

Appendix 2



*Phase One
Report & Recommendations*

28 June 2005

SERA



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Executive Summary

*The following is a summary of the
122nd Avenue Station Area Study - its
purpose, background, process, and
recommendations.*

Executive Summary

The *122nd Avenue Station Area Study Phase One Report* is the result of a six-month effort initiated by the City of Portland Bureau of Planning with a grant from the Oregon Transportation and Growth Management Program. This grant funded a consultant team led by SERA Architects that, in conjunction with the City project team, analyzed land use, transportation, and regulatory issues in the 122nd Avenue station area.

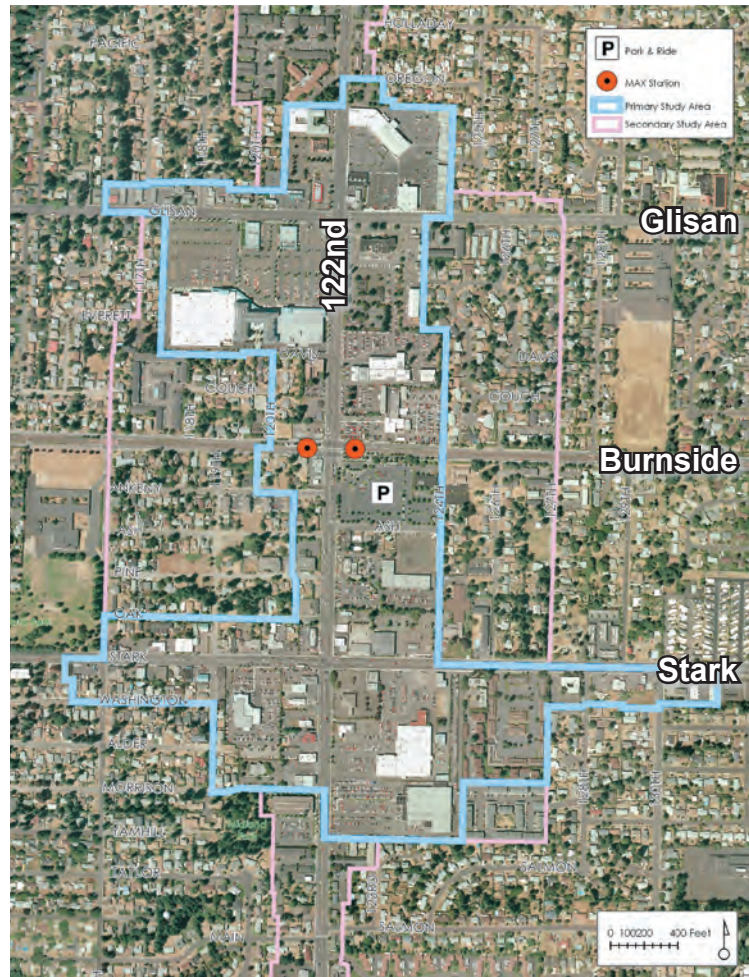
A public process was conducted to review existing conditions in the area, as well as various alternatives for future development, the public realm, and the interface between public and private spaces. The result is a set of phase one study recommendations that aim to strike a balance between the auto-oriented uses in the area with aspirations for a more transit-oriented and pedestrian-friendly future.

Study Area:

The study is focused around the MAX light rail station at 122nd and East Burnside Street, with a primary study area generally running from NE Glisan to SE Stark Streets, and the secondary study area going from approximately NE Halsey to SE Mill Streets and from 117th to 127th Avenues.

Background:

Since the introduction of MAX light rail transit in the mid-1980s, public policies have promoted more intense development around the 122nd Avenue MAX station, focusing on development that benefits from being near the station and that helps encourage transit use. The regulations that implement this policy have made it difficult for established auto-oriented development in the area to improve or expand operations without significant changes to development forms. As a follow-up to the 2004 *Gateway Planning Regulations Project*, stakeholders asked the City of Portland to review land use policies along 122nd Avenue and to address the issues that transit-oriented development policies create for established and growing auto-oriented uses. The 122nd Avenue Station Area Study was undertaken to explore ways to meet the transit-oriented goals for the area while dealing with the reality and needs of its auto-oriented uses.



Executive Summary

Study Mission:

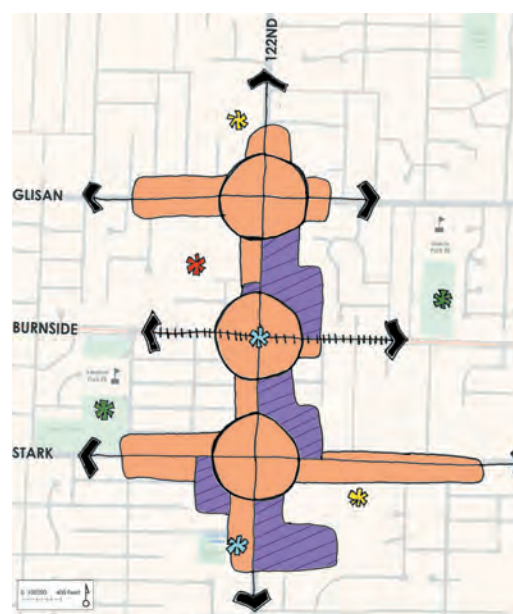
The general mission of the 122nd Avenue Station Area Study is to:

Foster the creation of a positive and distinctive place at the 122nd Avenue transit station, and to coordinate public and private investments along the 122nd Avenue main street and in the station area in order to:

- *Build on the area's light rail assets;*
- *Improve the area's appearance and function;*
- *Serve adjacent residents and nearby neighborhoods and*
- *Support businesses that serve both local and regional customers.*

Station Area Concept Overview:

The concept for the 122nd Avenue Station Area blends the established auto-oriented uses in the area with aspirations for a more transit oriented and pedestrian-friendly future. It accomplishes this objective by focusing pedestrian-friendly development and community-serving land uses at key intersections in the area. These intersections (122nd with Glisan, Burnside, and Stark) are well-served by transit, and are the key community entry points to this section of the 122nd Avenue main street. In between the key intersections, the concept provides for more flexibility to accommodate land uses, such as auto dealers, that feature exterior display and storage as part of their site development. Well-designed and landscaped exterior display areas provide an attractive environment for customers, as well as enhance the area's character for pedestrians, bicyclists, and motorists.



