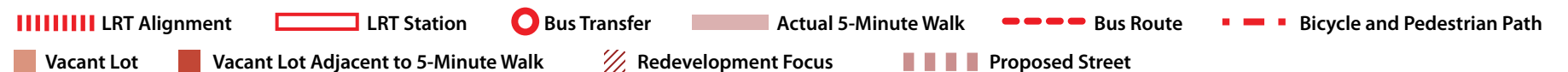
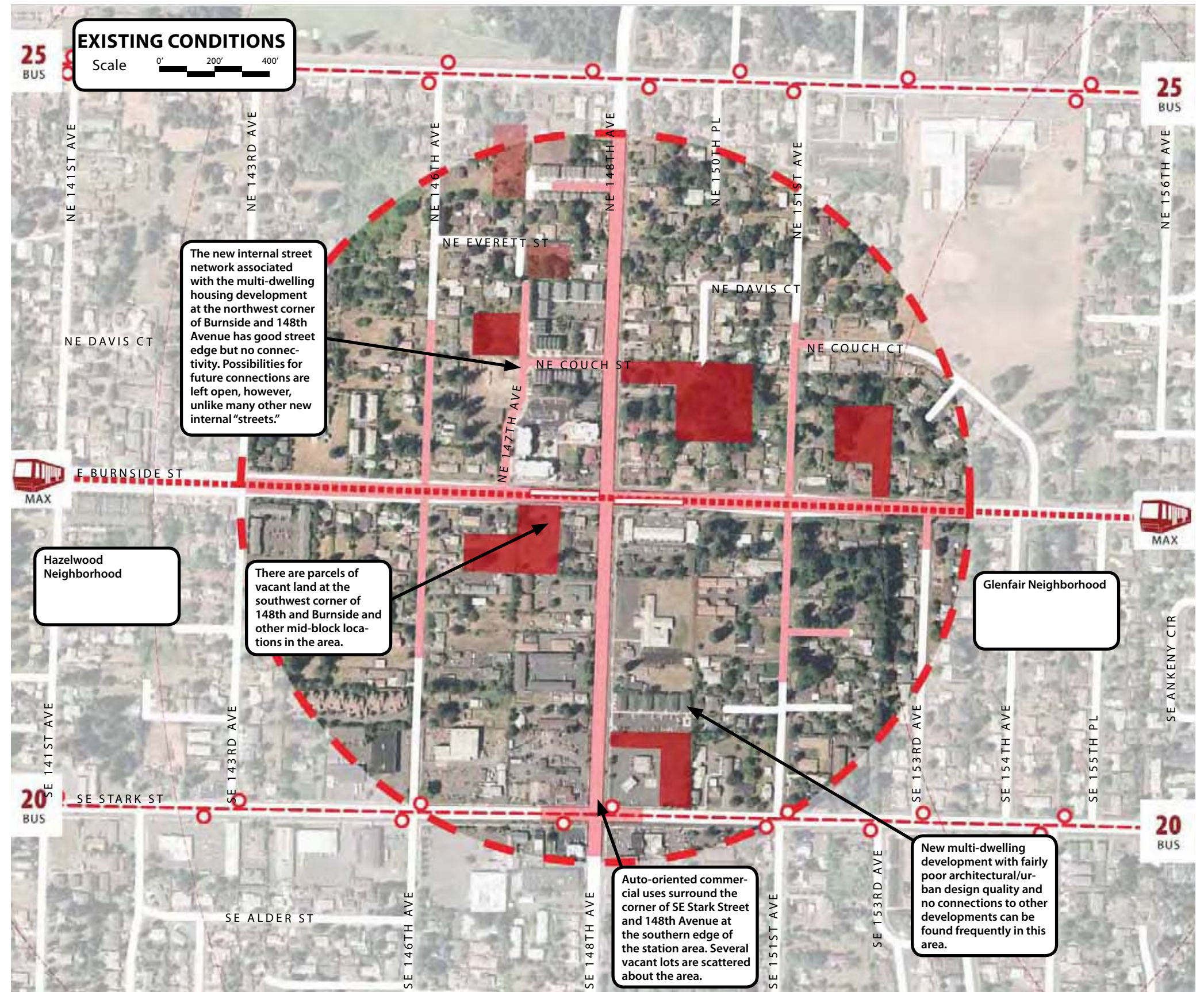
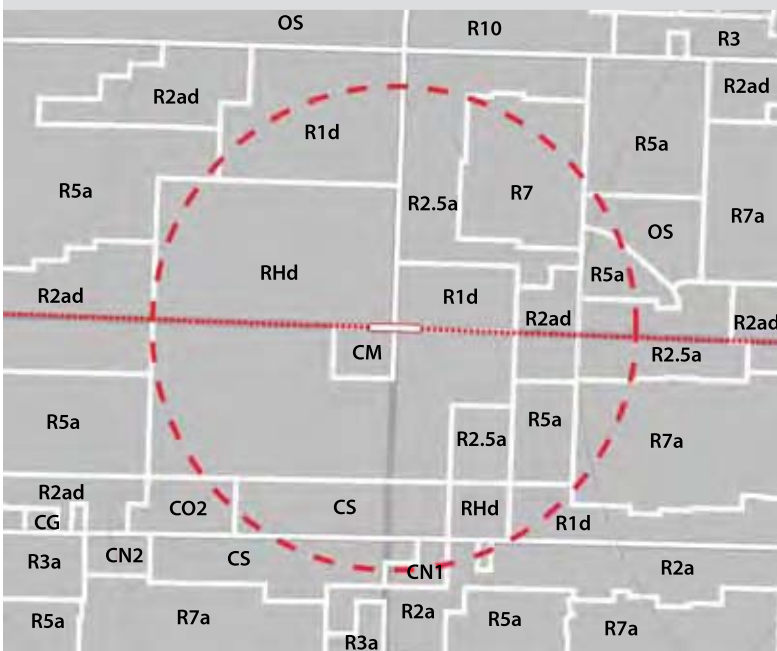
Quite a bit of multi-dwelling residential infill has been built since the station was built, though the quality of these developments, from a pedestrian standpoint, is fairly low. Much of the new residential infill makes no attempt to transition in density or scale, with existing development nor to preserve large existing trees. New infill tends to be built on disconnected cul de sacs.

One good example of recent multi-family residential infill is the development at the northwest corner of Burnside and 148th Avenue which actively engages both streets. The development also leaves open opportunities for future connections to other developments to the north and west.

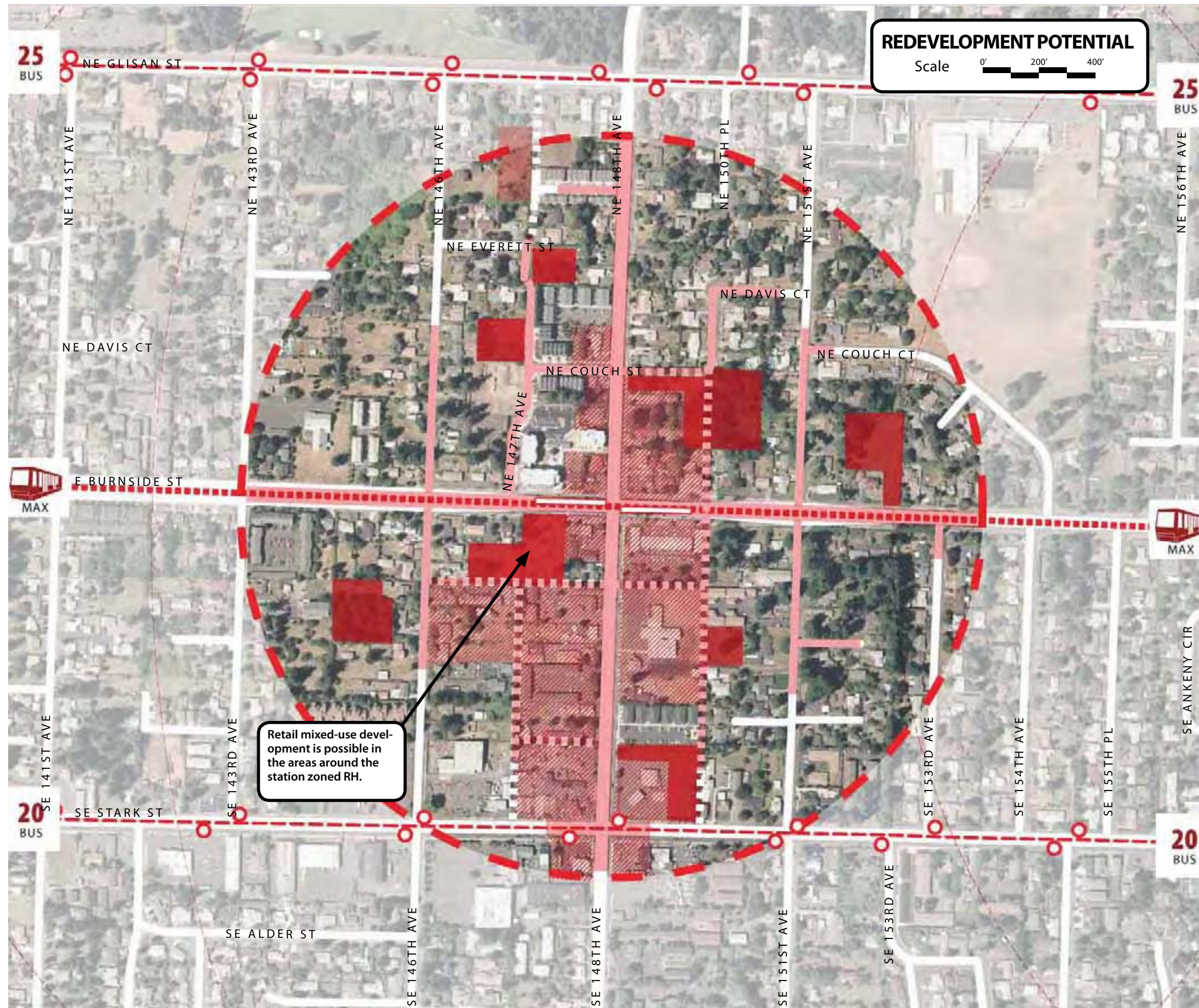
→ A fairly small commercial property occupies the southwest corner of Burnside and 148th.

→ Auto-oriented commercial uses surround the corner of SE Stark Street and 148th Avenue at the southern edge of the station area. Several vacant lots are scattered about the area.

ZONING



STATION ASSESSMENT 148TH AVENUE



REDEVELOPMENT POTENTIAL
Scale 0' 200' 400'

- There are parcels of vacant land at the northwest and southwest corner of 148th and Burnside and other mid-block locations in the area.
- The new internal street network associated with the multi-dwelling housing development at the northwest corner of Burnside and 148th Avenue has good street edge but no connectivity. Possibilities for future connections are left open, however, unlike many other new internal "streets."
- New multi-dwelling development with fairly poor architectural/urban design quality and no connections to other developments can be found frequently in this area.

ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES
The neighborhoods surrounding the station are zoned for multi family, RH, R1, R2 and R2.5 with an "a" or a "d" overlay zone [CHECK]. The residential zones are multi-family residential zones allowing for a range of higher density uses, such as duplexes, attached housing and multi-family. The "a" overlay zone is the Alternative Design Density Overlay Zone or ADD. The ADD overlay allows for bonus density beyond the base zoning if the project goes through a design review process. The zone is intended to encourage housing that is attractive and compatible to the character of the area and to allow for higher densities. The "d" overlay is design zone that is applied to areas where design and neighborhood character are of special concern. The area is located within the Outer Southeast Plan District.

REDEVELOPMENT POTENTIAL
The station area has many pieces in place for future redevelopment. The opportunities for redevelopment and infill extend the full radius around the station. According to a PDOT analysis the potential for intensification of the surrounding neighborhoods is significant under the current zoning. Infrastructure connectivity, infill compatibility and transition of density with existing R5 and R7 areas is key. Retail mixed-use development is possible in the areas around the station zoned RH.

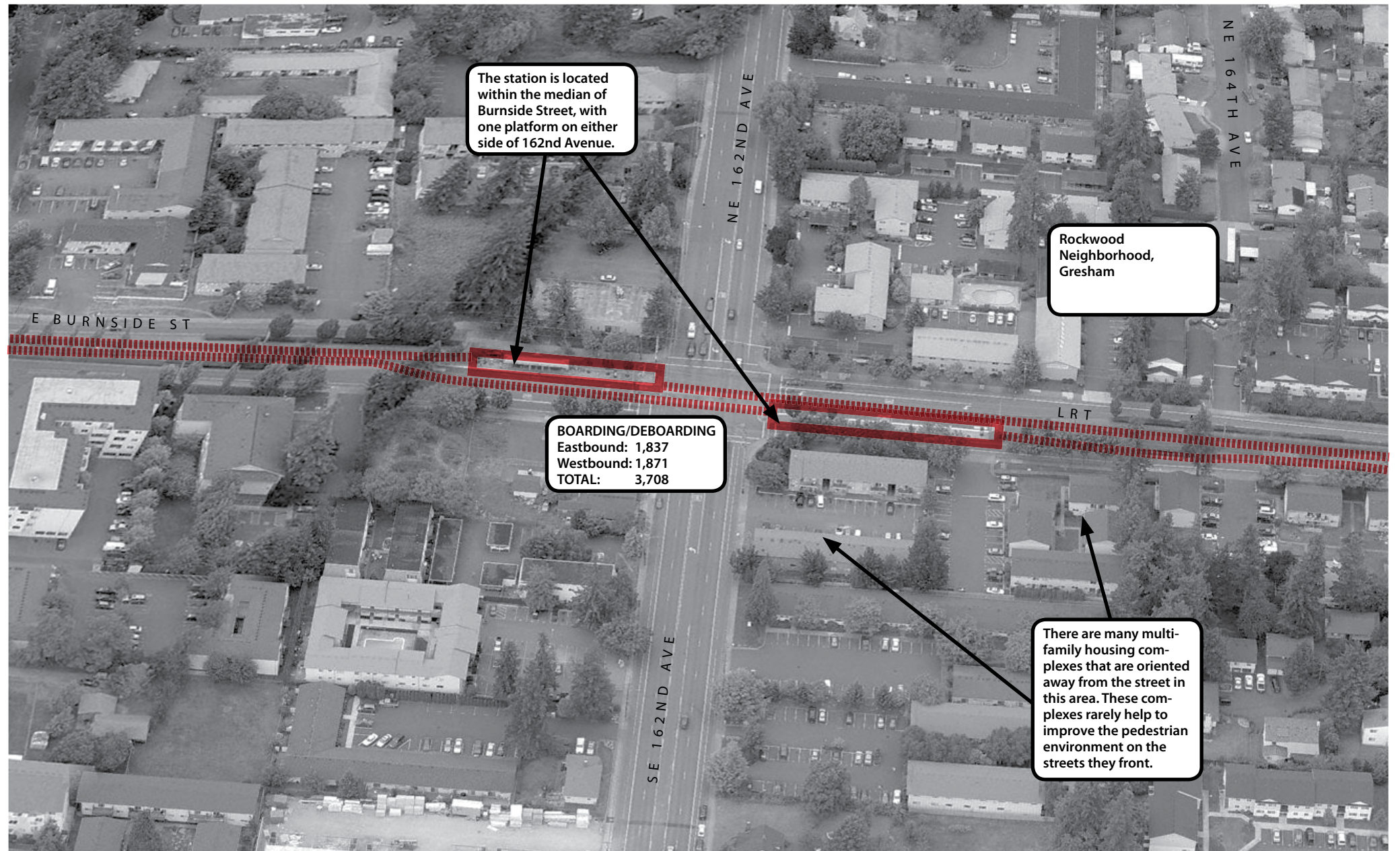
DEMOGRAPHICS

The population around the 162nd Avenue Station is extremely diverse. Over 21% of the population is Hispanic; 14.2% of the population classifies itself as "Some Other Race Alone." Over 5% of the population is two or more races. Incidentally, the area also has one of the lowest median household incomes of \$46,155 and the lowest home-ownership percentage (47.9%). Most of the housing units in the area are rental units – nearly 40% of people live in multi-family complexes that have more than two units. Twelve percent of the households make less than \$15,000 a year; 54% of the population makes less than \$50,000. The median age is 32 years. About 30% of the population is kids under the age of 19. Twenty percent of the population is over the age of 55.

LRT STATION DESIGN AND ACCESS

The station is located within the median of Burnside Street, with one platform on either side of 162nd Avenue. The eastern half of the station area, as well as the station itself, is located in Gresham. There is a general deficiency in the quality of the pedestrian environment around the 162nd Avenue station. Additionally, sidewalks along E Burnside Street and 162nd Avenue generally lack street trees and a landscape strip. Bike lanes on Burnside and 162nd Avenue help to improve the pedestrian environment.

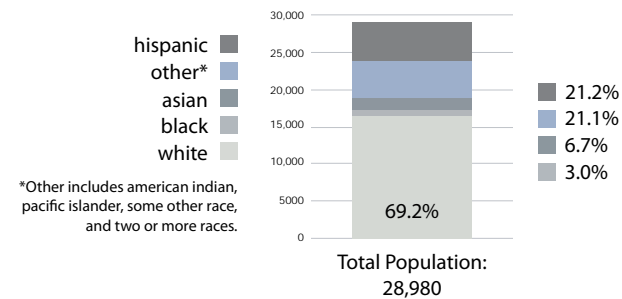
The existing, large-scale street network does not yet meet the City's pedestrian design standards. Blocks are very long in the north-south direction. None have new connections from east to west mid-block, and only a handful of new developments appear to have planned for future connectivity. Most local streets do not have sidewalks, and the width of the sidewalks on East Burnside vary from 6 feet to 8 feet which is below the recommended 12 feet guideline. New streets internal to the existing large block structure that are built in conjunction with redeveloped and replatted parcels generally have no connections, pedestrian or vehicular, to other internal streets.