General Development Framework Concept

Key Concept Components and Recommendations:

- **Development Framework:** The recommended framework concept fosters a development pattern that focuses new pedestrian-oriented and transit-supportive development at key intersection “nodes” at Burnside, Glisan, and Stark streets. The framework also calls for allowing greater flexibility for established uses that utilize exterior display and storage, and potential expansion for new uses that utilize exterior display and storage in areas between the intersection nodes.
- **Connectivity Plan:** The recommended connectivity plan shows the locations for future streets and connections in the station area. It is designed to provide, over time, more convenient and direct connections to the 122nd Avenue transit station and nearby commercial activities from adjoining neighborhoods. The plan also provides a pattern for future development that is supportive of the more frequent connections needed for a walkable, transit-oriented area.

Executive Summary

- **Streetscape:** The recommendations for streetscape enhancements are designed to improve the appearance of the 122nd Avenue station area while providing improved pedestrian safety and accessibility. The recommended approach balances the needs for turn movements and access with a desire for improved appearance, and allows for implementation over time.
- **Sidewalks and Building Setbacks:** The recommendations for sidewalks and building setbacks are designed to foster an environment that is pleasing to and convenient for pedestrians, transit users, and motorists. They also respond to the different environments created at intersection “nodes” and the areas in-between. Sidewalks along 122nd and arterial streets in the Ventura Park Pedestrian District are designed to mitigate the impacts of heavy traffic volumes on pedestrians by providing a generous buffer between pedestrians and traffic. Further, street tree and landscaping treatments are set to provide an aesthetic “greening” effect while better managing stormwater. Maximum building setbacks between the nodes are proposed to be increased for residential buildings to provide greater buffering, as well as for retail businesses that may utilize exterior display areas.
- **Site Design:** The recommendations for site design at the intersection “nodes” encourage an intensely-developed mix of retail, office, housing, and mixed-use development that is pedestrian-oriented but accessible by automobiles. In between nodes, site design recommendations call for more flexibility for businesses that feature exterior display, with limitations on the size and location of display areas, and site development plans that may allow for future redevelopment opportunity. In both areas, enhanced design guidelines and/or standards are recommended to encourage a high level of building quality, landscaping, and other features that help ensure compatibility with other uses in the station area.

Implementation Strategies:

The report concludes with several implementation strategies for advancing the recommendations in this report. These include addressing existing policy and objectives for the 122nd Avenue Station Area, pursuing revisions to regulations for development, refining transportation planning for streetscape and pedestrian improvements, and seeking funding for implementation.



Development Concept: existing conditions (left) and potential future development & streetscape (right)

1. Introduction

This introduction includes a description of the study's mission, the context under which it has been undertaken, and an outline of the study's process.

Introduction

The 122nd Avenue Station Area Study is an analysis of land use, transportation, and regulatory issues in the vicinity of the 122nd and Burnside MAX station. The primary study area generally focuses on the land along 122nd Avenue between NE Glisan and SE Stark Streets in Portland, Oregon. A secondary study area encompasses a larger area from approximately NE Halsey to SE Mill Streets, and from 117th to 127th Avenues.

Since the introduction of MAX light rail transit (LRT) in the mid-1980s, public policies have promoted more intense development around the 122nd Avenue MAX station, focusing on development that benefits from being near the station and that helps promote transit use. The new multi-family infill buildings, row houses, and streets that have been developed in the vicinity of the MAX station are in line with these policies.

At the same time, much of the current development along 122nd Avenue is characterized by storage of automobiles either in the form of car sale lots, shopping center parking lots, or driveways. Up until the development of the LRT line, these types of auto-oriented uses dominated the character and role of 122nd Avenue. While development in the area is evolving, auto-oriented uses remain a major component of the area.

As a follow-up to the 2004 Gateway Planning Regulations Project, stakeholders asked the City of Portland to review the land use policy along 122nd Avenue and to address the issues that transit-oriented development policies create for established and growing auto-oriented uses. The 122nd Avenue Station Area Study was undertaken to explore ways to meet the transit-oriented goals for the area while dealing with the reality and needs of its auto-oriented uses. Is it possible to balance the two? Could better designed streetscapes, pedestrian environments, and commercial uses make a difference?



Existing MAX station and auto dealership on Burnside east of 122nd.

Introduction

The general mission of the 122nd Avenue Station Area Study is to:

Foster the creation of a positive and distinctive place at the 122nd Avenue transit station, and to coordinate public and private investments along the 122nd Avenue main street and in the station area in order to:

- *Build on the area's light rail assets;*
- *Improve the area's appearance and function;*
- *Serve adjacent residents and nearby neighborhoods and*
- *Support businesses that serve both local and regional customers.*



Existing MAX station at 122nd and Burnside

This report summarizes the process and findings of the study; it includes the following sections:

Background: This section provides a review of the history and intent behind current land use policies, as well as brief summaries of current development, market, and transportation conditions in the study area.

Concept Development: This section discusses development of a concept for the station area. It starts with a vision statement for the study area, goals and objectives, and an analysis of opportunities and constraints. It includes a description of the different development and land use scenarios explored during the public process.

Station Area Concept & Recommendations: This section presents the preferred Station Area Concept. It includes a recommended development framework concept, a proposed master street plan, recommendations for streetscape improvements, and concepts and principles / standards for development along the street.

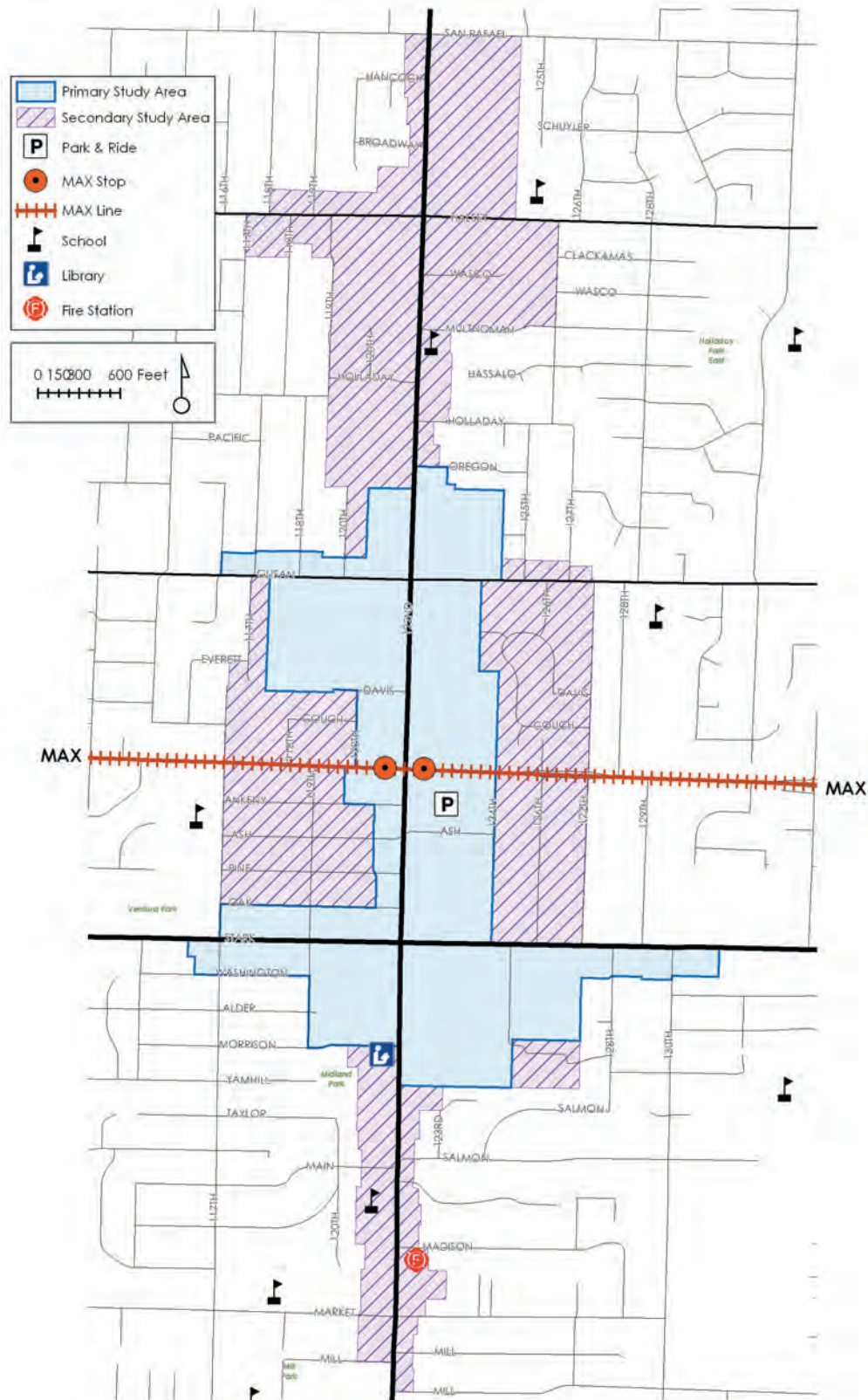
Implementation Strategies: The report concludes with strategies for implementing the recommendations of the study.



Existing auto dealership on 122nd

Study Area

1. Introduction



Process

TGM Grant

The City of Portland was awarded an Oregon Transportation and Growth Management (TGM) quick response grant. The grant funded a consultant team to provide expertise in urban development and design, transportation, and urban economics. The TGM consultant team includes: SERA Architects (lead/urban development and design), Falconi Consulting Services (transportation), and Johnson/Gardner (urban economics).

Timeline

The project was initiated in November 2004 and has followed the basic timeline below. This report encompasses phase one portions of the scope through step four, below. Phase Two will explore further a set of implementation measures, and may lead to review and consideration by the Portland Planning Commission and City Council.

Phase One

1. Assess Existing Conditions (Winter 2004-05)

Demographic and market data
Review land use patterns and transportation systems
Review policy and regulatory parameters
Identify opportunities and constraints

2. Set Goals and Objectives (Winter 2005)

Confirm problem statement and issues
Discuss and set key goals

3. Develop and Evaluate Alternatives (Winter-Spring 2005)

Explore alternative land use and transportation concepts and scenarios
Assess and explore streetscape and connectivity issues
Explore design for auto dealers and other land uses

4. Refine Preferred Alternative and Explore Implementation Strategies (Spring 2005)

Explore alternatives for achieving future development
Future street plan

Phase Two

5. Develop and Refine Implementation Strategies (Summer-Fall 2005)

Policy issues
Comprehensive plan map, zoning map and code
Design guidelines and regulations

6. Adoption Process (as appropriate: Fall-Winter 2005)

Planning Commission review
Design Commission review
City Council hearing

Process

Working Group

The study included a working group (SWG) composed of community stakeholders that met monthly from December 2004 through June 2005. While not a decision-making body, the group provided feedback to staff and consultants on various concepts and proposals from a variety of perspectives, and acted as a communication link to other organizations. The SWG included representatives appointed by nearby and local neighborhood associations and business associations, auto dealers, TriMet, and Metro. In addition to group members mentioned above, SWG meetings were attended by other community stakeholders.