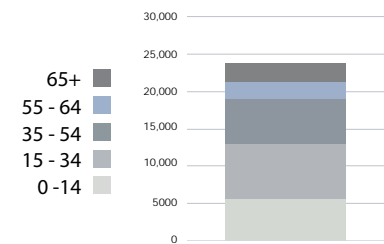
DEMOGRAPHIC PROFILE

	2000	2007
Population	22,547	23,905
Households	8,097	8,488
Families	5,361	5,563
Average Household Size	2.76	2.80
Owner Occupied HUs	3,978	4,400
Renter Occupied HUs	4,119	4,088
Median Age	31.7	32.0

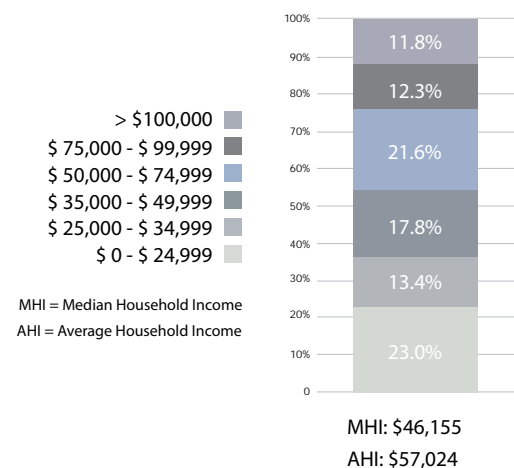
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

Form a coherent vision		
Articulate a plan		
Involve stakeholders		
Focus on implementation		
Maintain flexibility		
Understand market demographics		
Engage corporate attention		
Get the land uses right		
Make retail strategy market driven		
Develop mixed-income housing		
Allow single uses where appropriate		
Promote density		
Maximize transit ridership and access		
Build retail market base		
Locate employment areas near the station		
Create convenient, comfortable pedestrian & bicycle connections		
Connect the grid; provide well-designed sidewalks		
Develop compact blocks; provide on-street parking		
Create seamless access to neighborhoods		
Maximize safety & comfort through design		
Build bike parking		
Calm traffic; eliminate minimum LOS standards		
Build a place not a project; ensure good urban design		
Design with the station as the center		
Use high quality urban form to support mixed incomes & uses		
Make places that engage the public		
Create landmarks and beacons		
Preserve and invest in existing neighborhoods		
Taper density and height from stations to neighborhoods		
Get the parking right		
Do not locate Park & Ride or utility structures in front of station	na	
Develop shared parking policies		
Design structured parking well		
Make bus transit and TDM work		
Provide feeder transit and make buses attractive		
Provide local and workplace shuttles		
Embrace TOD and TDM to maximize trip reduction		
Create supportive public policies		
Pursue joint development		
Focus public investments to support market dynamics		

Notes

No plan for connectivity, urban form, open space, and infill
Challenging demographics: aging population with large family immigrant influx
Low income rental housing predominates; demographics make mixed-income housing difficult
Regulations requiring vertical mixed-use have proven difficult for developers
Demographics and predominance of low income rental housing drives current retail
TOD-supportive grid missing; incomplete sidewalks typical of Outer Southeast
Connectivity and block size major concern
Connectivity and block size major concern
162nd Avenue traffic, speed and street design major barrier to pedestrians and TOD
Concerns: predominance of rental housing, quality of infill
Concerns: transition of density to single dwelling; tree preservation
R1 & RH abut R5 and R7 areas with no transition

Present
 Opportunity for improvement
 Missing

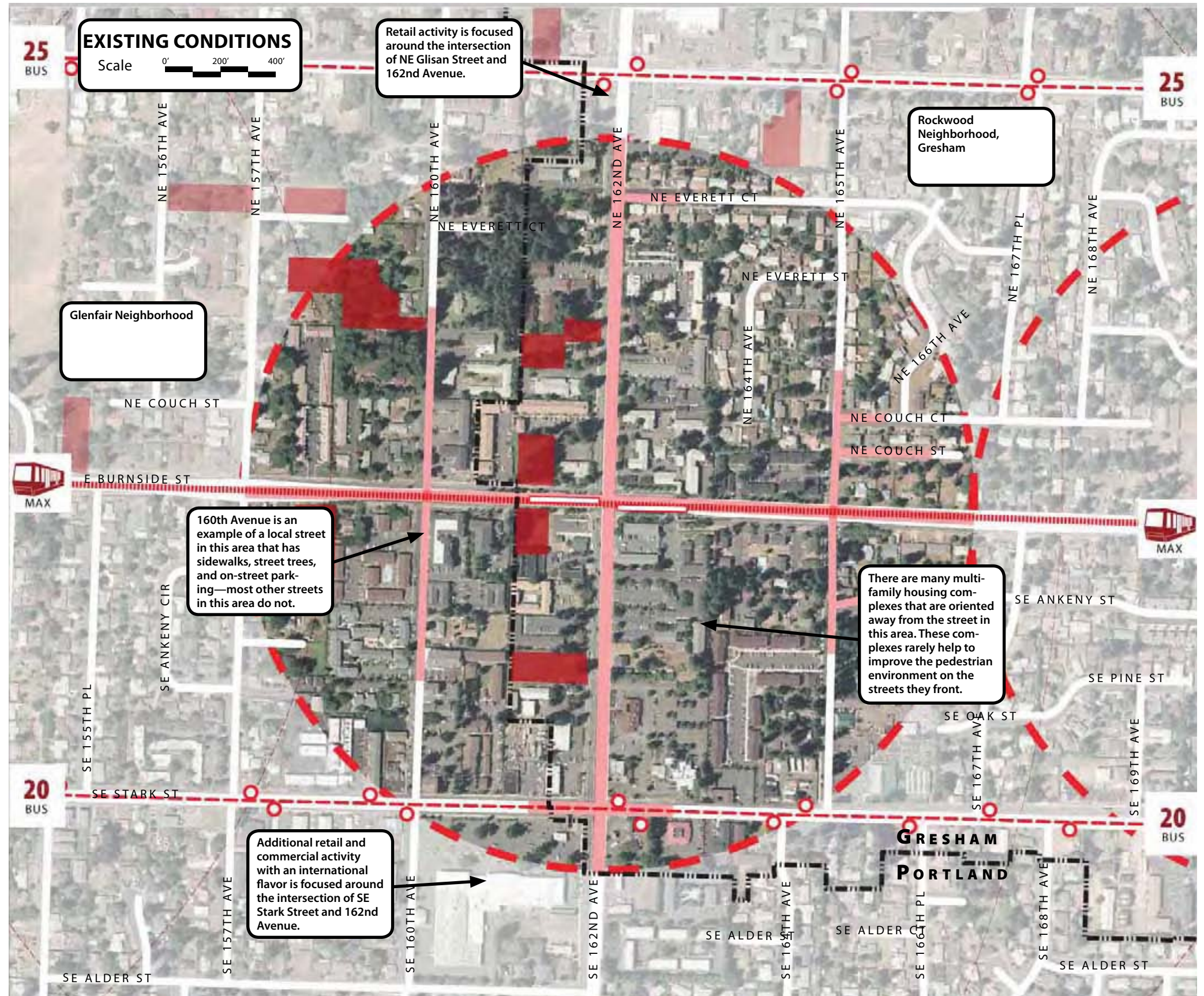
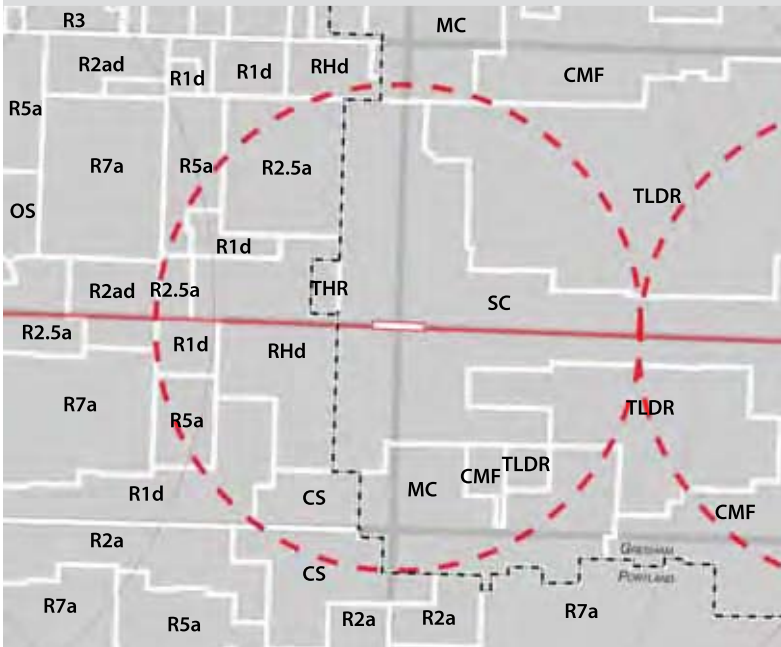
LAND USE AND DEVELOPMENT

There are currently a handful of relatively new residential developments that engage the street and provide for an improved pedestrian environment in these areas. Many new developments, however, appear to be completely internally focused with little thought given to the pedestrian environment or creating a sense of place.

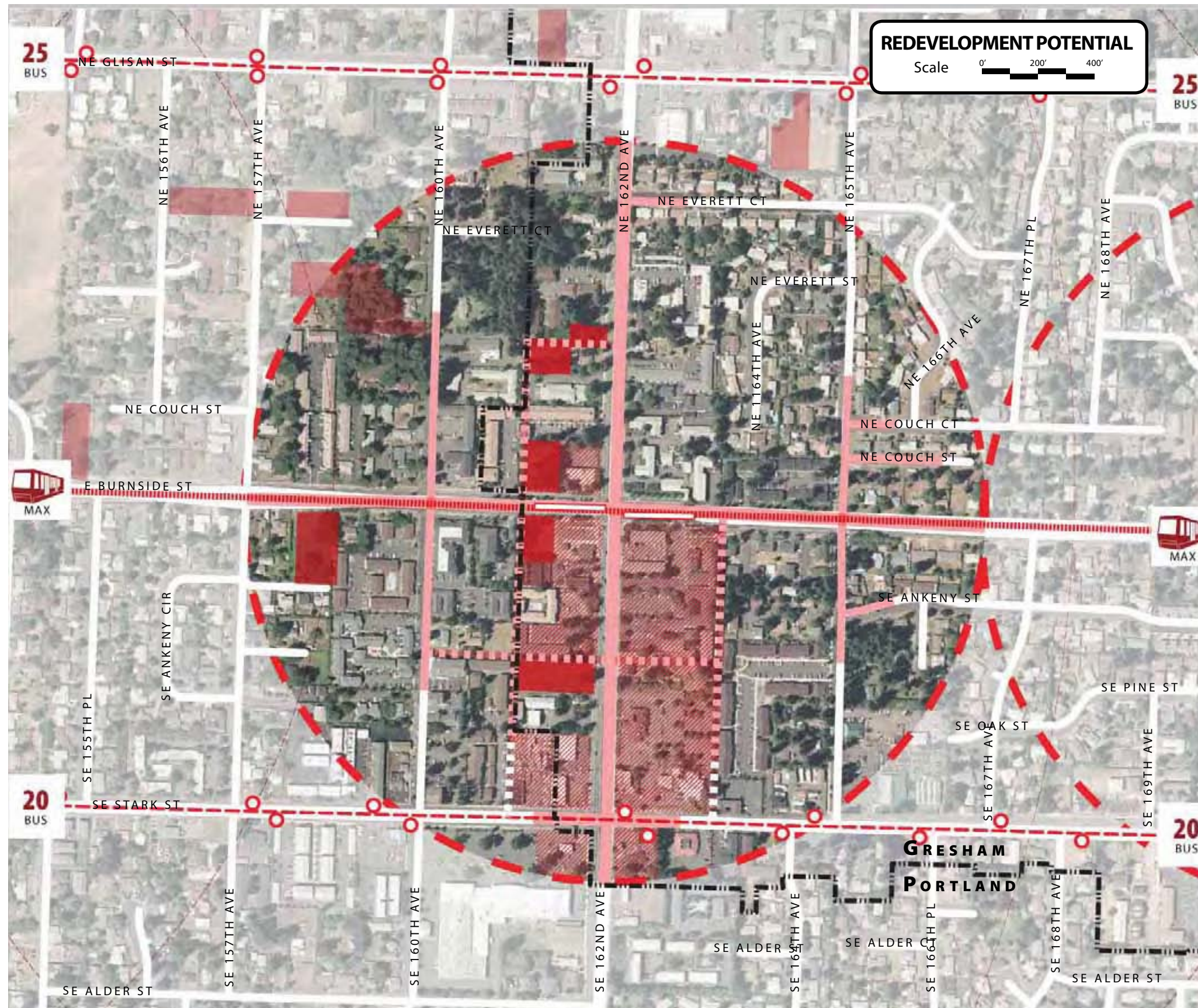
ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

The neighborhoods surrounding the station are zoned for multi family, RH, R1, R2 and R2.5 and single dwelling R5 and R7 with an "a" or a "d" overlay zone. The residential zones are multi-dwelling residential zones allowing for a range of higher density uses, such as duplexes, attached housing and multi-family. The "a" overlay zone is the Alternative Design Density Overlay Zone or ADD. The ADD overlay allows for bonus density beyond the base zoning if the project goes through a design review process. The zone is intended to encourage housing that is attractive and compatible to the character of the area and to allow for higher densities. The "d" overlay is design zone that is applied to areas where design and neighborhood character are of special concern. The area is located within the Outer Southeast Plan District.

ZONING



STATION ASSESSMENT 162ND AVENUE



REDEVELOPMENT POTENTIAL

Single dwelling and multi-dwelling residential uses are the primary land uses within the station area. Auto-oriented commercial uses surround the corner of SE Stark Street and 162nd Avenue at the southern edge of the station area. Several vacant lots are scattered about the area.

The station area has many pieces in place for future redevelopment. The opportunities for redevelopment and infill extend the full radius around the station. According to a PDOT analyses the potential for intensification of the surrounding neighborhoods is significant under the current zoning. Retail mixed use development is possible in the areas around the station zoned RH.

- There are many multi-family housing complexes that are oriented away from the street in this area. These complexes rarely help to improve the pedestrian environment on the streets they front.
- There are still several vacant parcels in the area.
- 160th Avenue is an example of a local street in this area that has sidewalks, street trees, and on-street parking—most other streets in this area do not.
- Retail activity is focused around the intersection of NE Glisan Street and 162nd Avenue.
- Additional retail and commercial activity with an international flavor is focused around the intersection of SE Stark Street and 162nd Avenue.



Recommended Public Interventions: 148th and 162nd Avenue Station Areas

These two stations are considered together because of their common characteristics. The public intervention regulations are applicable to 102nd and 122nd as well.

Leadership These stations would benefit from consistent city leadership to make the station areas more safe and secure. The real estate development panel discussion revealed that crime and the perception of criminal activity is a deterrent to development, particularly adjacent to the station.

The City should consider a coordinated Resident Safety Program for area adjacent to the Blue line from Gateway to the City boundary. The program should include at least the following:

- An more active security presence at the stations
- Outreach to all landlords to provide safety tips and encourage property clean-up.
- A nuisance abatement program aimed at poorly maintained multifamily complexes.
- Provide a hotline for non-emergency safety and security complaints.
- The Resident Safety Program should provide a designated staff who can maintain day to day contact with residents and police.

Regulatory Regulations can be both a help and a hindrance. Zoning in the area generally provides for the type of zoning that is appropriate for LRT station area. The permitted land uses and densities are supportive of transit. One possible improvement relates to the process for design review. Developers attending the real estate panel complained that the Type III process for design review was too onerous.

Developer Incentives This area is not within an urban renewal district. There remain two sources of funding for developer incentives general fund dollars and tax incentives. There are property tax abatements available for development near transit and other tax incentive programs, such as the low income housing tax credit for affordable housing. This program is less attractive in this area than others because market rents are already low.

Infrastructure Investments The development pattern east of Gateway is characterized by large blocks, disconnected streets, unimproved rights of way and a poor pedestrian environment. These conditions make it more difficult for transit patrons to

access the LRT stations. Because access to the transit station is paramount, a successful TOD should integrate its pedestrian and bicycle network into the surrounding neighborhood to the highest degree possible. Unconnected, curvilinear streets and cul de sacs seriously impair pedestrian and bicycle connections. Ideally, streets would be narrower and more of the streetscape would be devoted to pedestrian uses. These approaches ensure that pedestrian level of service dominates the physical environment, and relegates automobile level of service to a secondary consideration. These are difficult conditions to achieve where there is an existing, disconnected street network with wide arterials and unimproved collectors.

- A priority for the City must be to improve pedestrian connections through improvement to unimproved roadways, the addition of sidewalks and planter strips to existing streets and better pedestrian crossings on busy streets. This is a three step process
- Prepare a connectivity report for each station area which details the improvements required by achieve a “best practices” level of connectivity.
- Prepare a financial strategy for funding the improvements. The strategy should specifically address funding amounts and sources from local improvement districts, city transportation capital dollars and tax increment financing (where applicable).
- Design and build the improvements.

Making this a priority means assigning someone to be fully accountable for getting the work done. The City, like all public organizations, has many responsibilities and many priorities. The best way to make sure that priority actions are accomplished is to make sure someone has the responsibility and authority to carry out city policy and projects.

GREEN LINE STATIONS [I-205] DIVISION STREET POWELL BOULEVARD FOSTER ROAD / LENTS FLAVEL STREET

EXISTING CONDITIONS AND ASSESSMENT

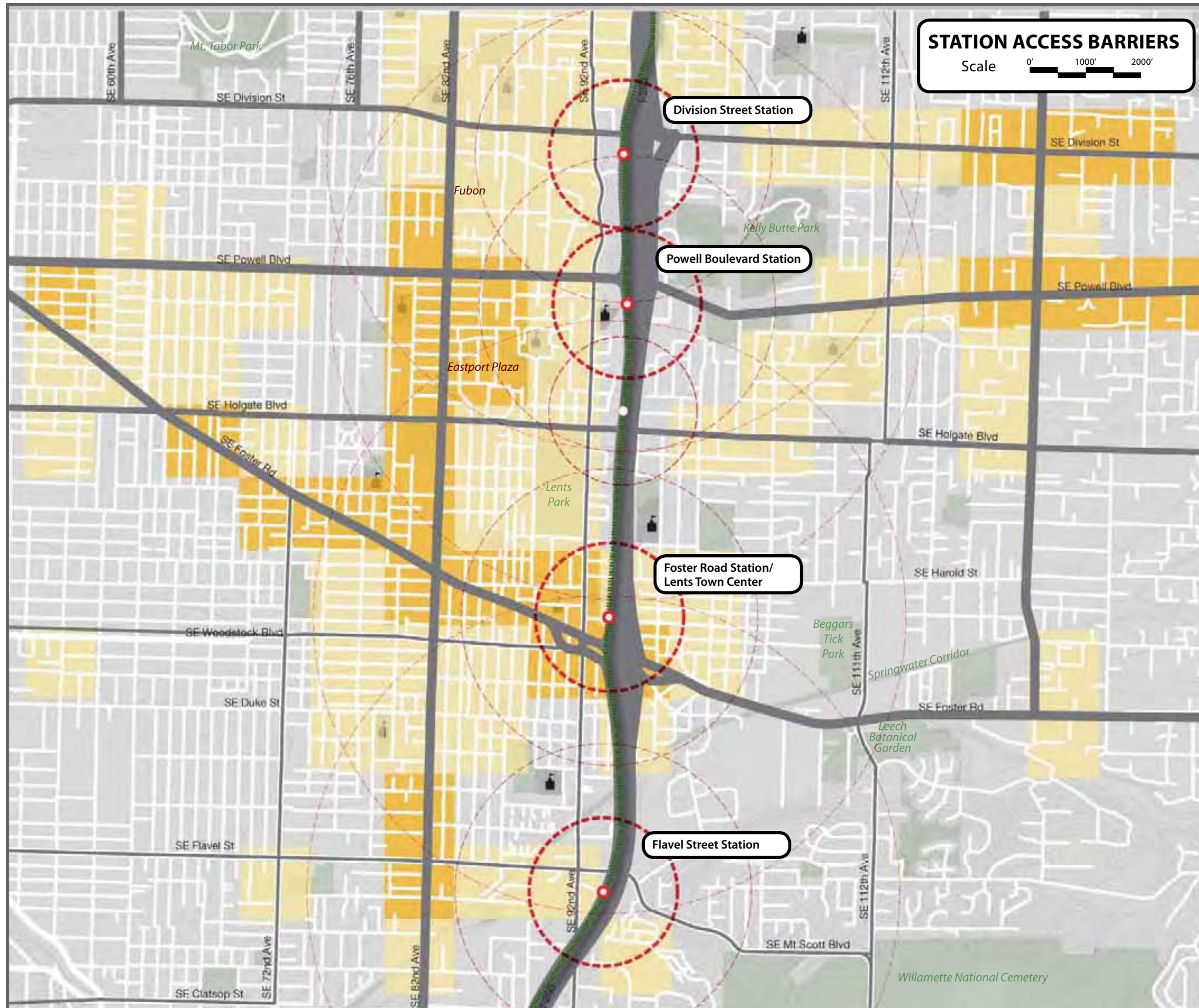
OVERVIEW

DIVISION STREET

POWELL BOULEVARD

FOSTER ROAD / LENTS TOWN CENTER

FLAVEL STREET



STATION ACCESS BARRIERS
 Scale 0' 1000' 2000'

STATION ACCESS BARRIERS
 The stations along major limited-access transportation corridors (i.e., interstate freeways) tend to have more challenging access issues than stations on transit lines with their own dedicated corridor. Stations adjacent to freeway interchanges are perhaps the most problematic, as the transit user must navigate an often complex network of on- and off-ramps that do not have appropriate pedestrian and bicycle crossing facilities. These interchanges are engineered to move motor vehicles quickly and efficiently and are a threat to pedestrians trying to cross multi-lane roadways. Additionally, stations adjacent to freeways are often isolated from adjacent land uses, which can create uncomfortable or unsafe environments for transit users from lack of “eyes on the street.” All of the Green Line Station Areas are all situated immediately adjacent to or within the Interstate right-of-way. Specific barriers to these stations include:

- I-205
- High-volume arterial and major collector roadways with limited pedestrian and bicycle facilities
- Few signalized or properly marked pedestrian crossings
- Limited local street connections to the I-205 trail
- Poor local street connectivity east of I-205
- Johnson Creek
- Kelly Butte and Mount Scott

LRT Alignment
 Study Area LRT Station
 Other LRT Station
12 Frequent Bus Route
20 Bus Route
 School or College
 Crime Incidents* 50 - 100
 100 - 300
 300 - 500
 Park, Cemetery or Greenspace
 Transportation Barrier