Public Meetings

The study process included three meetings where the general public was asked to attend and provide input on ideas and alternatives developed by the project team of City staff and consultants. These meetings are described below.

Open House, February 7, 2005

This open house was attended by over 40 people and introduced the study and issues to the general public. The project team presented information on goals for the area (developed with feedback from the SWG), a discussion of market factors for development, land use and transportation system constraints, and an analysis of opportunity areas. Feedback from the participants included:

- Concerns about change and increased density in the area, particularly affordable multi-dwelling residential development;
- Acknowledgement that existing auto dealers are an established part of the community that provide jobs and other economic benefits;
- A desire for improvements to the pedestrian environment (getting across 122nd Avenue safely can be a particular challenge);
- Concerns about traffic flow (there is a need to maintain traffic movement in the area as it changes);
- Discussion about the benefits of MAX (it increases access, but there are perceptions about increased crime and vandalism);
- Desire for aesthetic improvements to the public realm and private property (this includes streetscape amenities, beautification, and more “greening” of the area).

Workshop #1, April 2, 2005

This workshop was attended by over 40 people and included the presentation of four development scenarios, a draft circulation plan (master street plan), ideas for streetscape improvements, and a draft mission and vision statement for the study area. Participants completed a questionnaire and provided verbal and written feedback, which was assessed and then synthesized by the project team into a refined concept following this workshop. The scenarios and feedback are discussed in the concept development section of the report.

Process

Workshop #2, June 4, 2005

This workshop was attended by over 20 people and included the presentation of a refined development concept for the area which evolved from the four development scenarios presented previously. A revised draft circulation plan (master street plan), refined ideas for streetscape improvements, and specific options for concepts and site development (setbacks, landscaping, etc.) were also presented. The workshop included small group discussions to obtain feedback on several station area land use and transportation ideas. Feedback from this workshop is discussed in the concept development section of this report.



Photo courtesy of Tim Curran, Mid-county Memo

June workshop participants included local business people, neighbors, and other stakeholders

2. Background

This section includes background and context information for the study and the 122nd Avenue station area. Specific topics covered include City, County, and Regional policies, existing land use and development, market conditions, and existing transportation conditions.

Policy Background

Policy and Regulatory Background

Until the 1980s, the area encompassed by the 122nd Avenue Station Area Study was in the jurisdiction of unincorporated Multnomah County, Oregon. Plans for this portion of Multnomah County allowed a variety of multi-family and single-family residential, and commercial land uses in this area, which was transitioning from a rural to suburban character.

As the area urbanized through the 1960s, new residential and commercial development began to occur. Much of the commercial development was on large lots at major intersections, and designed for easy auto access. In the late 1960s, Multnomah County adopted the CAC (Commercial Automobile Center) zoning code regulations that facilitated the development of auto retailers on key sites along 122nd Avenue.

The construction of the eastside MAX light rail line in the mid-1980s changed public expectations about the area, and resulted in a change in policies for future development around the MAX station and along 122nd Avenue. Policies to promote transit-oriented development were first implemented while the area was in the jurisdiction of Multnomah County through use of the transit zones (“T”) which limited exterior activities and allowed mixed use development.

The area was annexed to the City of Portland during the 1980s and 1990s along with other areas in East Multnomah County. Portland zoning designations were applied in the area as it transitioned from unincorporated Multnomah County.

In 1991, a rewrite of Portland’s zoning code resulted in another change to the zoning designations in the area. In addition to commercial and residential zones, a Light Rail Transit overlay zone (“t”) was applied to sites near light rail. This overlay zone had several provisions designed to promote transit-oriented development; specifically, the “t” overlay:

- Prohibited vehicle repair, quick vehicle servicing, and drive through development;
- Prohibited single-dwelling development in multi-dwelling zones;
- Required a minimum 0.5:1 Floor Area Ratio (FAR);
- Required ground floor windows;
- Limited parking between a building and the street;
- Prohibited exterior display and storage.

In the mid-1990s, the regional *Metro 2040 Growth Concept* identified the area surrounding the 122nd Avenue MAX transit station as a “station community” and designated 122nd Avenue as a “main street.” Local implementation of regional policy resulted in regulations for the 122nd Avenue station community and main street that encourage it to evolve into a pedestrian-oriented area with development that supports the public investment in transit.

In 1996, the Portland City Council adopted the *Outer Southeast Community Plan* (OSCP). This plan created a vision, urban design framework, policies, and implementation actions for much of east Portland. The plan included an update to the Portland Comprehensive Plan, Comprehensive Plan map, Zoning map, and Zoning code for the area.

Policy Background

As part of the *OSCP*, the MAX LRT Corridor Policy was adopted (see Appendix). This policy called for development around the MAX light rail stations to support public transit investment. To implement the policy, zoning on much of the commercial land near the 122nd Avenue MAX station was designated CS, Commercial Storefront. Residential areas near MAX were zoned for high-density multi-dwelling (RH), medium-density multi-dwelling (R1) development, as well as other zones, including areas of R5, single-dwelling residential. The area along 122nd Avenue from NE Glisan to SE Stark was designated as the Ventura Park Pedestrian District.

The *Hazelwood Neighborhood Plan* was also adopted as part of the *OSCP* process. It included a 122nd Avenue Subarea policy that called for development of commercial areas in a nodal pattern (see Appendix).

Finally, the *OSCP* resulted in adoption of the Gateway Plan District. This was applied in Gateway, and along the MAX Corridor between Glisan and Stark to the city limits. The Gateway Plan District included additional regulations to foster transit-oriented pedestrian-friendly development in transit station areas. The Gateway Plan District continued the prohibitions on vehicle repair uses, quick vehicle servicing uses, drive-through developments, and development with exterior display and storage. It added the following:

- Required minimum amounts of housing in commercial zones on sites over 200,000 square feet.

In 2004, the *Gateway Planning Regulations Project* revised the Gateway Plan District regulations. This project separated the Gateway Plan District into two separate plan districts: the Gateway Plan District which focuses exclusively on the Gateway Regional Center, and the East Corridor Plan District, which includes the area from NE Glisan to SE Stark along the MAX line east to Gresham. As part of this effort, the plan district code provisions were revised to simplify and add flexibility as follows:

- Eliminated required housing in C zones on sites over 200,000 square feet;
- Allowed vehicle repair that is accessory to auto dealers;
- Increased minimum FAR in the 122nd Avenue area;
- Eliminated open area requirement on large lots;
- Eliminated internal circulation requirements;
- Changed building and development standards in conformance with other adopted code updates.

Existing Land Use & Development

122nd Avenue is a major arterial street on the eastside of Portland. The street extends from NE Marine Drive to SE Foster Road, and is a major center of auto-oriented retail uses. Within the study area, 122nd Avenue is lined with shopping centers, automobile dealerships, other commercial uses, and multi-family housing, while the blocks located to the east and west are typically developed with single- and multi-family residential uses.



Glisan Street Station at the intersection of 122nd & Glisan

The zoning pattern in the area is a mixture of Storefront Commercial (CS), General Commercial (CG), Mixed Commercial/Residential (CM), Neighborhood Commercial (CN2), Office Commercial (CO1 & CO2), and multi-family residential along 122nd Avenue, with single family and medium density residential zones on the blocks immediately behind the avenue.

Zoning within approximately ¼-mile of the MAX station at Burnside and on key transit streets is aimed at fostering development that supports the public investment in transit. Much of the commercial land in the primary study area is zoned Commercial Storefront (CS), and residential areas are a combination of multi-dwelling zones (RH, R1, and R2) and some single dwelling zones (R5, and R7). A small area of the Mixed Commercial/Residential zone (CM) is applied on the east side of 122nd Avenue near Burnside. In addition to base zoning requirements, the area between NE Glisan and SE Stark Streets is also subject to the regulations of the East Corridor Plan District.

Parcels in the primary study area vary greatly in size. Small sites ranging from roughly 7,000 to over 30,000 square feet are located generally on the west side of 122nd Avenue and on Glisan and Stark Streets. These parcels include areas zoned for commercial, multi-dwelling residential, and mixed commercial/residential use. Land uses in the area located on smaller sites include a crematorium, several small restaurants, retail, offices, and community-oriented services.



Commercial development along 122nd Avenue

Existing Land Use & Development



Residential development adjacent to the 122nd MAX station

The area also includes a number of large sites, which range from 100,000 square feet to over 400,000 square feet. Many of these sites in the primary study area are located on the east side of 122nd Avenue, but also occur at or near the intersection of 122nd/Glisan and 122nd/Stark Streets. Large sites accommodate a variety of uses in the area, and include community-oriented retail uses (Safeway, Target, etc.) and uses that may serve a larger market area (Fabric Depot, Big 5, Staples, etc.).

The study area includes several large sites that are in auto sales and service use: Rey Reece Dealerships (Volkswagen and Mitsubishi), Ron Tonkin Dealerships (Chevrolet, Honda, Gran Turismo, Mazda, and Toyota), and Acura of Portland are located within the primary study area. Courtesy Ford, and Tonkin Nissan are located to the north near NE Halsey in the secondary study area. The auto dealer sites are typically developed with substantial areas for exterior display and storage. Site development with exterior display and storage does not conform to the current CS zoning and plan district standards applied near the MAX station.

A TriMet park and ride facility is also located at Burnside Street and 122nd Avenue. This six-acre facility is currently configured as a 612-car surface parking lot.

Land uses surrounding commercial areas on 122nd Avenue, Stark Street, and Glisan Street are a mix of older, single-dwelling uses and more recent row house and multi-dwelling development. The area roughly between 122nd Avenue, 117th Avenue, Stark Street, and Davis Street has a combination of high-density (RH) and medium-density (R1) residential zones; the Mixed Commercial/Residential (CM) zone is applied close to Burnside Street. Much of this area is currently transitioning from low-density single-dwelling development into higher density single- and multi-dwelling uses. The area east of 122nd Avenue to roughly 127th Avenue between Stark Street and Burnside Street is generally developed in a medium density single dwelling pattern. New infill development at higher density is occurring in conformance with the RH and R1 zones applied in this area.



Ventura Park

Existing Land Use & Development



Auto dealer and commercial businesses on the east side of 122nd south of Stark



Existing commercial business on the west side of 122nd between Stark & Burnside



Existing civic use on the SE corner of 122nd & Glisan



Rowhouses on SE Pine west of 122nd



Tri-Met Park & Ride lot at SE corner of 122nd and Burnside



Commercial development along SE Stark east of 122nd

2. Background



Market Conditions

The following is a summary of a market conditions assessment performed by Johnson Gardner during the Spring of 2005. The full market report has been produced under separate cover and is available from the Bureau of Planning.

The commercial environment of the 122nd Avenue station area is varied, including both neighborhood as well as more regional retail uses. A key distinguishing characteristic of the area is the concentration of auto dealerships. The surrounding area also contains a fairly high residential density, with almost 20,000 people estimated to live within a half-mile of the study area. Residential densities are expected to increase considerably over the next several decades, and an increased demand for associated retail is anticipated.