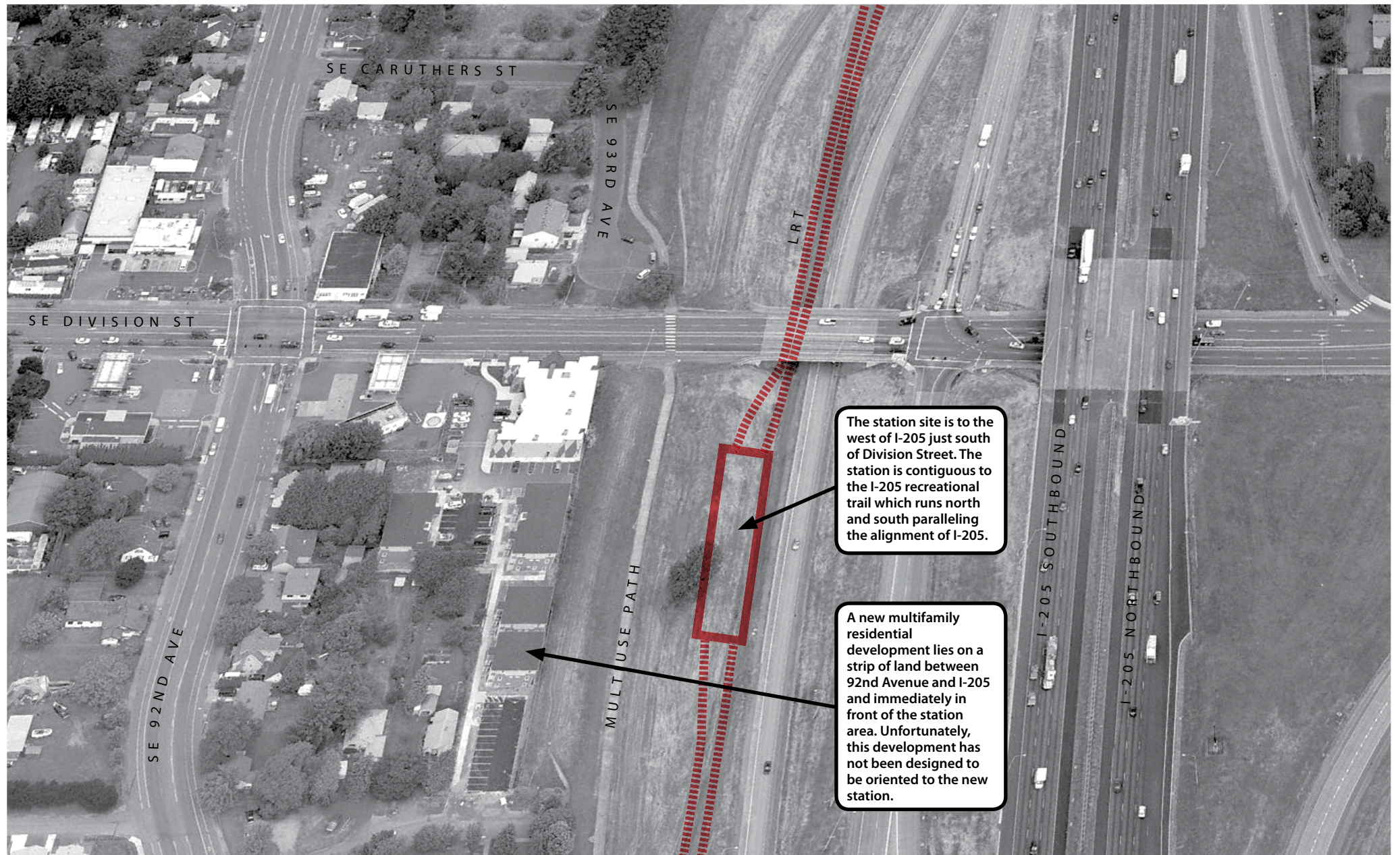
*Illustrates the number of total crimes in a half mile grid. Crimes include: arson, assault, burglary, homicide, larceny, rape, robbery, theft from auto, vehicle theft, drug laws, embezzlement, forgery, fraud, prostitution, vandalism, weapons laws, curfew, disorderly conduct, DUII, gambling, kidnapping, liquor laws, offense against family, runaway, and trespass.

DEMOGRAPHICS

Demographic research conducted for a .5 mile radius around the Division Street station area indicates that the household lifestyle profile falls into three categories; "older, settled married couples" (30.8%), "newly formed households" (24.5%) and "rustbelt neighborhoods" (25.3%). The demographic profile suggests a stable but aging population with moderate household income with most homes being owner occupied. Home ownership is 65 percent. Newly formed households are a mix of household types with single parents, married couples with and without children. They have moderate household incomes. The median household income extrapolated to 2006 is estimated at \$47,154, while the median for the region is estimated at \$52,483.

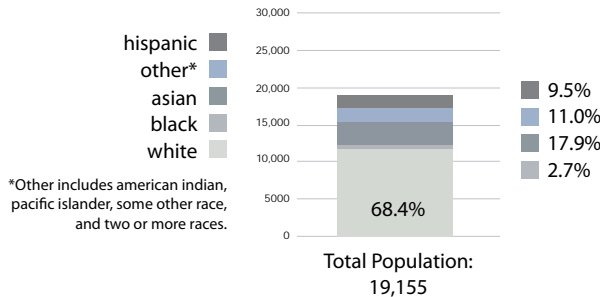
LRT STATION DESIGN AND ACCESS

The station site is to the west of I-205 just south of Division Street. The station is contiguous to the I-205 recreational trail which runs north and south paralleling the alignment of I-205.

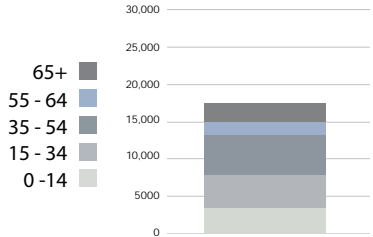


DEMOGRAPHIC PROFILE		
	2000	2007
Population	15,963	17,487
Households	6,206	6,753
Families	3,801	4,092
Average Household Size	2.52	2.54
Owner Occupied HUs	3,736	4,188
Renter Occupied HUs	2,470	2,565
Median Age	37.0	38.2

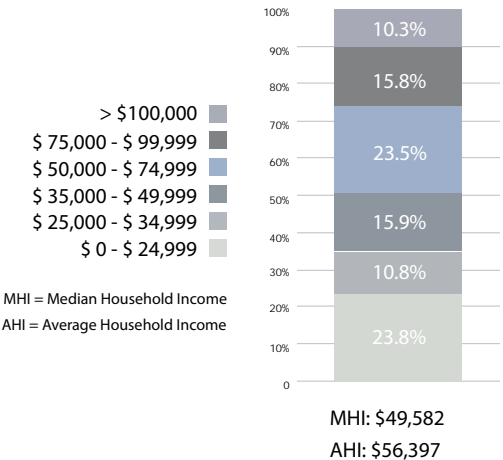
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?		Notes
Form a coherent vision		
Articulate a plan	Missing	No plan for connectivity, urban form, open space, and infill
Involve stakeholders	Missing	
Focus on implementation	Missing	
Maintain flexibility	Missing	
Understand market demographics	Opportunity for improvement	2004 demographic study
Engage corporate attention	Missing	
Get the land uses right		
Make retail strategy market driven	Opportunity for improvement	
Develop mixed-income housing	Present	R1a and R2a zoning encourages mix of housing types including home ownership
Allow single uses where appropriate	Missing	
Promote density		
Maximize transit ridership and access	Missing	
Build retail market base	Missing	Retail is auto oriented
Locate employment areas near the station	Opportunity for improvement	
Create convenient, comfortable pedestrian & bicycle connections		
Connect the grid; provide well-designed sidewalks	Missing	Connections to 92nd Avenue critical and design of multiuse path
Develop compact blocks; provide on-street parking	Opportunity for improvement	
Create seamless access to neighborhoods	Missing	Neighborhoods to east cut off from station
Maximize safety & comfort through design	Missing	
Build bike parking	Missing	
Calm traffic; eliminate minimum LOS standards	Missing	Division Street is a concern
Build a place not a project; ensure good urban design		
Design with the station as the center	Missing	Station is buried between multi-use path and I-205
Use high quality urban form to support mixed incomes & uses	Missing	Potential if planned
Make places that engage the public	Missing	Potential if planned
Create landmarks and beacons	Opportunity for improvement	Potential if planned
Preserve and invest in existing neighborhoods	Missing	Potential if planned
Taper density and height from stations to neighborhoods	Missing	Potential if planned
Get the parking right		
Do not locate Park & Ride or utility structures in front of station	na	
Develop shared parking policies	Missing	
Design structured parking well	Missing	
Make bus transit and TDM work		
Provide feeder transit and make buses attractive	Opportunity for improvement	
Provide local and workplace shuttles	Missing	
Embrace TOD and TDM to maximize trip reduction	Missing	
Create supportive public policies		
Pursue joint development	Missing	
Focus public investments to support market dynamics	Missing	

Present
 Opportunity for improvement
 Missing

LAND USE AND DEVELOPMENT

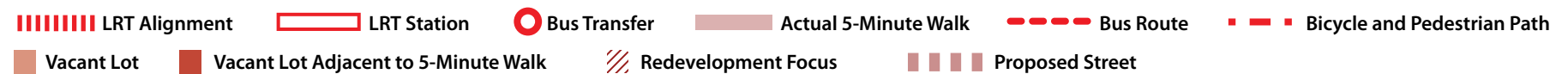
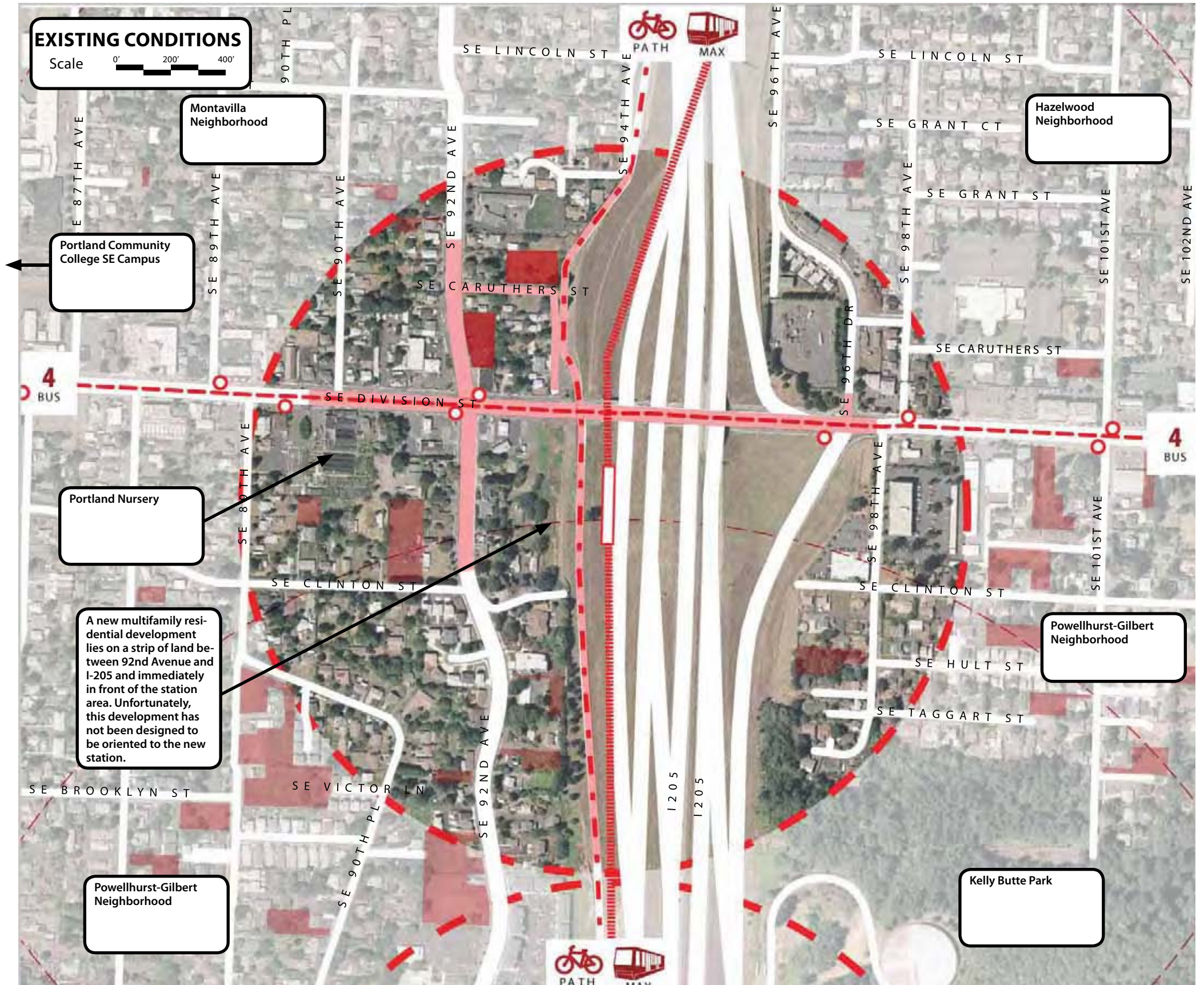
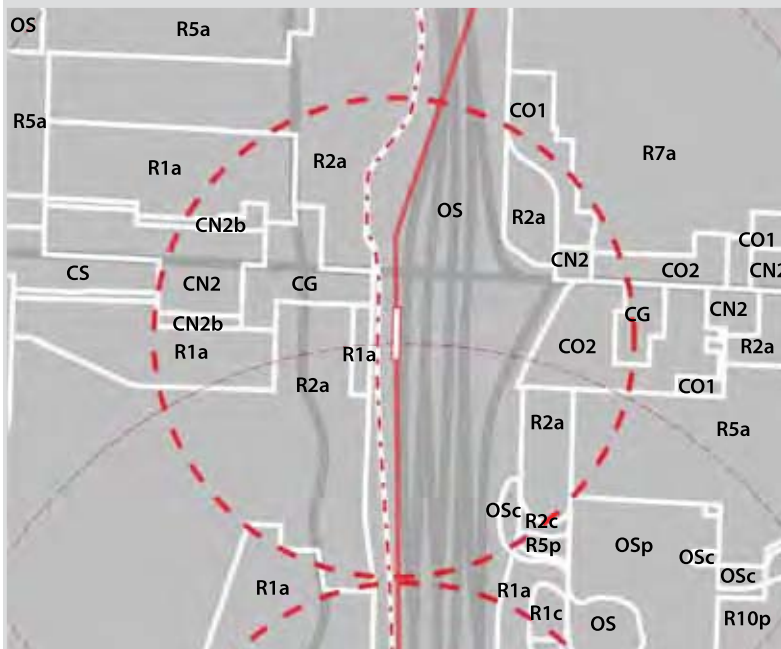
A new multifamily residential development lies on a strip of land between 92nd Avenue and I-205 and immediately in front of the station area. Unfortunately, this development has not been designed to be oriented to the new station. Single-family homes comprise most of the rest of the station area, both north and south of Division Street. Along Division Street itself lies primarily established auto-oriented retail. Other new smaller-scale retail developments exist at the intersection of 92nd Avenue and Division Street.

ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

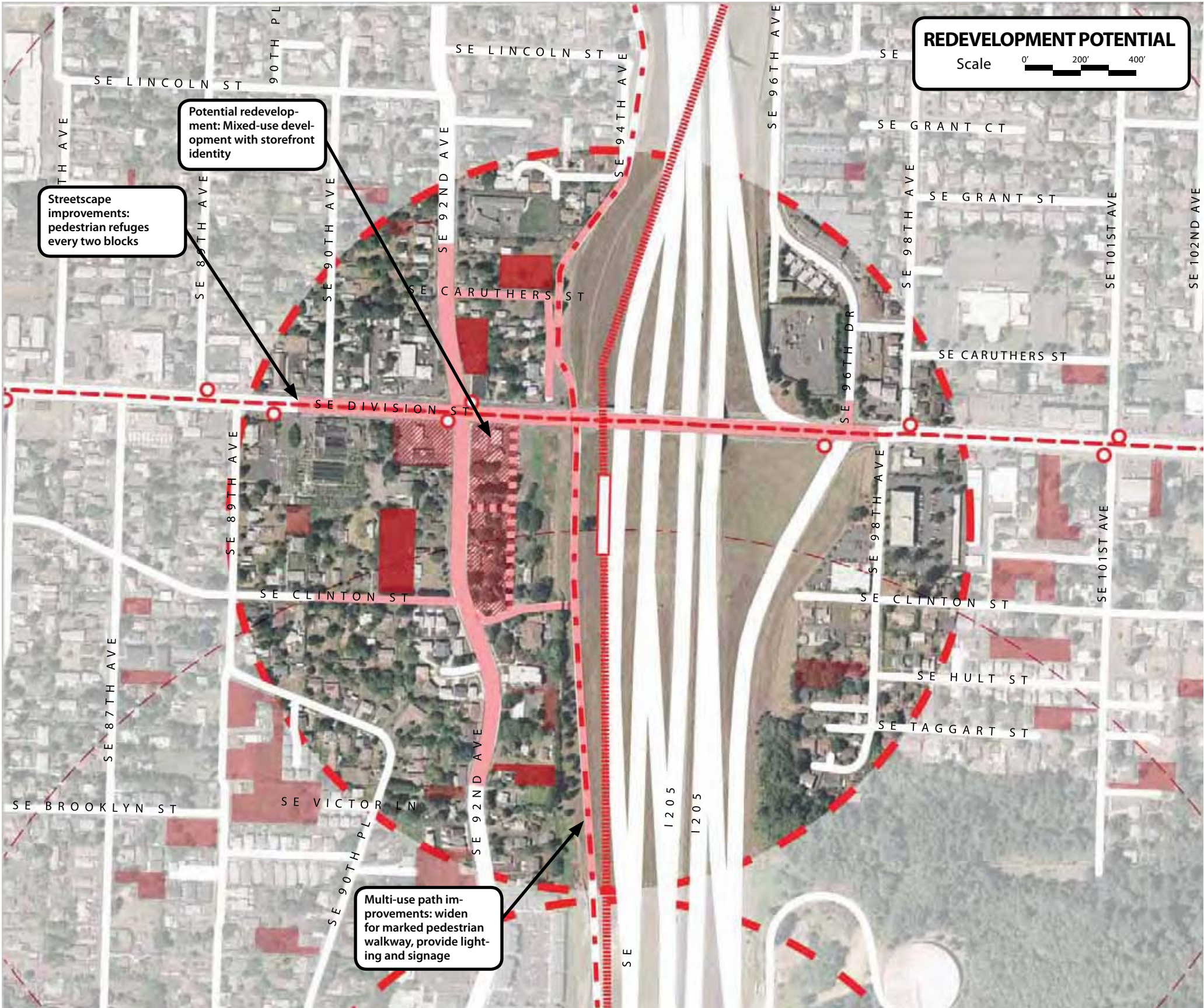
Adjacent land to the west is zoned for residential development—R1a, R2a zoning—that can accommodate multi-family, attached units and duplex housing. The “a” overlay zone is the Alternative Design Density Overlay Zone or ADD. The ADD overlay allows for bonus density beyond the base if the project goes through a design review process. The zone is intended to encourage housing that is attractive and compatible to the character of the area and to allow for higher densities.

Several parcels on Division Street just north of the station are zoned for commercial (CG). The general commercial zone is intended to allow auto-accommodating commercial development in areas already predominately built in this manner. The zone allows a full range of retail and services businesses.

ZONING



STATION ASSESSMENT DIVISION STREET



REDEVELOPMENT POTENTIAL
Scale 0' 200' 400'

Potential redevelopment: Mixed-use development with storefront identity

Streetscape improvements: pedestrian refuges every two blocks

Multi-use path improvements: widen for marked pedestrian walkway, provide lighting and signage

REDEVELOPMENT POTENTIAL

The 2004 I-205 MAX Station Area Evaluation identified the potential for redevelopment of vacant underdeveloped parcels directly adjacent to the station area. The CG zoned parcels on Division Street in conjunction with underutilized parcels to the south to the station area could be the focus of transit oriented development (TOD) redevelopment projects. If the sites on Division were to redevelop under the existing CG zoning, the opportunity for an integrated gateway project would be lost to auto dominated design.

The 2004 I-205 MAX Station Area Evaluation identified vacant parcels and other development opportunities within walking distance that would be enhanced by increased pedestrian connectivity and by reinforcing the image and identity of the station area. The proposal also leverages the utility of the existing multi-use path to improve pedestrian circulation, especially south of Division to SE Clinton Street.

Other recommendations:

- Stimulate mixed-use development on other sites on Division Street between I-205 and SE 82nd Avenue.
- Engage the City of Portland Bureau of Planning to examine station area zoning and consider increasing allowable intensity in the CN2 and CG zones within 1/4 mile of the light rail station.
- The zoning at this station should be addressed. While mixed use MAY be achievable in this zone, the desired density is not achievable. In addition, the form of development possible in these zones is not always transit friendly.
- Explore possibility of low-cost streetscape improvements to promote pedestrian safety and connections across Division Street.
- The poor quality of the pedestrian environment at this station is a major concern.
- Upgrade the bike path to a 24 hour multi-use pedestrian and bike path.

LRT Alignment
 LRT Station
 Bus Transfer
 Actual 5-Minute Walk
 Bus Route
 Bicycle and Pedestrian Path
 Vacant Lot
 Vacant Lot Adjacent to 5-Minute Walk
 Redevelopment Focus
 Proposed Street

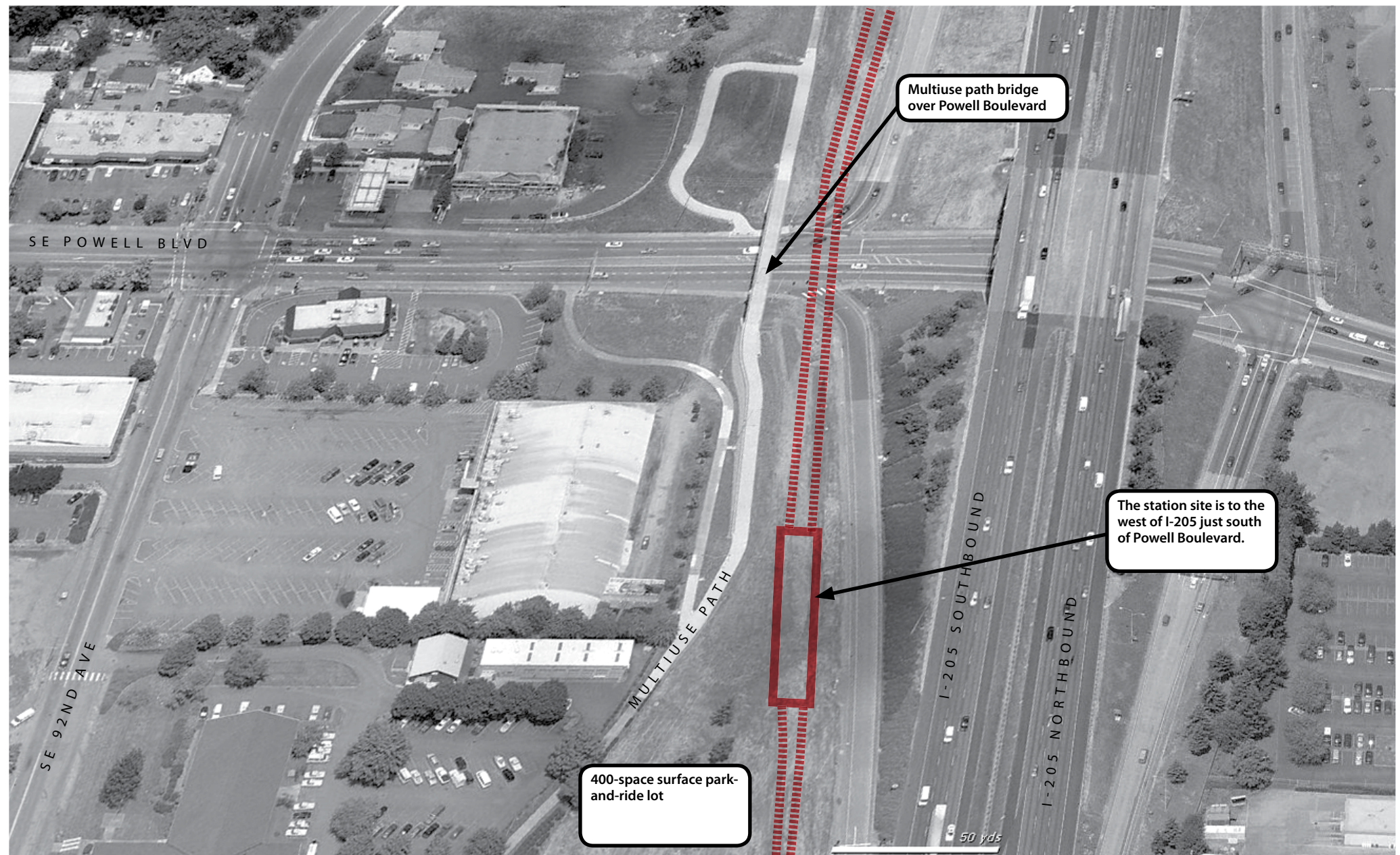
DEMOGRAPHICS

Earlier research on demographics around this station area indicates that within .5 miles almost 50 percent of the residents are classified as “social security dependents” that are often elderly and live alone. Nearly half of the householders are 65 years or older; almost 65 percent live alone. They are usually renters and live in low-rent, high-rise apartment buildings. They do not own cars. This is consistent with other household information which indicates that in 2000, 56.9 percent of households within the .5 miles of the station were renters. The median household income is estimated to be \$29,693, while the median for the region is estimated at \$52,483.

The other half of the residents within the .5 mile radius are “newly formed households” which is a mix of household types including single parents, single person and shared households. They have moderate incomes and work in manufacturing and service industries. The other section is “small town working families” whose age and household distributions parallel the US profile.

LRT STATION DESIGN AND ACCESS

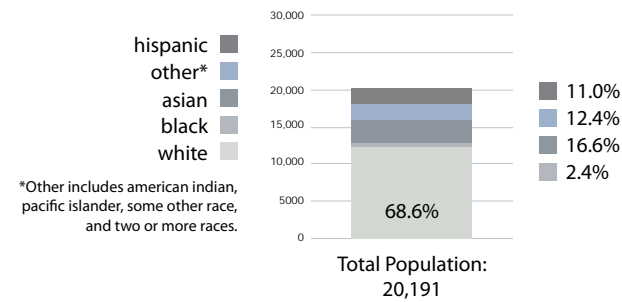
The station site is to the west of I-205 just south of Powell Boulevard. A 400-space surface park and ride lot is planned just to the south of the station on a publicly owned parcel zoned for open space. The station and park and ride are contiguous to the I-205 recreational trail which runs north and south along 94th Avenue.



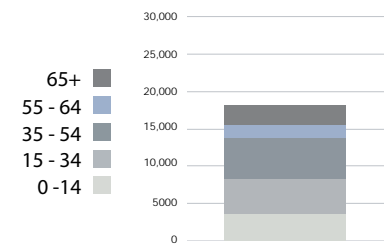
DEMOGRAPHIC PROFILE

	2000	2007
Population	16,885	18,185
Households	6,362	6,809
Families	3,919	4,135
Average Household Size	2.59	2.61
Owner Occupied HUs	3,704	4,133
Renter Occupied HUs	2,658	2,676
Median Age	36.1	37.3

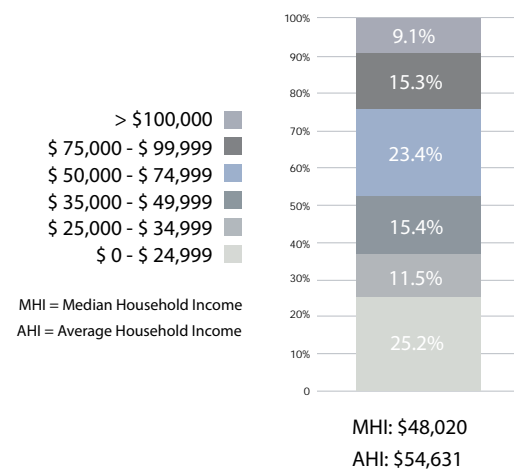
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

Form a coherent vision

Articulate a plan	Missing
Involve stakeholders	Missing
Focus on implementation	Missing
Maintain flexibility	Missing
Understand market demographics	Opportunity for improvement
Engage corporate attention	Missing

Get the land uses right

Make retail strategy market driven	Present
Develop mixed-income housing	Present
Allow single uses where appropriate	Missing

Promote density

Maximize transit ridership and access	Missing
Build retail market base	Missing
Locate employment areas near the station	Present

Create convenient, comfortable pedestrian & bicycle connections

Connect the grid; provide well-designed sidewalks	Opportunity for improvement
Develop compact blocks; provide on-street parking	Present
Create seamless access to neighborhoods	Opportunity for improvement
Maximize safety & comfort through design	Opportunity for improvement
Build bike parking	Missing
Calm traffic; eliminate minimum LOS standards	Missing

Build a place not a project; ensure good urban design

Design with the station as the center	Missing
Use high quality urban form to support mixed incomes & uses	Missing
Make places that engage the public	Missing
Create landmarks and beacons	Opportunity for improvement
Preserve and invest in existing neighborhoods	Opportunity for improvement
Taper density and height from stations to neighborhoods	Missing

Get the parking right

Do not locate Park & Ride or utility structures in front of station	Missing
Develop shared parking policies	Missing
Design structured parking well	Missing

Make bus transit and TDM work

Provide feeder transit and make buses attractive	Present
Provide local and workplace shuttles	Missing
Embrace TOD and TDM to maximize trip reduction	Missing

Create supportive public policies

Pursue joint development	Missing
Focus public investments to support market dynamics	Missing

Notes

No plan for connectivity, urban form, open space, and infill
Potential
Potential
Potential
2004 demographic study
Potential

Concern: CG & EG2 zoning

Retail dominates and is auto-oriented
Potential

Connections to 92nd Avenue critical and design of multiuse path
Neighborhoods to east cut off from station

Powell Boulevard & I-205 ramps major concerns

Station is in freeway right-of-way & new east-west street connects to 92nd Avenue
Potential
Potential
Kelly Butte is landmark
Potential
Potential

Park & ride is to south of station

Present
 Opportunity for improvement
 Missing

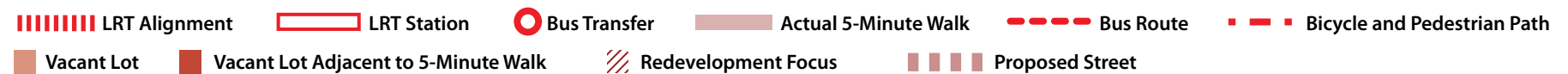
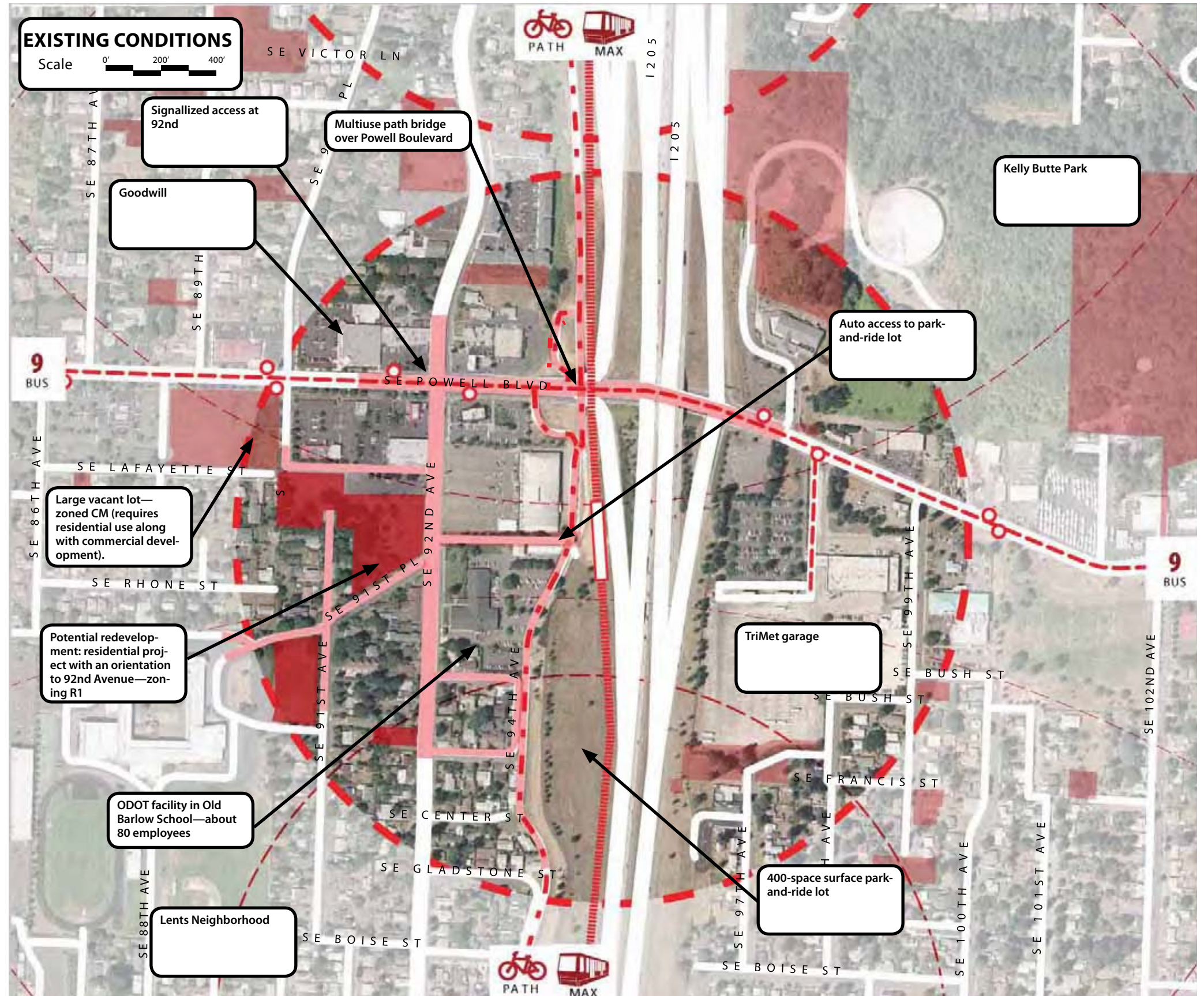
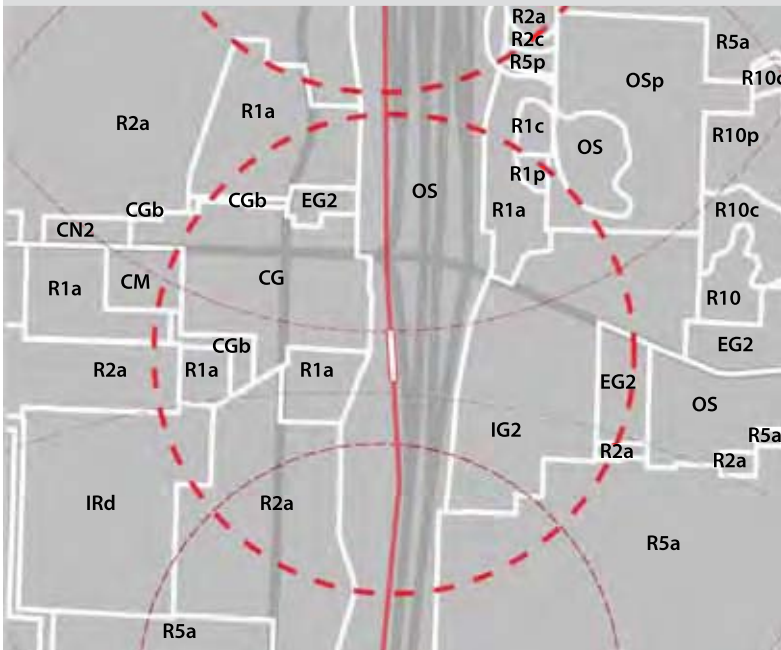
LAND USE AND DEVELOPMENT

Powell Boulevard within the station area is fronted primarily by auto-oriented retail, much of which appears underdeveloped. To the north and south of Powell Boulevard are neighborhoods of multifamily and single-family housing. The neighborhoods are a mixture of existing, lower density housing and newer infill housing.

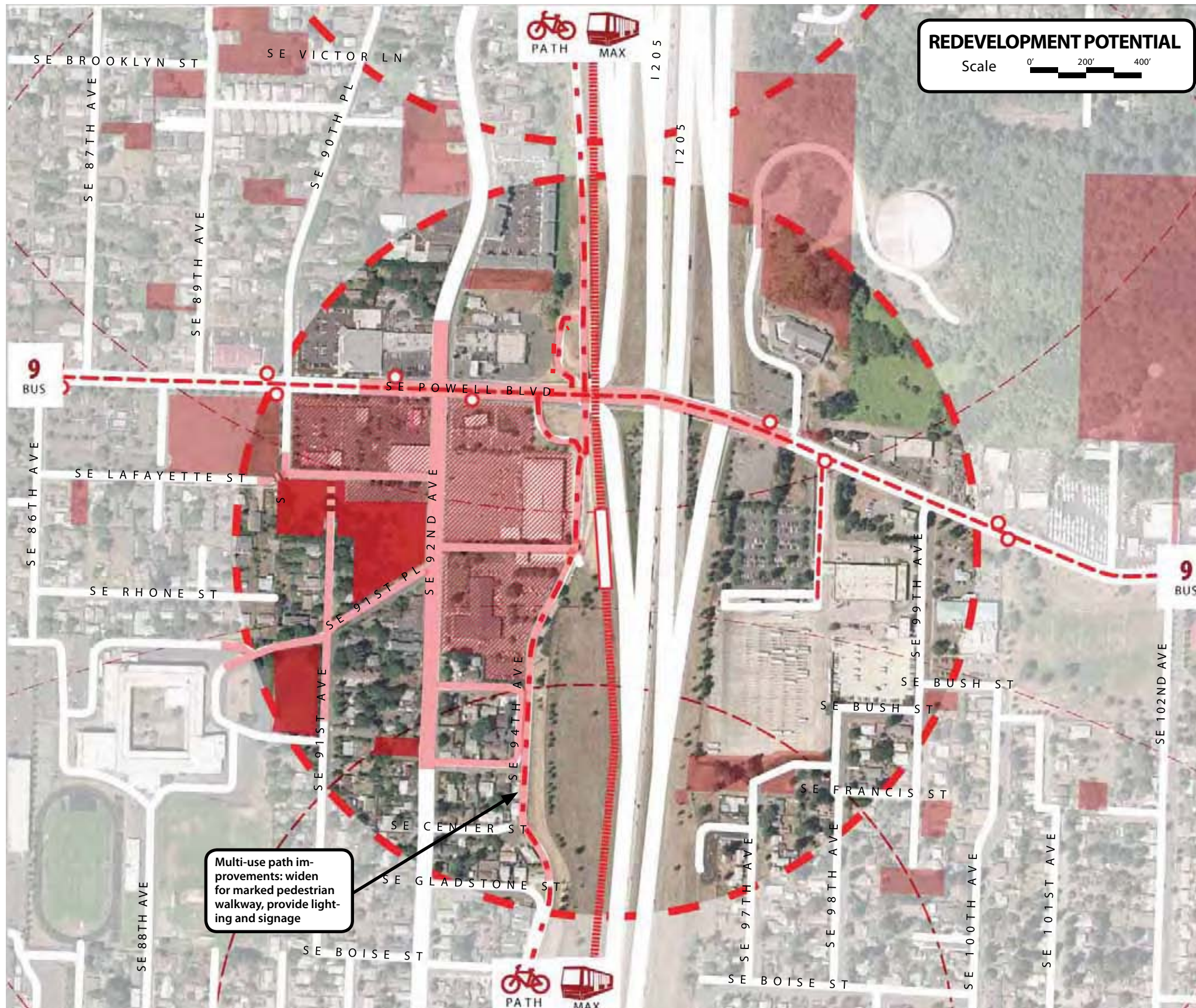
ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

The adjacent land to the west is zoned for residential development R1a, R2a and R5 zoning. The R1 and R2 zones are multi-family residential zones allowing for a range of higher density uses, such as duplexes, attached housing and multi-family. The R5 zone is a small lot residential zone. The "a" overlay zone is the Alternative Design Density Overlay Zone or ADD. The ADD overlay allows for bonus density beyond the base if the project goes through a design review process. The zone is intended to encourage housing that is attractive and compatible to the character of the area and to allow for higher densities. The surrounding land is developed but several parcels could be the focus of transit oriented development (TOD) redevelopment projects.

ZONING



STATION ASSESSMENT POWELL BOULEVARD



REDEVELOPMENT POTENTIAL
 Scale 0' 200' 400'

Multi-use path improvements: widen for marked pedestrian walkway, provide lighting and signage

REDEVELOPMENT POTENTIAL

The 2004 I-205 MAX Station Area Evaluation recommended a number of actions to stimulate redevelopment: Identify residential and mixed-use infill opportunities. If property owners can be interested in higher density development, encourage the Portland Bureau of Planning to take on a narrowly focused legislative rezoning effort or assist the owners to seek zone changes on their own. Mixed-use development would be facilitated by a different zone, but the primary impediments to transit oriented development are not regulatory.

Other recommendations:

- Upgrade the bike path to a 24 hour multi-use pedestrian and bike path.
- Improve pedestrian access from Powell Boulevard. The bike path should be upgraded to a multi-use path to increase access to residential neighborhoods to the north and south.

- ||||| LRT Alignment
- LRT Station
- Bus Transfer
- Actual 5-Minute Walk
- - - Bus Route
- · - Bicycle and Pedestrian Path
- Vacant Lot
- Vacant Lot Adjacent to 5-Minute Walk
- /// Redevelopment Focus
- Proposed Street

DEMOGRAPHICS

According to the 2006 housing study, a large percent of the single family homes in Lents were built over 50 years ago. Very little housing production occurred between 1960 and 2000. Recent development shows that new construction is picking up in Lents with more units built since 2000 that were built in the entire decade of the 1990s. Home sales from January 2004 to June 2005 rose along with the regional market and prices increased in alignment with the average increase region-wide. The housing study also indicated that new ownership housing was being built for moderate and middle income households, but that this was at the higher end of the Lents household incomes.