122nd Avenue is a varied commercial environment

The 122nd Avenue Corridor has a number of key attributes that influence viable development forms in the area. These include the following:

- *122nd serves as the major north/south arterial in the area of Portland east of I-205. Estimated average daily traffic volume is over 25,000.*
- *Transit access is quite good in the corridor, including bus (lines 71, 4, 20, 25 and 27) and light rail access at East Burnside.*
- *The existing concentration of auto dealerships provides a regional draw and employment, but at a relatively low development intensity and configured with an auto-oriented street relationship.*
- *The surrounding area has a substantial residential density, providing support for a range of commercial uses.*
- *Proximity to the Gateway Regional Center, which provides services but also competes for potential uses.*



The 122nd Avenue station area has a concentration of auto dealerships and auto-related uses

Market Conditions

Taking into account these market area characteristics, as well as local and regional market conditions, Johnson Gardner evaluated the short and long-term potential for future development in the 122nd Corridor Study Area. The following table summarizes our findings and conclusions by major land use.

**Current Market Conditions & Assessment of
(Re)Development Opportunities by Land Use**

Land Use	Occupancy/ Sales Activity	Lease Rates/ Sale Prices	Short-Term Development	Long-Term Development
Rental Housing	Relatively high occupancy levels, currently estimated at 96%	\$0.70 to \$0.92 per square foot quoted rents.	Good development potential, for both tax-credit as well as market rate units. Under the current rent structures, affordable projects represent the most viable development type, in addition to senior housing.	The long-term marketability of the area for market rate apartments will be dependent upon the perceived desirability of the area. Expansion of the nearby Gateway Regional Center will present competition for the 122 nd Corridor.
Ownership Housing	14 attached home sales in the area over the last year, with 93 detached sales	Average price of \$157,000 for attached new construction, and \$257,000 for detached new construction.	New development within the study area is expected to be limited to either attached for-sale (townhome or condo) or small lot product. These are seen as being price point as opposed to lifestyle driven in this area.	Assembly of land will limit the viability of redevelopment for ownership housing over time, with longer term prospects potentially turning to condominium product in a flat configuration.
Office	Occupancy over 90%, well above the regional average.	\$15.00 to \$18.00 per square foot (Gross)	The short-term potential is good, but at a limited scale.	The lack of regional access, as well as the proximity to the Gateway Regional Center, will likely limit local office space development to neighborhood-serving commercial.
Retail (Non-Auto)	Healthy, local occupancy exceeds 90%.	\$13.00 to \$16.00 per square foot (NNN)	While vacancy in the broader market area is elevated, the study area vacancy based on projects surveyed was only 4%, indicating strong localized retail demand. Opportunities exist for new retail development with a wide range of uses.	Expected marginal increases in local residential density will increase retail demand, particularly for neighborhood serving uses. Better connections with the residential areas east and west of the corridor will help this relationship.
Auto Dealerships	Very Healthy, Full Occupancy	Dealerships are owner occupied, but have the ability to outbid most alternative uses for vacant land.	Demand exists for short-term expansion and redevelopment of dealerships within the study area, but preferred configurations are not allowed under the current code.	The long-term nature of auto dealerships is unknown, but escalating prices in real terms would be expected to shift the development pattern to a more intensive form.

Market Conditions

New development in the area will largely take the form of redevelopment, as most of the area has been developed previously. The opportunities can be broken into three broad categories. The first of these is redevelopment of commercial properties fronting the major arterials. Many of these properties are considered under-developed or have been developed in configurations that are not consistent with current market requirements. These properties are expected to redevelop over time through natural market forces, as the value of the improvements falls below the value if redeveloped.

The second major opportunity is for ongoing infill residential development, comprised of rental apartments, senior housing or attached ownership housing. This is already occurring in the area, and is expected to continue over time. With the higher density developments, linkages to the commercial and transit corridors will be more desirable for residents.



New residential development is occurring in the station area

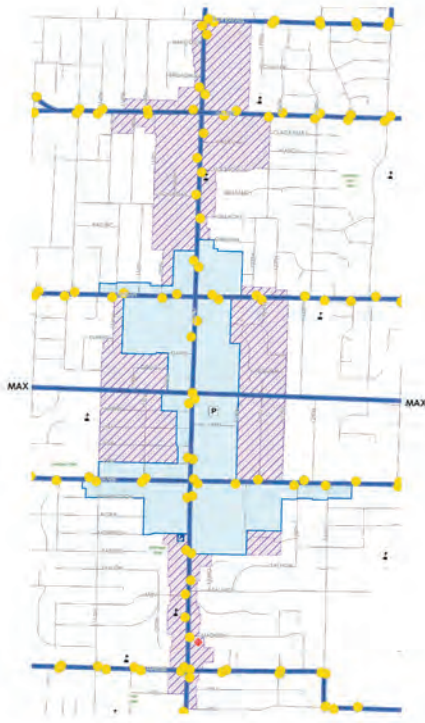
The third major opportunity type is redevelopment and/or reconfiguration of the auto dealerships. The relatively high land values associated with prime dealership sites, coupled with the fact that auto dealerships typically require a large amount of land relative to their improvement values, generally place dealerships as highly redevelopable using typical land-to-improvement methodologies. While many of the dealers expressed interest in short-term redevelopment or expansion, their preferred development programs are not allowable under current zoning restrictions. As a result, the scale of redevelopment in the near term will be contingent upon the dealerships willingness and ability to reconfigure. Over time, escalating land values in the area would be expected to encourage dealerships to evaluate more intensive development scenarios, particularly for auto storage. A key design goal may be to assure that dealer configurations allow for later densification if land values justify it.

An important determinant in the final form of development in the area will be how parking needs are met. Under current land values, surface parking is expected to represent the most cost effective parking option for most uses. There exists an immediate potential for ground floor podium and tuck-under parking options for residential projects, as ground floor units are often not very marketable and residential tenants will pay for secured parking. Office and commercial uses are unlikely to generate any income from secured parking in the short-term, making the lower cost surface parking option more likely.