2000 Census data indicate that Hispanic and other minority households are becoming a larger percentage of the total population living the Lents Town Center urban renewal district. While whites still make up 66% percent of the population this is a drop of 15 percent from 1990 to 2000, and the Hispanic and Latino population grew 240 percent during the same time frame. The overall demographic trend is a shift toward ethnic diversity in the area which translates in changing housing needs. The one and two person households are still the most common household size among homeowners and renters in Lents. However, Lents has more large families in both categories than the rest of Portland.

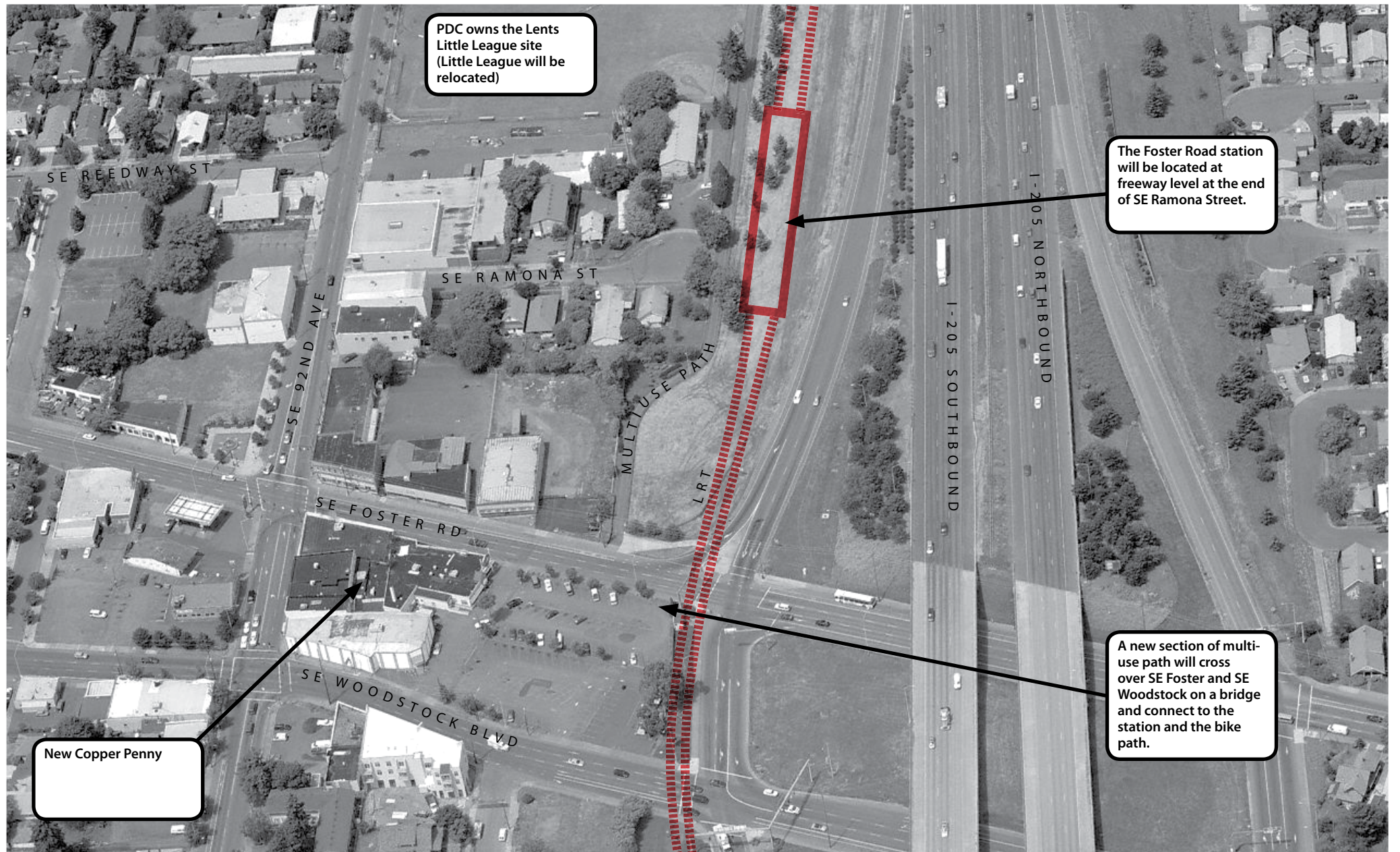
The 2006 housing survey indicates that Lents is still a “blue collar neighborhood”. The 2000 median household income was \$40,472 compared to \$52,483 for the region.

LRT STATION DESIGN AND ACCESS

The Foster Road station will be located at freeway level at the end of SE Ramona Street. A new section of multi-use path will cross over SE Foster and SE Woodstock on a bridge and connect to the station and the bike path.

LAND USE AND DEVELOPMENT

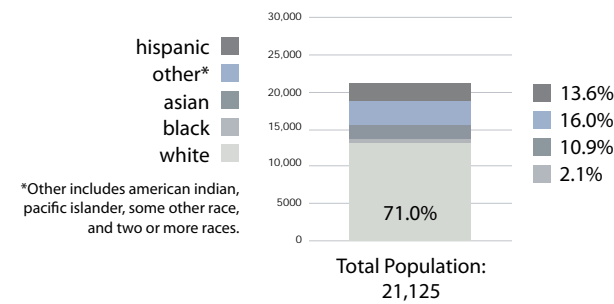
The Lents Town Center area focuses around the Foster Road loop and is bisected by I-205. Development along Foster Road and Woodstock Boulevard on the west side of the freeway is a mixture of existing commercial and industrial uses with some new mixed-use residential/retail developments. Residential neighborhoods, primarily consisting of single-family housing, lie to the north and south. Areas east of the freeway are primarily single-family housing.



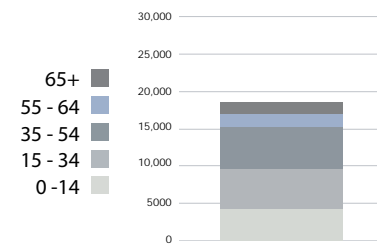
DEMOGRAPHIC PROFILE

	2000	2007
Population	17,981	18,603
Households	6,609	6,795
Families	4,223	4,297
Average Household Size	2.70	2.72
Owner Occupied HUs	3,809	4,103
Renter Occupied HUs	2,800	2,691
Median Age	32.6	34.0

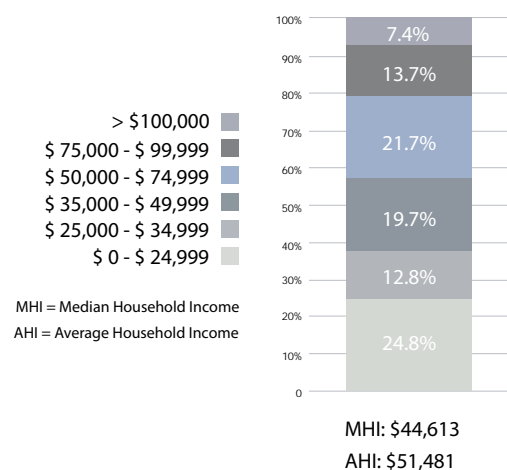
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

		Notes
Form a coherent vision		
Articulate a plan	Present	A number of plans completed; PDC and others are implementing
Involve stakeholders	Present	A number of plans completed; PDC and others are implementing
Focus on implementation	Present	
Maintain flexibility	Present	
Understand market demographics	Opportunity for improvement	2004 demographic study
Engage corporate attention	Present	
Get the land uses right		
Make retail strategy market driven	Present	
Develop mixed-income housing	Present	
Allow single uses where appropriate	Present	
Promote density		
Maximize transit ridership and access	Present	
Build retail market base	Present	
Locate employment areas near the station	Present	
Create convenient, comfortable pedestrian & bicycle connections		
Connect the grid; provide well-designed sidewalks	Opportunity for improvement	Connections to 92nd Avenue critical and design of multiuse path
Develop compact blocks; provide on-street parking	Present	
Create seamless access to neighborhoods	Present	Neighborhoods to east cut off from station
Maximize safety & comfort through design	Present	
Build bike parking	Present	
Calm traffic; eliminate minimum LOS standards	Present	Foster Road and Woodstock Boulevard are concerns
Build a place not a project; ensure good urban design		
Design with the station as the center	Present	Station is in freeway right-of-way
Use high quality urban form to support mixed incomes & uses	Present	Potential exists
Make places that engage the public	Present	
Create landmarks and beacons	Present	Springwater Corridor is landmark
Preserve and invest in existing neighborhoods	Present	
Taper density and height from stations to neighborhoods	Present	
Get the parking right		
Do not locate Park & Ride or utility structures in front of station	na	
Develop shared parking policies	Present	Potential exists
Design structured parking well	Present	Potential exists
Make bus transit and TDM work		
Provide feeder transit and make buses attractive	Present	Extend bus turn-arounds
Provide local and workplace shuttles	Present	
Embrace TOD and TDM to maximize trip reduction	Present	
Create supportive public policies		
Pursue joint development	Present	
Focus public investments to support market dynamics	Present	PDC owns Little League site, providing funds for New Copper Penny

Present

Opportunity for improvement

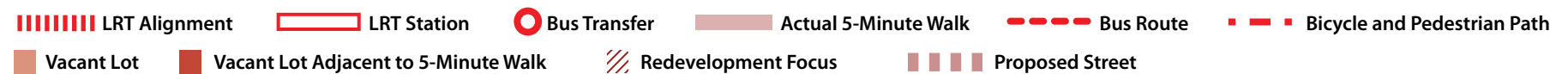
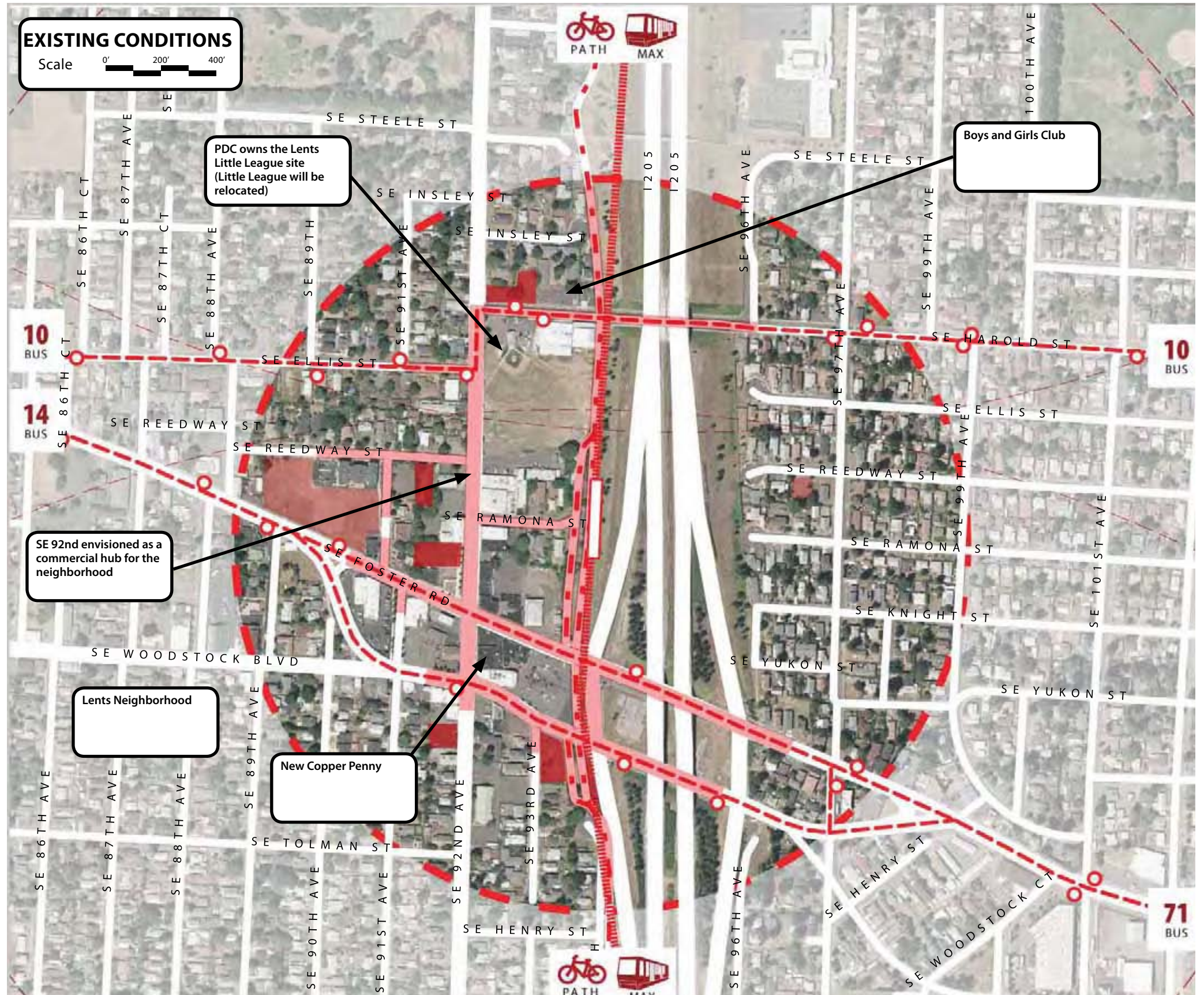
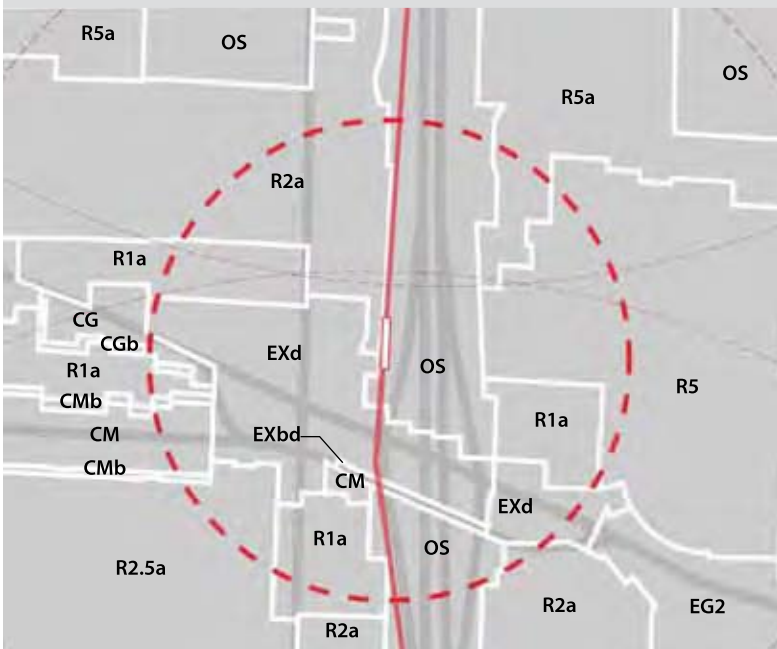
Missing

ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

The Foster Road station is included in the Lents Town Center Urban Renewal Area which was adopted in 1998. The land uses in the Town Center Plan reflect the Lents Town Center plan which is part of the Outer Southeast Community Plan. The Plan policy calls for “the development of a Lents Town Center that attracts employment opportunities, residential density, and recreational activities while reducing adverse environmental impacts”.

Like other I-205 stations, the Foster Road station is sited in the right-of-way; thus the redevelopment opportunities are limited to the neighborhoods directly adjacent to the station. These neighborhoods to the west are zoned for multi-family residential (R1, R2, R2.5) with an “a” overlay zone allowing for a density bonus. Properties along Foster Road and Woodstock Boulevard are zoned EXd, allowing a wide range of uses. This zone also extends two blocks to the north of Foster Road on the west side of the freeway.

ZONING



STATION ASSESSMENT FOSTER ROAD / LENTS



REDEVELOPMENT POTENTIAL
Scale 0' 200' 400'

REDEVELOPMENT POTENTIAL

The 2004 I-205 MAX Station Area Evaluation identified the City owned Little League site as a possible redevelopment opportunity. The site also houses the Boys and Girls Club. The underlying zoning is R2 which is a multi-family zone; the report recommends higher residential densities.

- Other recommendations:
- Examine the issues surrounding relocation of the Lents Little League and provide any assistance that the light rail project might appropriately leverage. This large site has substantial development potential.
 - The southeast corner of the site is within one block of the station platform and three blocks of the center of the Lents community at 92nd and Foster. It is within an urban renewal district. The current zoning of R-2 may need to be changed to achieve an appropriate density and mix of uses. A second site with potential is the triangle site located northwest of 91st and Foster. This site has EX zoning that is conducive to mixed use development.
 - Improve SE 92nd Avenue to reinforce its new role as the primary active pedestrian street within the town center.
 - Strategically place bus transit stops for the 14 Hawthorne and 71 60th Avenue to serve SE 92nd Avenue. Place these stops to disperse riders and increase the amount of pedestrian activity along 92nd, Foster and Woodstock.
 - Improve SE Ramona to be a pedestrian-friendly, transit supportive access point to the new light rail station. Create a plaza at the terminus of Ramona Street adjacent to the station. Extend Ramona west to connect with the strategic triangle north of Foster Boulevard. Ramona Street station plaza can become an identifiable Lents landmark.
 - Complete the relocation of the Little League Ball Park. Redevelop this site as mixed-use, transit-oriented development.
 - Upgrade the existing bike path to a multi-use path. Improvements to 92nd, Ramona and multi-use path will increase pedestrian access.

DEMOGRAPHICS

Within .5 mile radius of the station, the median household income is \$44,701 compared to the regional estimate of \$52,483. Within the .5 mile radius, households are described as baby boomers with children (31.7%), newly formed households (26.7%) and small town working families (41%). The owner-renter ratio for the .5 mile radius is close to 50 percent, however, within a quarter-mile of the station, renters make up over 70 percent of the households, and 94% are newly formed households. The newly formed households are comprised of single parent households, households with a single person or shared households and married couples. The newly formed household category consists of individuals with moderate incomes and low unemployment and poverty rates.

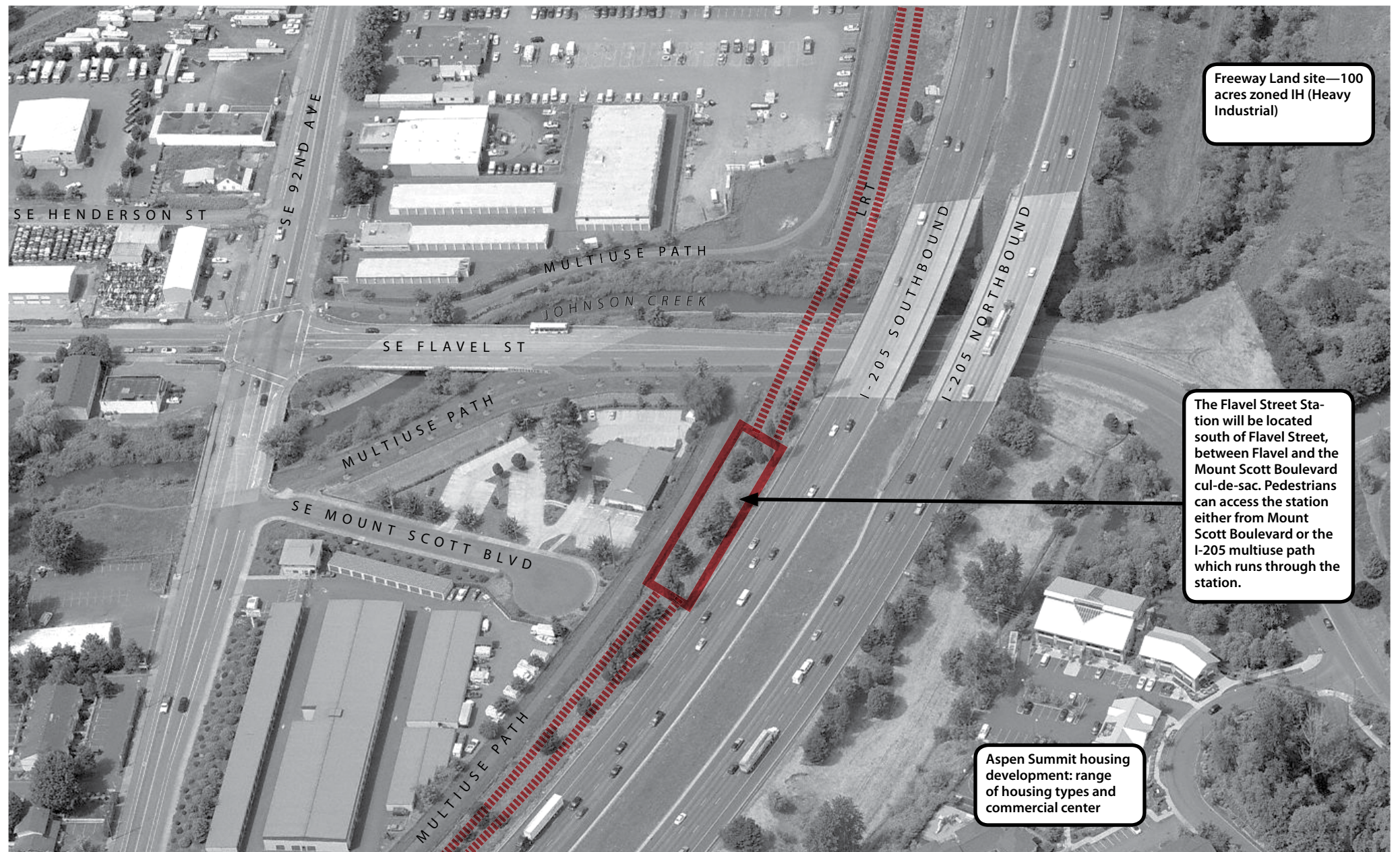
LRT STATION DESIGN AND ACCESS

The Flavel Street Station will be located south of Flavel Street, between Flavel and the Mount Scott Boulevard cul-de-sac. Pedestrians can access the station either from Mount Scott Boulevard or the I-205 multiuse path which runs through the station. Unfortunately, there is no close pedestrian connection across Flavel Street or Johnson Creek to the north of the station. Pedestrians and bicyclists must detour one block west in order to cross and continue north on the multiuse path.