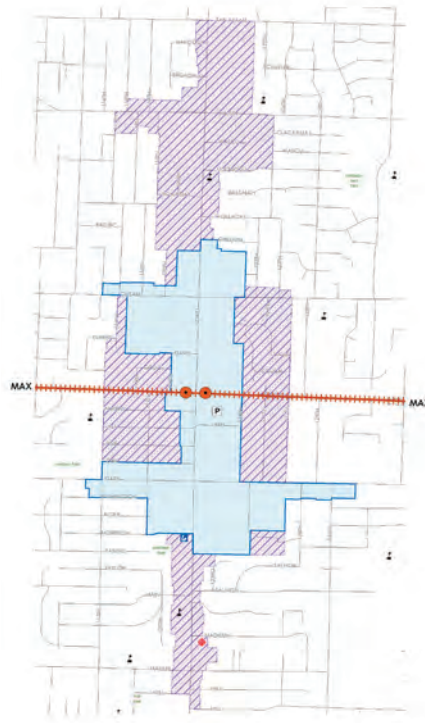
Transit-oriented mixed-use development will be viable if the individual uses are viable and the site is suitable. Transit-oriented development need not be mixed-use, as residential development that is supportive of transit ridership often locates within walking distance of transit opportunities. We see immediate demand for transit supportive development in the area, with recent residential construction activity related to the availability of transit. In the study area, we would expect that vertical mixed-use development could be done if mandated, but would be unlikely to occur in any substantial way in the short term merely through market forces. Nonetheless, if required on appropriate sites, the market appears capable of supporting these development forms.

Transportation Conditions

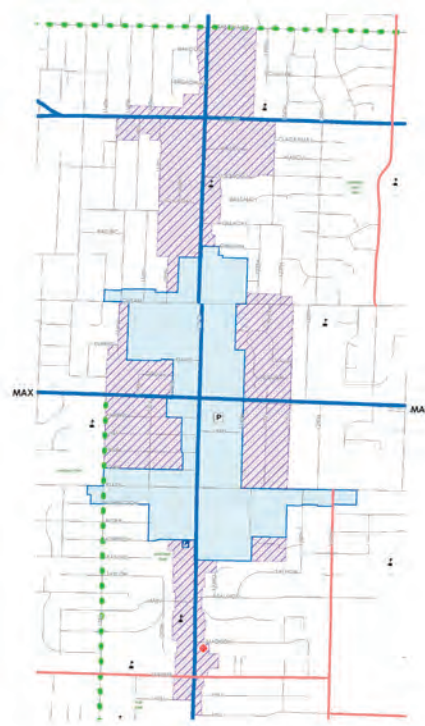
Bus Lines & Stops



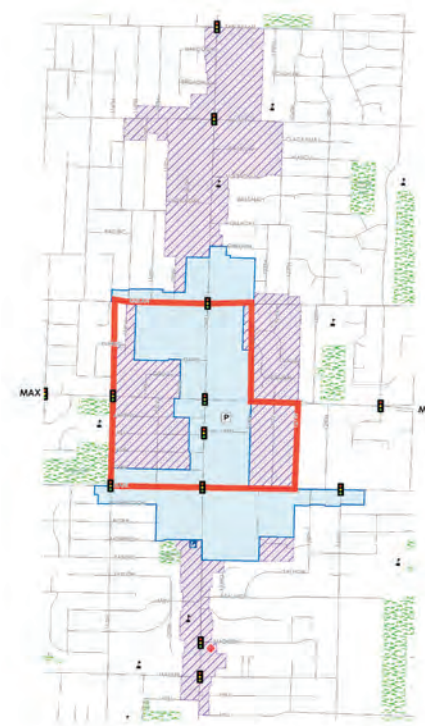
MAX Line & Stops



Bike Routes



Pedestrian District



Transportation Conditions

According to the City of Portland Transportation System Plan, 122nd Avenue is classified as a Major City Traffic Street, Transit Access Street, City Bikeway, City Walkway, Major Truck Street, Major Emergency Response Street, and Regional Main Street (between Oregon and Stark Streets). Due to the variety of functions that 122nd Avenue serves and the high volumes of traffic it handles on a daily basis, making this street a pedestrian friendly facility presents some challenges. Other major streets within the study area are:

Glisan Street. West of 122nd Avenue, Glisan Street is classified as a Major City Traffic Street; east of 122nd Avenue it is classified as a District Collector Street. In addition, Glisan Street is a Community Transit Street, City Bikeway, City Walkway, Minor Truck Street, Major Emergency Response Street, and Community Main Street (116th to 123rd).

Burnside Street. In the vicinity of 122nd Avenue, Burnside Street is a Neighborhood Collector Street, Regional Transitway, City Bikeway, City Walkway, and Community Main Street (117th to 127th).

Stark Street. In the vicinity of 122nd Avenue, Stark Street is a Major City Traffic Street, Transit Access Street, City Bikeway, City Walkway, Major Truck Street, Major Emergency Response Street, Community Main Street (117th to 122nd), and Regional Corridor (east of 122nd Avenue).

The average total width of 122nd Avenue between curbs is approximately 76 feet. In general, 122nd Avenue between Oregon and Yamhill Streets consists of four lanes of travel with a continuous two-way left turn lane; bike lanes and sidewalks are found on both sides of the street. There are designated left turn lanes at major intersections, which in most cases are controlled by traffic signals. On-street parking is allowed on both sides of the street with the exception of specific areas designated for transit stops where on-street parking is not allowed.