The station, like all other stations along I-205, is in the I-205 right-of-way; however, in this case, the station will be at the level of the neighborhood to the west with I-205 high above on an embankment. The street network in the area consists mainly of very large blocks. This is primarily due to the industrial land use patterns and Johnson Creek, which bisects the station area from west to the northeast.

LAND USE AND DEVELOPMENT

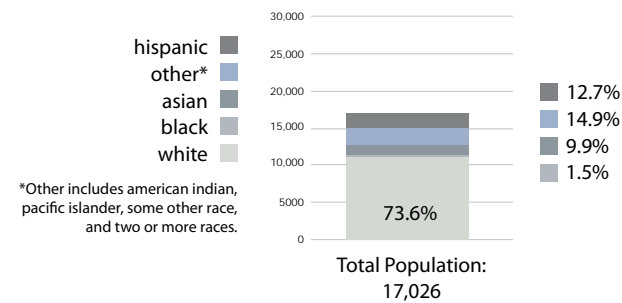
The station area is a mixture of industrial uses, multi-family housing, and some single-family housing. Industrial uses lie to the immediate north, northwest, and south of the station. Additionally, a very large heavy industrial parcel, the Freeway Land site, lies to the northeast of the station, across I-205. Some of these parcels are underdeveloped—for example, an industrial parcel to the immediate southwest of the station is occupied by self-service storage. Multi-family housing lies to the southwest and southeast of the station. The single-family housing is on the outskirts of the station area.



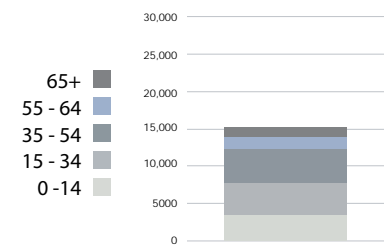
DEMOGRAPHIC PROFILE

	2000	2007
Population	14,553	15,110
Households	5,296	5,478
Families	3,468	3,562
Average Household Size	2.72	2.73
Owner Occupied HUs	3,210	3,490
Renter Occupied HUs	2,086	1,988
Median Age	32.5	34.1

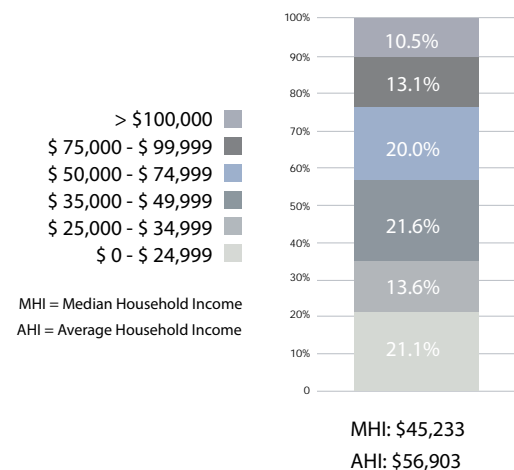
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

		Notes
Form a coherent vision		
Articulate a plan		No plan for
Involve stakeholders		Potential
Focus on implementation		Potential
Maintain flexibility		Potential
Understand market demographics		2004 demographic study
Engage corporate attention		Potential
Get the land uses right		
Make retail strategy market driven		
Develop mixed-income housing		
Allow single uses where appropriate		Concern about potential for Flavel to be employment-focused station
Promote density		
Maximize transit ridership and access		
Build retail market base		
Locate employment areas near the station		Industrial/employment uses exist; could be intensified
Create convenient, comfortable pedestrian & bicycle connections		
Connect the grid; provide well-designed sidewalks		
Develop compact blocks; provide on-street parking		
Create seamless access to neighborhoods		
Maximize safety & comfort through design		
Build bike parking		
Calm traffic; eliminate minimum LOS standards		
Build a place not a project; ensure good urban design		
Design with the station as the center		Station buried behind church
Use high quality urban form to support mixed incomes & uses		R2 encourages mix of housing types; mixed housing developments nearby
Make places that engage the public		
Create landmarks and beacons		Mount Scott and Johnson Creek are landmarks
Preserve and invest in existing neighborhoods		
Taper density and height from stations to neighborhoods		
Get the parking right		
Do not locate Park & Ride or utility structures in front of station	na	
Develop shared parking policies		
Design structured parking well		
Make bus transit and TDM work		
Provide feeder transit and make buses attractive		
Provide local and workplace shuttles		
Embrace TOD and TDM to maximize trip reduction		
Create supportive public policies		
Pursue joint development		
Focus public investments to support market dynamics		

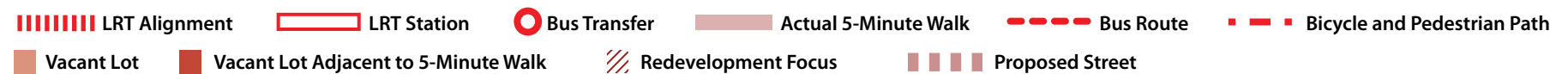
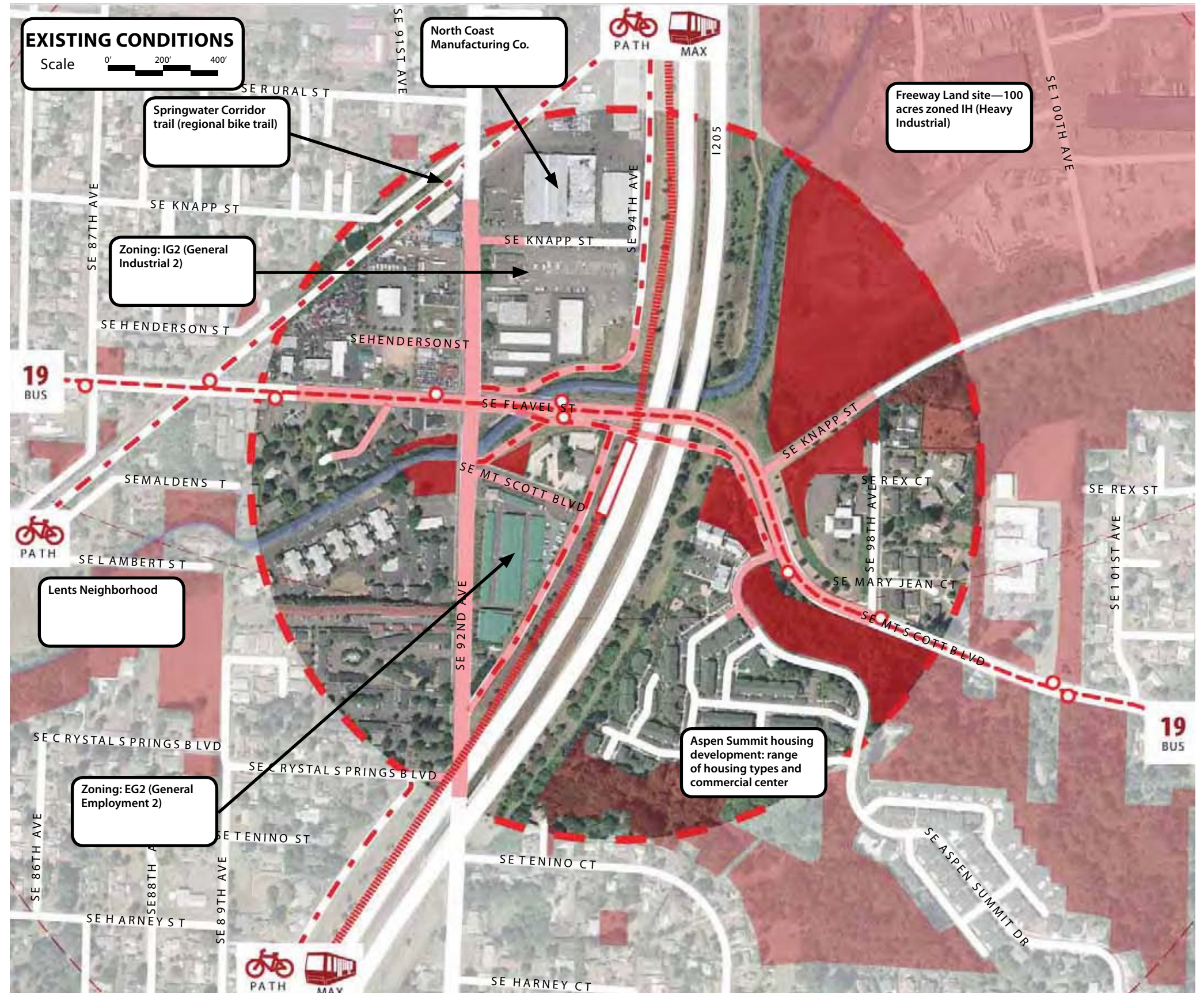
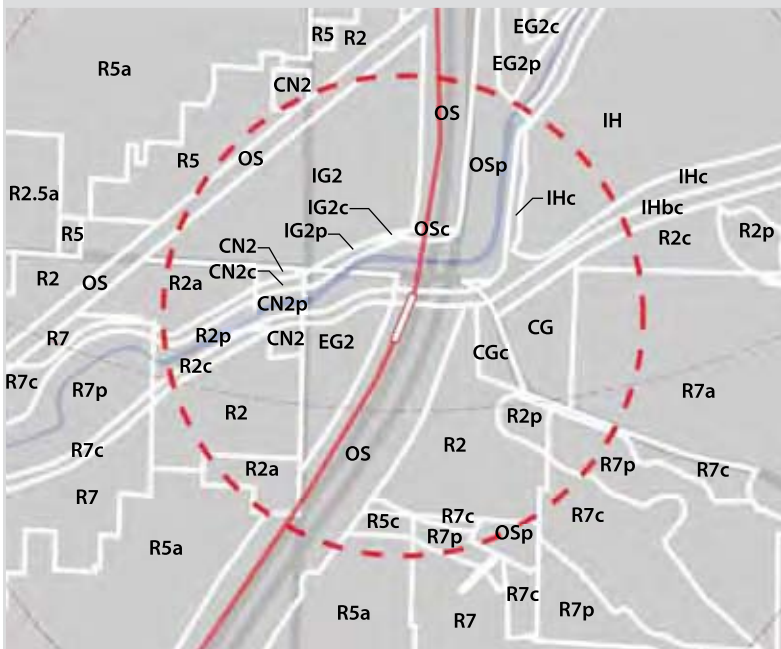
Present
 Opportunity for improvement
 Missing

ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

The Flavel station provides unique development challenges because it is covered under the Johnson Creek Basin Plan District and is not entirely buildable. In addition, much of the land in close proximity to the station is zoned for industrial or employment uses. The Freeway Land site dominates the area with approximately 100 acres in single ownership and is an underutilized property zoned for industrial uses (IH). It is envisioned in the Lents Town Center urban renewal plan that this site and adjacent employment sites are opportunities to create a sizable business park or light manufacturing complex with the potential of creating 2,000 to 3,000 jobs for area residents. One policy in the Lents Urban Renewal Plan is to "Help businesses create family-wage jobs within the Area and help make these jobs available to residents of the Area".

Just to the north and south of the station is Johnson Creek which bisects the area. Protection and conservation overlay zoning is applied to adjacent parcels. Within a parcel, several different overlay zones may apply, such as density bonus, conservation and protection zones. Adjacent to the station to the west are several parcels zoned EG2 which allows for vehicle repair and servicing, self-service storage, manufacturing and warehousing, wholesale sales and industrial service. Schools, medical centers and daycare facilities are also allowed in this zone. Commercial retail sales and services and office uses are limited or conditional uses. Farther

ZONING



Recommended Public Interventions: Green Line Station Areas

These stations are on the green line that is now under construction. Each of them is located within the freeway right of way, with the freeway on the east side and generally below the grade of the adjacent streets. Auto oriented uses dominate most of the closest properties.

Leadership There are good development opportunities adjacent to each of these stations, almost all of them on private property. In order to achieve the development potential of these stations public leadership is required. A wide range of activities is possible, but at a minimum should include: identifying and resolving regulatory impediments, providing market information to developers and property owners; assisting property owners with site planning and design to assure that future development is supportive of transit objectives. The public leadership should come from the City but could also be provided by the Portland Development Commission or TriMet. Specific leadership actions for each station

→ **Division** Create a work program to address zoning impediments (see below)

→ **Powell** Promising site owned by the Bitar family is adjacent to station. Work with the owner to formulate a feasible redevelopment proposal. Some regulatory change may also be required

→ **Foster** PDC ownership of two major development sites, creates the potential for a joint development deal. Provide marketing support for re-development sites.

→ **Flavel** City should create a partnership of PDC, BES and BOP to create a sustainable TOD development on the site northwest of the station. (see below)

Infrastructure Investment Good connectivity is the challenge for these stations. This situation is particularly acute on the east side of the stations because the I-205 Freeway creates an impediment to good connections and a harsh pedestrian environment. On the east side of the stations, there are generally wide arterials without on street parking or planting strips. Collector streets are unimproved or without sidewalks further impeding pedestrian connections.

An infrastructure program in this area should emphasize improvements to streets and sidewalks within 1/4 mile of the station. In addition, the I-205 multi-use path is a major north south connection between all the greenline stations. It is currently unlit and too narrow for heavy pedestrian and bicycle use. The path

should be substantially improved by widening to a 15 foot path with adequate lighting. Doing so will facilitate pedestrian access to all of the stations.

Regulatory There is a need for regulatory adjustments in area of all four stations

→ **Division** There is CG and CN zoning adjacent to the station on Division. Mixed use may be achievable but at densities that are lower than ideal.

→ **Powell** There is CG, CM and CN zoning on Powell. The density achievable in these zones should be considered and development standards or a zone adjusted to achieve the desired density. Residential zoning is generally supportive of transit oriented development

→ **Foster** This station is within the Lentz town center. Zoning in this area is very supportive of transit oriented development

→ **Flavel** There is EG zoning directly across the street from the station on a site that currently has a low density manufacturing use. This is a redevelopment site and mixed use zoning will be needed if redevelopment occurs.

Development Incentives Foster and Flavel are within the Lents urban renewal district. This puts PDC in the position of being able to assemble property for development and to utilize tax increment financing to support new infrastructure that can attract development. The PDC has used these tools extensively in Lents and has a major development parcel adjacent to the station.

Special Opportunity at the Flavel Station The property on the north side of Flavel is currently occupied by low density manufacturing. It is adjacent to Johnson Creek and partially within the flood plain. This is an excellent opportunity to showcase a sustainable TOD project. It would be possible to design the site with development pads and additional flood storage and stormwater treatment features. This would need to be a joint project of BES, PDC and BOP but is an example of the type of joint action that is needed to achieve the development objectives in these stations.

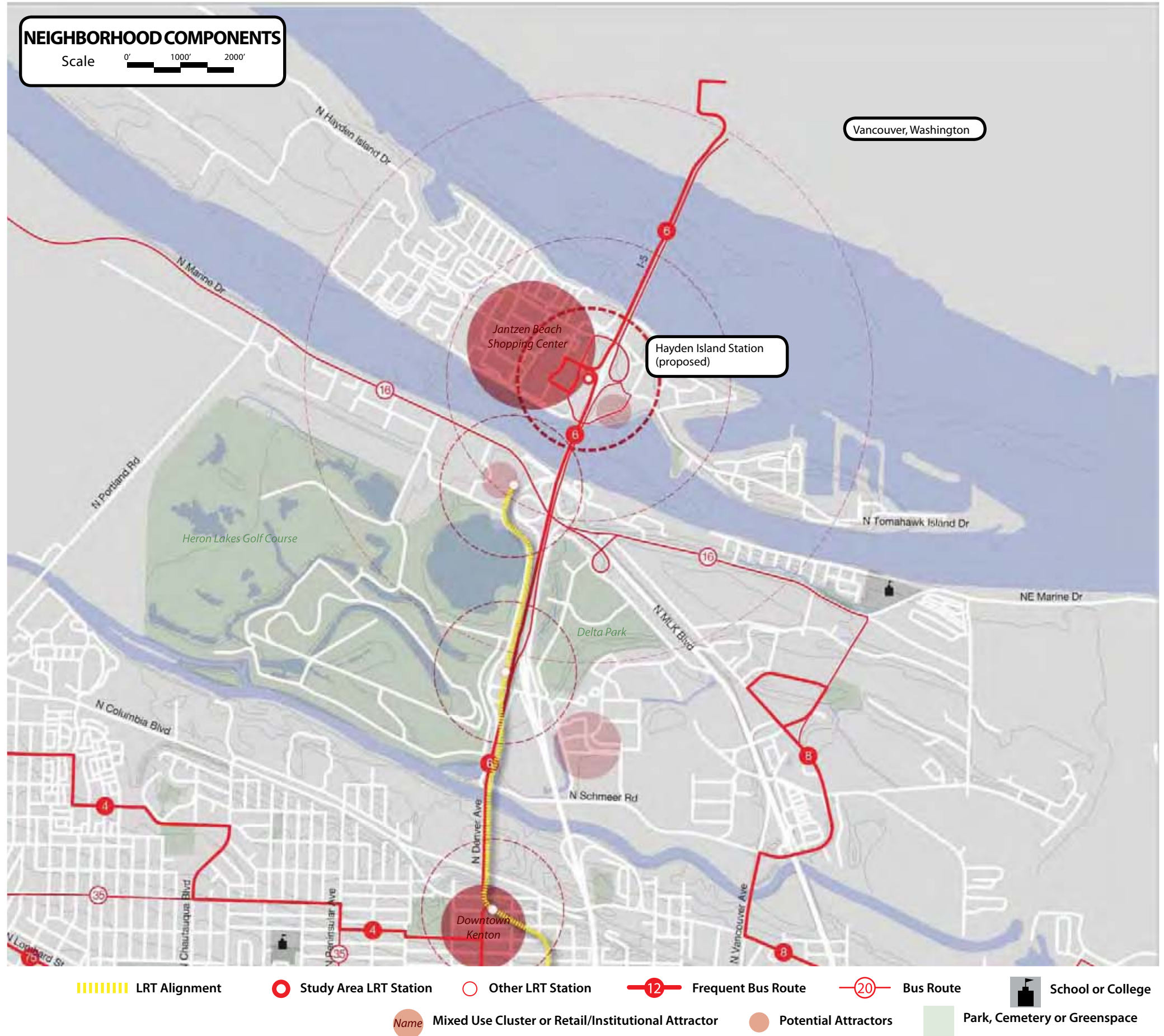
YELLOW LINE STATIONS HAYDEN ISLAND

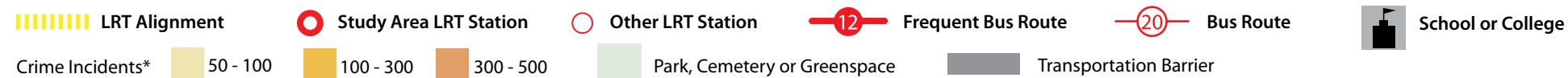
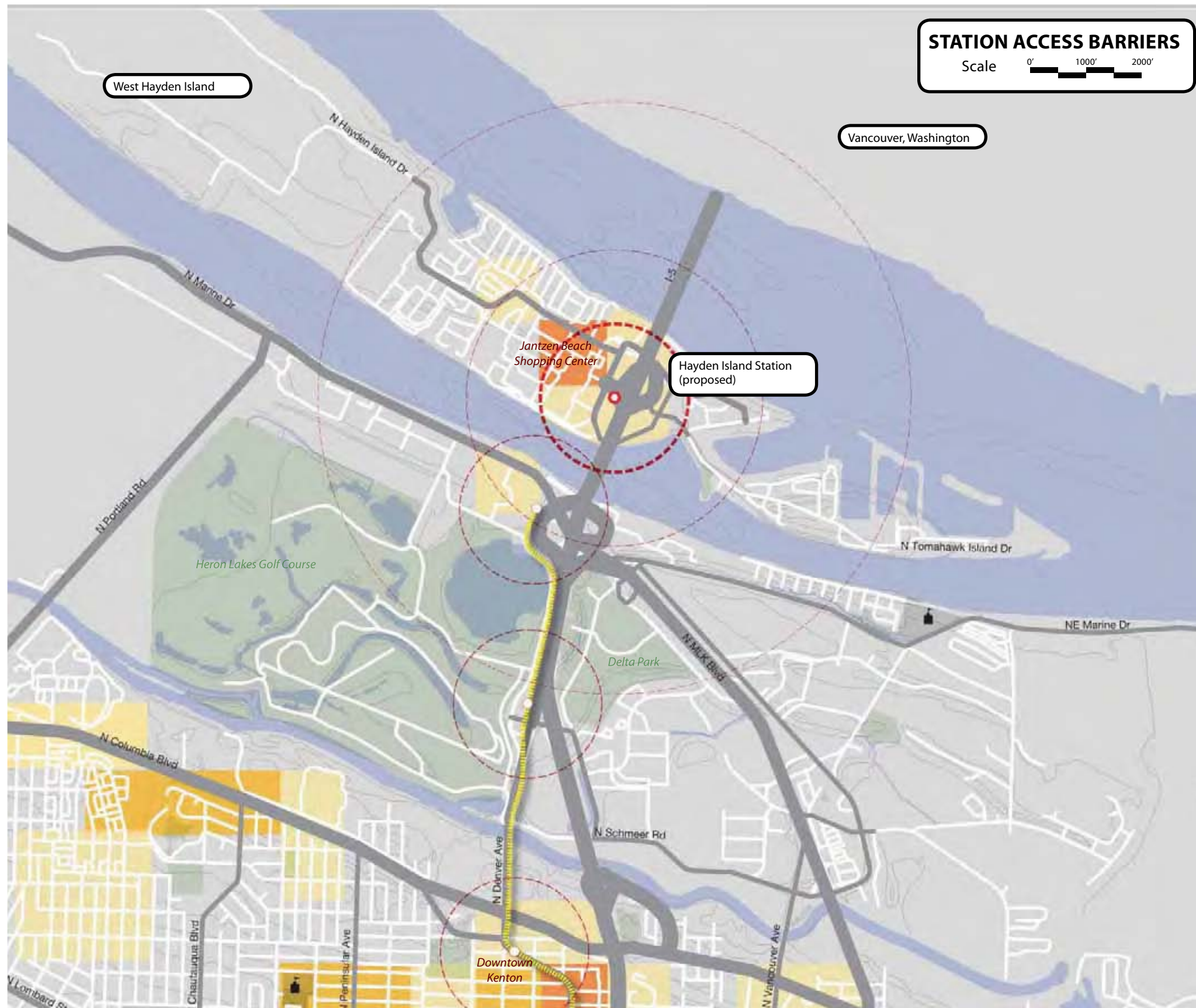
EXISTING CONDITIONS AND ASSESSMENT

NEIGHBORHOOD COMPONENTS

The Hayden Island Station is the last proposed stop in Oregon for the MAX yellow line, which will eventually continue north to downtown Vancouver, Washington. The precise location of the stop has not yet been determined, but will likely be on the west side of I-5. Hayden Island is its own neighborhood and is separated from the “mainlands” of Portland and Vancouver by the Oregon Slough (North Portland Harbor) and the Columbia River. The only land access to and from the Island is on I-5; N Hayden Island Drive and Tomahawk Island Drive are the only public local roads on the Island. The lands uses on the Island west of I-5 consist of a mix of light industrial, big box retail (Jantzen Beach Super Center), and a mobile home park. The east side of Hayden Island is largely residential with a number of floating homes, unattached single-family homes, duplexes, and condominiums. A commercial node exists immediately adjacent to I-5. There are no schools on Hayden Island and one small public park.

NEIGHBORHOODS





STATION ACCESS BARRIERS

Hayden Island is a unique place and has some unusual access barriers. First and foremost, it is surrounded by water and has limited access points. Primary access to the Island is auto-oriented via I-5, which has an array of on- and off-ramps that provide access to both sides of the Island. These ramps create a challenging wayfinding environment for pedestrians and bicyclists, as they must be traversed to reach any part of the Island and north to Vancouver, Washington. Adjacent land uses are typical big-box retail designs: a large single structure set behind a larger area of surface parking. Often the parking lots do not have paths or accessways through them for pedestrians. Significant barriers in the vicinity of the Hayden Island Station include:

- I-5 and its confounding network of on- and off-ramps
- Waterways: Columbia River, Columbia Slough
- Few properly marked mid-block pedestrian crossings
- Limited linear local roadway system
- Private and gated neighborhoods
- Large-scale land uses with large parking lots

*Illustrates the number of total crimes in a half mile grid. Crimes include: arson, assault, burglary, homicide, larceny, rape, robbery, theft from auto, vehicle theft, drug laws, embezzlement, forgery, fraud, prostitution, vandalism, weapons laws, curfew, disorderly conduct, DUII, gambling, kidnapping, liquor laws, offense against family, runaway, and trespass.

DEMOGRAPHICS

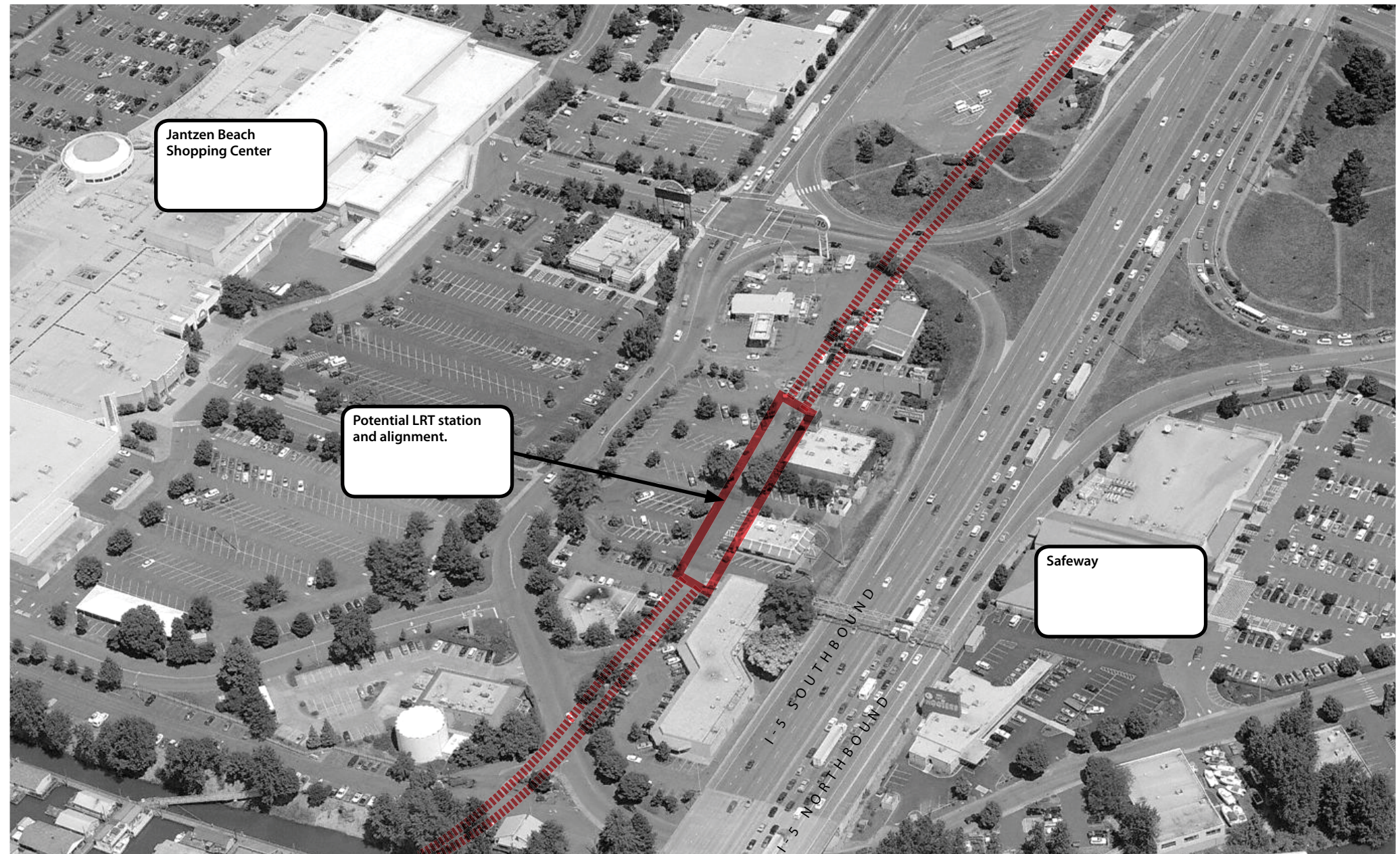
Hayden Island is a study in contrasts. It has the highest percentage of low-income residents (36.2% under \$25,000) of all the station areas and also one of the highest percentages of high-income residents (15.2% over \$100,000). This is reflected in the type of housing on the Island, which includes everything from single-wide mobile home units to million-dollar unattached, single-family residential homes. The median age of residents on Hayden Island is 53.9, which is significantly higher than the other station areas, and explains some of the income variation -- many are senior citizens on a fixed income. There are very few children or young adults living on Hayden Island and nearly everyone is white (91%). Nearly 50% of people own a home on Hayden Island; about 28% are renters. There is a 22% vacancy rate, which is much higher than the other station areas (which are typically 5% - 8%).

LRT STATION DESIGN AND ACCESS

The study area for the future station location is west of I-5 at the Hayden Island interchange.

LAND USE AND DEVELOPMENT

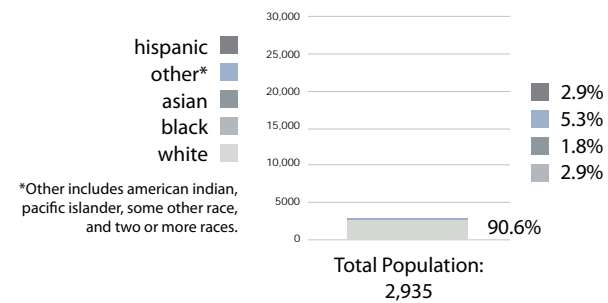
Land uses within the station area consist primarily of big-box retail, along with some smaller-scale retail and restaurants and hotels. Houseboats and boat moorings lie along the southern edge of the station area in the Oregon Slough.



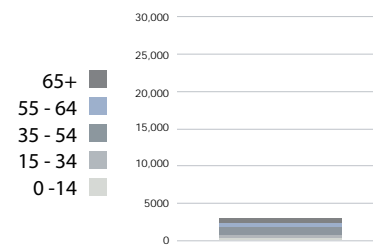
DEMOGRAPHIC PROFILE

	2000	2007
Population	2,597	2,851
Households	1,514	1,728
Families	595	617
Average Household Size	1.67	1.61
Owner Occupied HUs	1,067	1,109
Renter Occupied HUs	447	619
Median Age	50.6	53.9

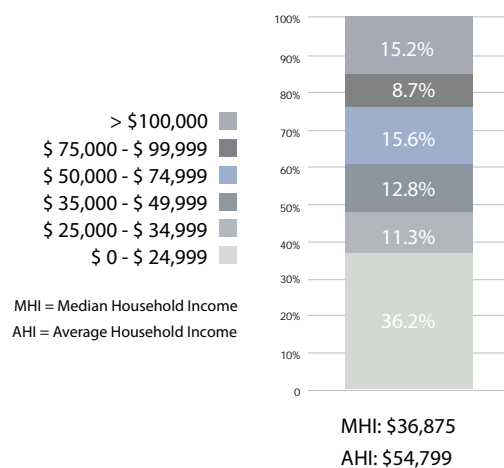
Population and Race (2007)



Age By Population (2007)



Household Income (2007)



BEST PRACTICES EVALUATION: WHAT IS MISSING?

		Notes
Form a coherent vision		
Articulate a plan		East Hayden Island Plan (ongoing)
Involve stakeholders		East Hayden Island Plan (ongoing)
Focus on implementation		East Hayden Island Plan (ongoing)
Maintain flexibility		East Hayden Island Plan (ongoing)
Understand market demographics		East Hayden Island Plan (ongoing)
Engage corporate attention		East Hayden Island Plan (ongoing)
Get the land uses right		
Make retail strategy market driven		East Hayden Island Plan will study
Develop mixed-income housing		East Hayden Island Plan will study
Allow single uses where appropriate		East Hayden Island Plan will study
Promote density		
Maximize transit ridership and access		Goal of current East Hayden Island Plan project
Build retail market base		Existing demand is almost exclusively auto-oriented
Locate employment areas near the station		Major retail area
Create convenient, comfortable pedestrian & bicycle connections		
Connect the grid; provide well-designed sidewalks		East Hayden Island Plan will make recommendations
Develop compact blocks; provide on-street parking		East Hayden Island Plan will make recommendations
Create seamless access to neighborhoods		East Hayden Island Plan will make recommendations
Maximize safety & comfort through design		East Hayden Island Plan will make recommendations
Build bike parking		East Hayden Island Plan will make recommendations
Calm traffic; eliminate minimum LOS standards		I-5 interchange ramps are an issue; East Hayden Island Plan will make recommendations
Build a place not a project; ensure good urban design		
Design with the station as the center		East Hayden Island Plan will make recommendations
Use high quality urban form to support mixed incomes & uses		East Hayden Island Plan will make recommendations
Make places that engage the public		East Hayden Island Plan will make recommendations
Create landmarks and beacons		Interstate Bridge, Columbia River
Preserve and invest in existing neighborhoods		East Hayden Island Plan will make recommendations
Taper density and height from stations to neighborhoods		East Hayden Island Plan will make recommendations
Get the parking right		
Do not locate Park & Ride or utility structures in front of station	na	
Develop shared parking policies		East Hayden Island Plan will study
Design structured parking well		East Hayden Island Plan will study
Make bus transit and TDM work		
Provide feeder transit and make buses attractive		East Hayden Island Plan will study
Provide local and workplace shuttles		East Hayden Island Plan will study
Embrace TOD and TDM to maximize trip reduction		East Hayden Island Plan will study
Create supportive public policies		
Pursue joint development		East Hayden Island Plan will study
Focus public investments to support market dynamics		East Hayden Island Plan will study

Present

Opportunity for improvement

Missing

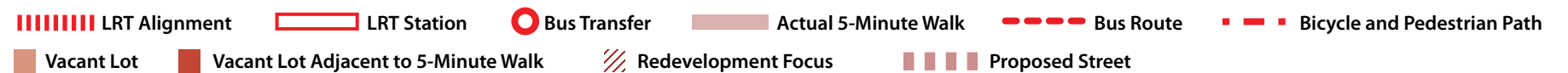
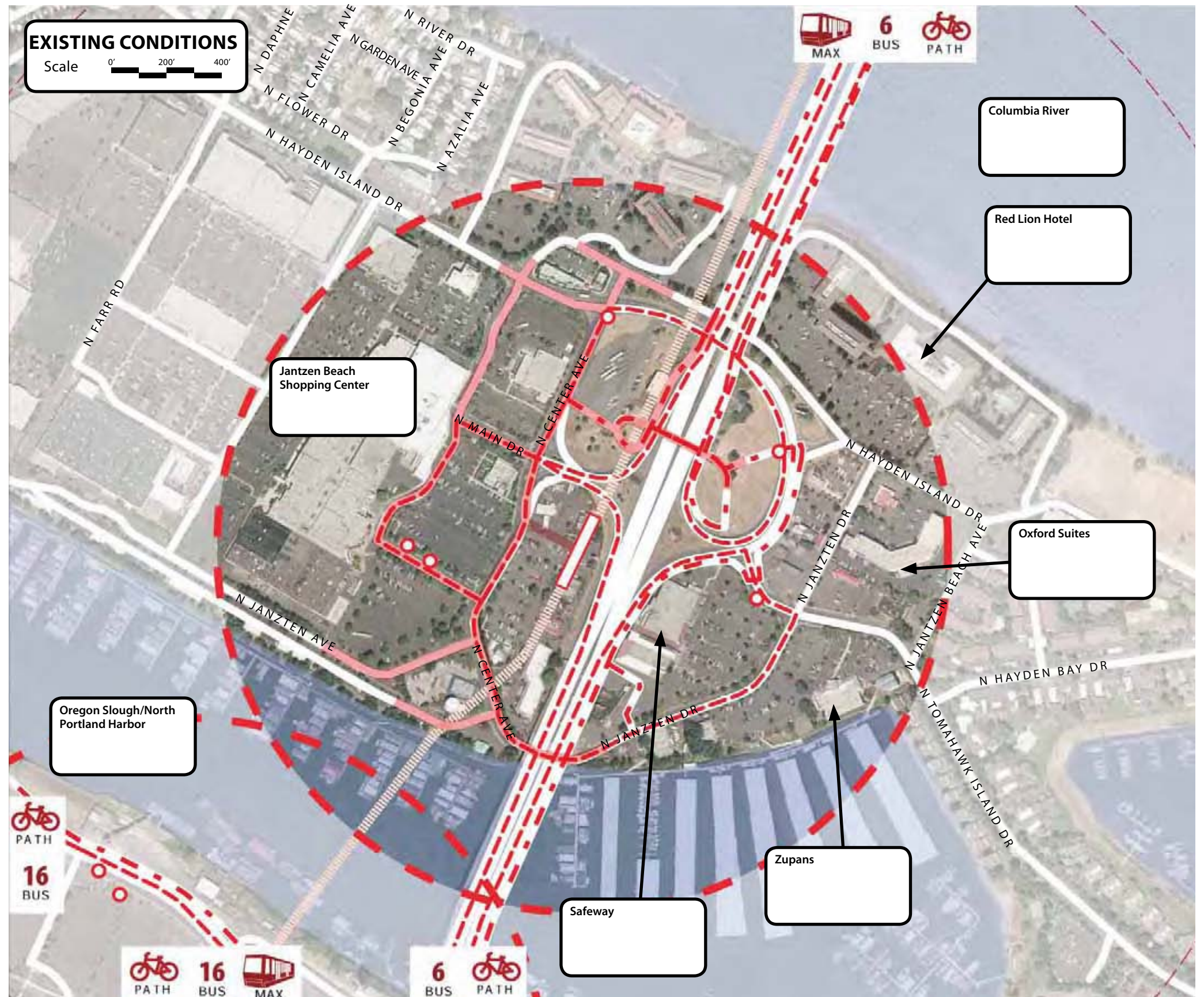
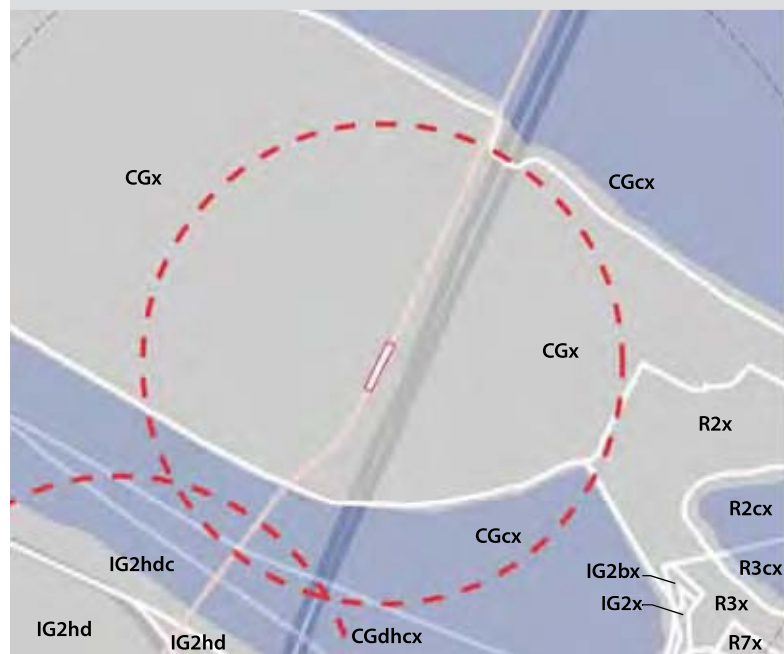
ZONING, COMPREHENSIVE PLAN AND DISTRICT PLAN POLICIES

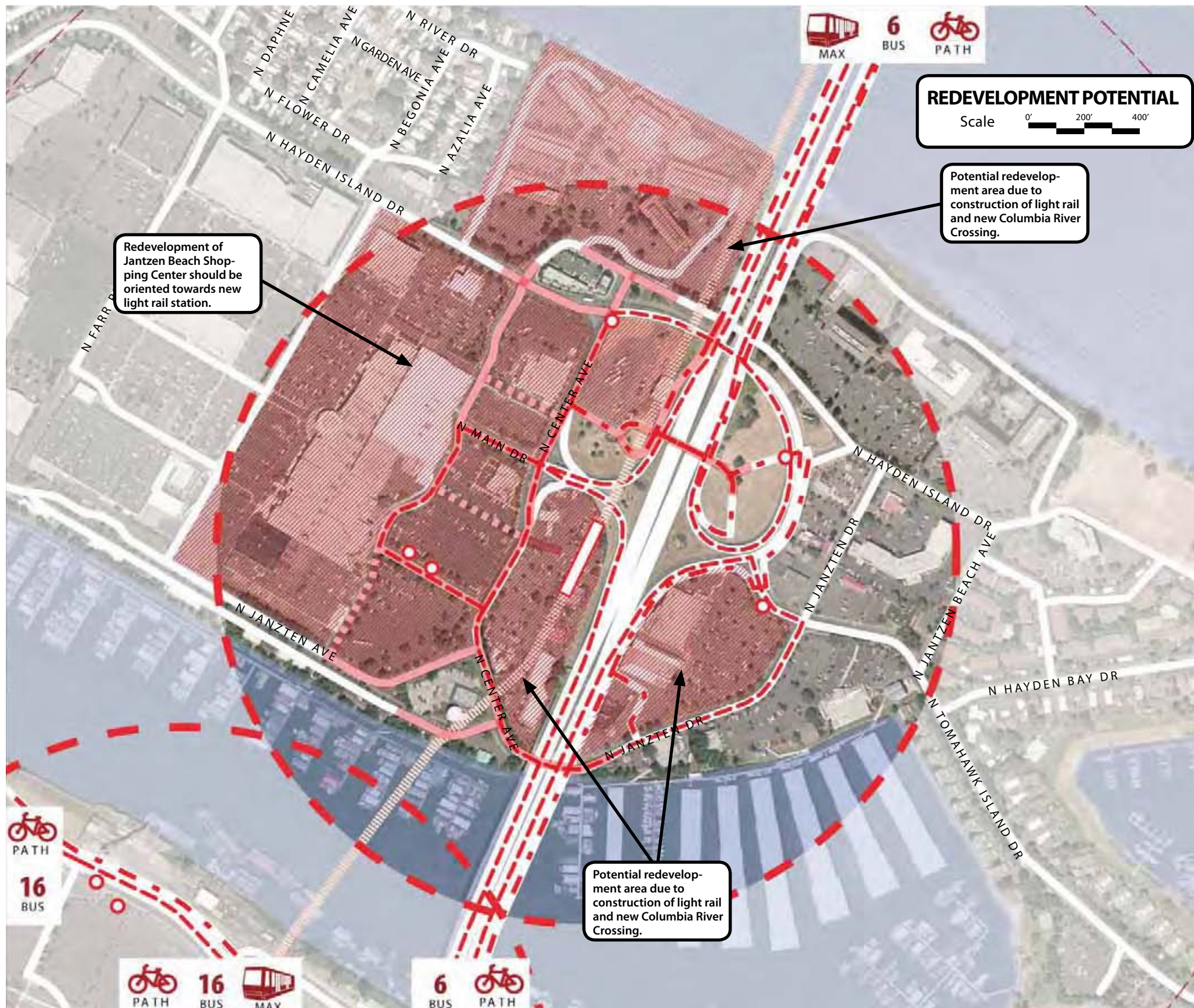
The zoning in the immediate area is commercial (CG) and directly to the east is residential zoning and development. Farther east the zoning is a mix of commercial and industrial. The east end is ringed with houseboats and marinas. Beyond the immediate commercial areas adjacent to the I-5, in the north is a manufactured home park and farther west land zoned for industrial uses. A significant portion of the western end of the island is outside of the city limits and is owned by the Port of Portland.

The City's overlay zone, "x" is associated with the airport noise impact area. This overlay zone covers most of Hayden Island. New residential uses are prohibited within the Ldn 68 noise contour. Exception to this restriction allows for replacement within 5 years of damaged or destroyed housing and replacement of houseboats or manufactured homes that have been moved. New development must conform to the noise insulation requirements in the code. Any vacant land in the 'x' overlay area that falls within the Ldn 65 and the Ldn 68 noise contours that is zone for a residential use is limited to the density of R10 regardless of base zoning.

Parcels adjacent to the island shore are covered by the "c" conservation overlay zone which regulates the area of disturbance and the impact on vegetation, storm water management and setback from the natural resource. In addition parcels as the eastern edge of the island are also covered by the "h" overlay zone which applies to all structures and vegetation within the aircraft landing zone and are subject to height limits.

ZONING





REDEVELOPMENT POTENTIAL

The existing development pattern, the required resource protection and constrained transportation system coupled with the complex regulatory environment will limit redevelopment in proximity to the proposed Hayden Island station.

Portland and Vancouver are job centers for the island residents and this station could be a good commuter option for them. Safe and easy access for pedestrians to the station will be important to reduce parking conflicts between commuters and customers within commercial sites adjacent to the station.

An examination of the underlying zoning assumptions, a resource management plan and a district plan is needed to comprehensively leverage the Columbia River Crossing investment and the Hayden Island station.

REDEVELOPMENT POTENTIAL
 Scale 0' 200' 400'

Potential redevelopment area due to construction of light rail and new Columbia River Crossing.

Redevelopment of Jantzen Beach Shopping Center should be oriented towards new light rail station.

Potential redevelopment area due to construction of light rail and new Columbia River Crossing.

- ||||| LRT Alignment
- LRT Station
- Bus Transfer
- Actual 5-Minute Walk
- - - Bus Route
- · - · Bicycle and Pedestrian Path
- Vacant Lot
- Vacant Lot Adjacent to 5-Minute Walk
- /// Redevelopment Focus
- Proposed Street

Recommended Public Interventions: Hayden Island Station Area

Leadership Because this is a new station, Hayden Island has the greatest development potential of all of the stations evaluated in this study. Leadership will be especially critical for converting this location's potential into real development. The following leadership actions are needed beginning today:

The transit station is likely to be located on what is today private property. The city and TriMet should work with the property owner(s) to identify a mutually beneficial location. Creating more predictability now for the property owner will help them avoid making a property improvement in the path of the new line and station. In exchange, the property owner may be interested in financial consideration and regulatory relief and the City should lead the way in exploring those options

The City can facilitate development in the area by creating a street plan that improves connectivity and is supportive of transit oriented development. That work is now underway through the Hayden Island Plan.

The neighborhood association can be a leader in advocating for LRT and an LRT station. It may also be able to influence the attitude of the management of the Jantzen Beach Shopping Center.

Regulatory The Hayden Island Plan will be evaluating regulatory options that promote TOD development. At a minimum, the zoning should permit a mix of uses. However, the opportunity for a real mix of uses is severely constrained by the prohibition on residential uses within the PDX Airport noise contour. If a plan district is adopted, plan regulations that are tailored to this location may be useful. On the other hand, overly prescriptive requirements may also discourage development interest.

Infrastructure Hayden Island presently has a mix of private and public roads. Access to the island and mobility around the island is constrained. Pedestrian connectivity is poor. New streets with complete pedestrian amenities are needed. The proposed re-development of the shopping center presents an opportunity for re-orienting and improving the road and pedestrian network.

Development Incentives Most development incentives are associated with the development of affordable housing. Hayden Island has limited residential development opportunities and those that exist are likely to develop as higher income units built to take advantage of the water's view and proximity. Development incentives for retail and commercial do not appear warranted particularly in the case of retail which dominates this area already. Hayden Island is not in an urban renewal district so sources of funds are severely limited.

This report has evaluated 10 stations and determined:

- The best practices needed to stimulate transit supportive development
- Which of those ideal practices is missing from each station; and
- The public interventions needed to provide those missing elements and change the existing condition

The City's elected officials and bureau leadership are now in a position to make change happen-- and change will happen if the City does three things:

Invest in streets and sidewalks It takes public money to solve some problems—and this is one of them. The most glaring best practice that is lacking at each station is a good pedestrian network and compact blocks. The degree of the problem varies but each of them suffers from not having excellent pedestrian connectivity. Wider sidewalks, planting strips, on street parking, safe crosswalks and a complete network of improved streets would enhance the feasibility of development. This problem is compounded by large block sizes at some stations, notably 148th and 162nd. Compare the number of addresses within a five minute walk of the 162nd station and the 60th station. (insert side by side figure of the two stations with the red shaded line showing the 5 minute walk perimeter) Increasing the lineal feet within a close walk of the station also increases the feasibility of dense development.

Improve the regulatory framework for transit supportive development

For the most part, the slow pace of development around these stations is not due to zoning. The policies and codes for most station areas are generally supportive of the densities and uses needed for transit oriented development. At a number of stations, however, strategic development parcels are currently zoned CG with an emphasis on auto-oriented uses. The City should evaluate these locations for zone changes or should provide greater use and density flexibility within the CG development standards.

Developers who participated in the real estate panel also pointed to a need for changes in the land use review process. The specific issue cited was a change from a type II to type III review process for proposed development in the Gateway area.

Create accountability for change The best way to get City staff and elected officials to focus on making changes is to put someone in charge and make them accountable for the implementing actions needed around each station. The City needs someone who will wake up every day and ask themselves “what can do today to make a difference in the communities around our LRT stations. This report provides a place to start but some dedicated attention to these areas, backed by a commitment to invest in infrastructure, will yield even more ideas for transforming the community

A Call to Action

In the end, making change happen around LRT stations will come down to leadership. The City has done a good job over the last 20 years of defining a vision for station communities. The implementation of that vision has been uneven. The City's elected officials and bureau leaders can use the findings of this report to set an agenda for change that is compelling for the public and backed by a firm commitment to make a difference.

APPENDIX BEST PRACTICES BIBILIOGRAPHY CURRENT POLICIES: SUMMARY POLICY REFERENCE DOCUMENTS

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CURRENT POLICIES: SUMMARY

Portland LRT Stations—Current Policies

Regional Policies

Regional Policies contained in Metro’s Regional Framework Plan and implemented through the Urban Growth Management Functional Plan (Functional Plan). Regulations contained in the Functional Plan are binding on local governments. Applicable policies pertaining to the Portland MAX light rail station are derived from Metro’s growth management strategies.

Policies are contained in four major areas; Description of the 2040 Growth Concept, Urban Form, Economic Vitality, and Developed Urban Land.

The 2040 Growth concept is the unifying concept around which the Regional Framework plan is based. It states the preferred form of growth and development: growth occurs inside the urban growth boundary in the form of infill and redevelopment with higher density development where it is appropriate. Fundamental to the growth concept is a hierarchy of mixed-use, pedestrian friendly centers that are well connected by high capacity transit and corridors.

Station communities are described as nodes of development centered around a light rail or high capacity transit station that feature a high-quality pedestrian environment. They provide for the highest density outside centers. Station communities encompass an area approximately one-half mile from a station stop.

Under Urban Form the policies include:

- (1) Maintain a compact urban form, with easy access to nature
- (2) Preserve existing and district neighborhoods by focusing commercial and residential growth in mixed-use centers and corridors at a pedestrian scale
- (3) Ensuring affordability and maintaining a variety of housing choices with good access to jobs and assuring that market-based preferences are not eliminated by regulation
- f) Target public investments to reinforce a compact urban form

Regional economic policy addresses existing conditions of many of the light rail station areas. Economic Vitality: Recognize that to allow the kinds of social and economic decay in older suburbs and the central city that has occurred in other larger and older metro regions is a threat to our quality of life and the health of the regional economy.

In the third policy area, Developed Urban Land, there are two policies:

- a) Identify and actively address opportunities for and obstacles to the continued development and redevelopment of existing urban land using a combination of regulations and incentives to ensure that the prospect of living, working and doing business in those locations remains attractive to a wide range of households and employers.
- b) Encourage, in coordination with affected agencies, the redevelopment and reuse of lands used in the past or already used for commercial or industrial purposes were ever economically viable and environmentally sound.

The Functional Plan addresses local government requirements for station areas in four major areas, density, parking and center redevelopment. The area of density, Metro established housing and employment capacity in Title 1: Requirements for Housing and Employment Accommodation, Table 1. It states that local governments may change the dwelling unit density of any zoning district so long as the district continues to comply with the 2040 Growth Concept policies and the overall capacity for housing in Table 1 is met. Title 1 also includes the provision that the city shall authorize at least one accessory dwelling unit for each detached or attached single-family dwelling unit in a station community. The authorization may be subject to reasonable regulation for siting and design purposes. Metro also recommends 45-persons per acre average density for housing and employment in station areas.

The State’s Transportation Planning Rule calls for restriction on construction of new parking spaces. Metro addresses the state requirements through Title 2: Regional Parking Policy. It states that local governments shall establish parking maximums at ratios not greater than those listed in the Regional Parking Ratios table. Zone A regulations are applicable to Portland station areas. The Regional Parking Ratios table is included in the appendix as Table A. Only free surface parking spaces are covered under the regulations.

The third area of the Functional Plan that contains regulations pertaining to the station areas is in Title 6: Central City, Regional Centers, Town Centers and Station Communities. Metro requires local governments to:

- (1) examine physical and regulatory barriers to development and to eliminate or reduce them
- (2) conduct an analysis of incentives to encourage development and a program to adopt the incentives

- (3) encourage the siting of government offices in centers and station areas.

Metro’s affordable housing requirements are contained in Title 7: Affordable Housing.

Taken as a whole, Metro has established expectations about how areas with high quality transit services are expected to accommodate much of the region’s growth through redevelopment and infill. The City has complied with the regional regulations with exception of the Title 6 Centers evaluation which is not due until December 2007.

District and Community Plan Policies

Outer Southeast Community Plan The Outer Southeast Community Plan (Plan) contains the description of a desired future for the outer southeast area in the year 2020. The Plan addresses six community-wide policy areas: Economic Development, Transportation, Housing, Open Space and Environment, Urban Design, and Public Safety. It also includes subarea goals and objectives. Six of the station communities in this study were considered in the Plan.

The Plan envisions creating 6,000 new jobs in 20 years, and new job creation is supported by encouraging more intense use of land zoned for commercial and industrial uses. The creation of the Town Center at Lents as an employment area is part of this goal. The potential to construct 14,000 new housing units are part of the plan goals and zoning designation are in effect to allow attached single or multi-family housing where good public transportation and nearby shopping exist. The Alternative Design Density overlay zone was applied within one-quarter mile of streets with transit services. This overlay zone allows alternative development types in exchange for meeting design standards in single-family residential areas.

The transportation goals for the plan link support for alternative modes of travel through land use; higher density is allowed along streets with planned or existing transit service. More intense commercial and mixed-use development is promoted in the town centers and around the MAX light rails stations.

The public safety policy emphasizes reducing crime through design of the built environment and landscaping. Community Design principles incorporated in this policy include building design to provide eyes on the street with ground floor windows facing the sidewalk and building entrances. The Plan also promotes mixed-use development in commercial district so that people are present through the day and night.

Under the urban design policy, the Plan designated Montavilla, the 82nd street station, as a new pedestrian district. Design review of

new development will be required in the Lents Town Center and the intersection of 82nd and Foster Road to encourage more urban pedestrian-oriented development in these areas.

Protecting natural resources and providing new open space are important features of the plan. The expanded Johnson Creek Basin plan district regulations provide for continued protection of Johnson Creek and a transfer of development rights process to take development pressure off these environmentally sensitive areas. Additional plan district regulations specifically regulate development in the 100-year flood plan of Johnson Creek.

The 82nd Avenue I-205 corridor subarea policy promotes the revitalization of 82nd Avenue by increasing the number and variety of jobs in the area and increasing housing opportunity to improve the market for local retail and service businesses. The policy for the Lents Town Center is to foster the development of the center to attract employment, new residents and recreational activities while reducing adverse environmental impacts. Subsequent to the Plan an urban renewal district plan was created for the area.

The MAX light rail line runs through the eastside corridor subarea and encompasses two of the light rail stations in the study, the 148th and the 162nd Avenue stations. In the Plan, station communities are envisioned to develop around the light rail stops. The issues addressed in the subarea policies are increased housing density and shopping opportunities at the station areas. The Glenfair Neighborhood was not considered during the Plan process. The Plan identifies that this neighborhood may need to be revisited for updating. Comprehensive plan and zoning designations have been adopted to implement the Plan goals. The Plan, though 10 years old, set in place smart growth tools to reinforce the public investment in light rail transit.

Johnson Creek Basin Plan District The Flavel Street station is covered by the Johnson Creek Basin plan. The district plan provides for development of lands which are subject to a number of physical constraints, including significant natural resources, steep and hazardous slopes, flood plains, wetlands and the lack of street, sewers, and water services. In addition, restrictions are placed on all new land uses and activities to reduce stormwater runoff, provide groundwater recharge, reduce erosion, enhance water quality, and retain and enhance native vegetation throughout the district.

Development standards prohibit new above ground structures in the Johnson Creek floodway and limits alterations of existing structures.

Transfer of development rights in the district allow the transfer from sites with the Environmental Protection Overlay Zones or sites

where any portion of the site is in the 100 year floodplain.

Density bonuses are also part of the district plan. They encourage development patterns that reduce the impact on environmentally sensitive sites and promote denser development in appropriate areas. Proposals to use bonuses must be attached residential and the development must be approved as a Planned Development.

Zoning Requirements

City Station Area Policies Chapter 33.450 Light Rail Transit Station Zone is an overlay zone that encourages a mixture of residential, commercial, and employment opportunities within identified light rail station areas. The regulations in this chapter are stated to be temporary and that they will be revised at the completion of a regional effort to develop station area plans. The LRT zone is shown on the zoning map as a “t” map symbol. There are no parcels adjacent to the station areas in the study that are covered by the overlay zone.

It is assumed that City will eventual apply the overlay zone to station areas in the study. Specific regulations pertain to prohibit uses, parking spaces, pedestrian improvement and building design.

Prohibited Uses Prohibited uses within in 500 feet of a light rail alignment are:

- (a) vehicle repair uses
- (b) sale or lease of consumer vehicles
- (c) offices for sale or lease of vehicles.

(2) Prohibited within 200 feet of a light rail alignment are:

- (a) commercial parking
- (b) surface or structured
- (c) accessory parking on a surface lot.

Development Restrictions Development regulations include prohibition of development within 500 feet of a light rail alignment:

- (a) of drive-through facilities
 - (b) exterior display of goods and exterior storage on the portion of a site
- (2) Within 75 feet of a light rail alignment:
- (a) new parking access is prohibited

Parking Requirements Parking regulations state that the minimum number of spaces within 50 feet of a light rail alignment is 50 percent of the required parking spaces stated in Table 266-1 of chapter 33.266. Maximum number of parking spaces for non-residential uses may not exceed 150 percent of the requirement in Table 266-2 of Chapter 33.266. The parking tables are included in the appendix as Table B.

Building Improvements

- (1) Landscaping to at the least the L1 standard and/or hard surface for use by pedestrians is required between the building and the street. If it is hard-surfaced pedestrian amenities are required.
- (2) Ground floor window standards contained in section 33.130.230. B.2 apply to all development in the RH, C, and E base zones.

Overview of Market Assessment

I 205 MAX (Division, Powell, Foster, Flavel)

According to the analyses conducted by Leland Consulting Group in 2003 given that the I-205 light rail line will be development within the existing right-of-way of the freeway the station locations will more directly benefit the immediate geography. According to the report, the development opportunities will radiate from each station in a semi-circular shape. The freeway and the right-of-way are real estate barriers so most development will likely occur adjacent to the stations on the same side of the freeway.

Initial observations by the Leland consulting Group suggests that some of the ‘smaller stations’ such as Flavel and Division, have with limited undeveloped land and will likely have small ‘transaction-based’ transit oriented development (TOD). This means that several acres of land adjacent to the station could be developed by a single organization in a single project and that this may be the only likely TOD development to occur.

The opportunities for development and redevelopment at the northern and southern stations, Gateway and Clackamas Town Center are great.

POLICY REFERENCE DOCUMENTS

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