The posted speed along 122nd Avenue is 35 MPH. A pedestrian crossing analysis was performed by the Portland Department of Transportation in 1999 for 122nd Avenue at Morrison Street. As part of this analysis, a radar speed study (conducted November 23, 1999) reported an 85th percentile speed of 39 MPH with up to 47% of drivers exceeding the posted speed limit; up to 3% of drivers exceeded the limit by 10 MPH or more. Traffic volume along 122nd was measured in 1992 at 23,000 vehicles per day (vpd) in each direction. 1996 and 1999 directional counts study indicated that traffic volume had increased to over 25,000 vpd in each direction. The most current traffic counts (2000-2004) put directional traffic flow in vehicles per day (vpd) at the following:

- 122nd Avenue at NE Glisan: ~29,000 vpd
- NE Glisan at 122nd: ~28,000 vpd
- SE Stark at 122nd: ~34,000 vpd
- E Burnside @ 122nd: ~9,800 vpd

In addition to MAX light rail service on Burnside Street, TriMet serves the study area with bus service on 122nd Avenue (#71), Glisan (#25), Stark (#20), San Rafael (#23), Halsey (#77), and Market (#27). Light rail tracks cross 122nd Avenue at Burnside Street, which makes this intersection very busy at times, as transit users try to connect between light rail and buses.

Transportation Conditions

Traffic accident data was obtained from ODOT for the five-year period between 1999 and 2003. A review of this data revealed that the intersection of Glisan Street at 122nd Avenue had a total of 92 accidents; Burnside Street at 122nd Avenue had 31 accidents, and the intersection of Stark Street at 122nd Avenue showed a total of 83 accidents.

As indicated in the following table, based on information provided by the City of Portland, an inventory of existing access points was conducted and revealed the following number of driveways along 122nd Avenue and within the project area.

**APPROXIMATE NUMBER OF
DRIVEWAYS**

Location	East of 122nd Avenue	West of 122nd Avenue
Oregon Street to Glisan Street	4	4
Glisan Street to Burnside Street	5	9
Burnside Street to Ash Street	1	2
Ash Street to Stark Street	5	1
Stark Street to Morrison Street	7	8
Morrison Street to Yamhill Street	2	1
Total	24	25
Access per mile	28.16	29.33



The sheer number of driveways along 122nd contribute to an unfriendly pedestrian environment

The relatively high number of driveways along 122nd Avenue, in conjunction with the high number of auto-oriented businesses (many of which have substantial parking lots), means that there is a greater chance that a pedestrian walking along 122nd Avenue (or a cyclist using the bike lane) will come into conflict with a vehicle turning into or out of a driveway. This type of conflict contributes to a hostile pedestrian environment, an environment which is further degraded by:

- narrow sidewalks (or a lack of sidewalks, as occurs in parts of the study area);
- street lights and/or telephone poles in the sidewalk;
- a lack of pedestrian-scale lighting;
- a lack of street trees;
- wide roadways (122nd, Burnside, Glisan, Stark) to cross;
- a lack of crossing opportunities;
- development patterns that are not pedestrian-oriented (lacking windows/doors on the street edge, large parking areas along the sidewalk, auto-oriented setbacks, etc.)

In short, although there are bike lanes and sidewalks along 122nd Avenue, this 'main street' has been designed up to this point almost exclusively for automobiles at the expense of pedestrians, bicyclists, and transit riders.

3. Concept Development

Throughout the Spring of 2005, a development framework concept was formulated for the 122nd Avenue station area. This section traces the evolution of that concept - from vision and goals, through an opportunities and constraints analysis, to the creation of four alternative concept scenarios.

Vision Statement

A draft 20-year future vision statement for 122nd Avenue Station Area was developed in the Spring of 2005 with input and feedback from the study working group.

A 20-Year Vision for the 122nd Avenue Station Community (Draft):

The 122nd Avenue Transit Station Community has evolved over the years. Close to the bustling Gateway Regional Center, as well as established residential neighborhoods, development of the area along 122nd Avenue and near the MAX stop has intensified.

122nd Avenue has continued to develop as the community's "main street", featuring businesses that serve local and regional market areas. Development in the area includes single-purpose buildings as well as mixed use sites, some of which featuring ground-floor commercial uses with housing. The corners of Glisan and Stark at 122nd Avenue are key intersections or "nodes" for community-oriented businesses in the station area, while the area or "node" near Burnside has a more mixed-use emphasis with more residential uses. Major streets in the area continue to carry large amounts of traffic, but they have become more walkable and pedestrian friendly over time with changes to both the sidewalk environment and private development. New commercial buildings at the nodes are close to the sidewalk, and have large windows that allow retail display opportunities; they also provide "eyes on the street," enhancing the sense of security for pedestrians. Between the major nodes, some buildings are setback from the sidewalk; these are well landscaped or feature attractive retail displays. Sidewalks have been improved and feature street trees and other amenities.

Somewhat unique among light rail station areas, auto dealers are a presence at 122nd Avenue. Consistent with the special character of the area, they have been built in a manner that is pleasing to pedestrians, and allows them to reconfigure and intensify development of their sites over time. Serving customers from around the region, the presence of auto dealers has attracted other retailers and services to the area; these businesses bolster the main street by serving the local community. The design and streetscape features of auto dealers help support a vital pedestrian main street environment, and minimize conflicts with the nearby housing.

The area surrounding the 122nd Avenue MAX station has evolved through redevelopment from a low-intensity area of detached houses to a more highly developed area featuring apartments, condominiums and row houses. People that live in the area take advantage of nearby shopping and services, and rely less on their cars for daily use. Many in the area use MAX and bus transit services for their commute and some do not own a car. The well-developed network of tree-lined streets and paths make walking and bicycling in the station area easy and pleasant. Neighbors in the area take advantage of nearby Ventura Park for recreating, but also enjoy smaller green spaces and plazas created by development, and the improved sidewalk environment created by enhanced landscaping and additional street tree planting.

Outside the station area environment, the area largely remains in the development pattern established long ago. Neighborhoods of detached homes on generous lots flourish, although some infill development has occurred over the years. These neighborhoods are served by retail and service businesses along major streets in the community. In addition to businesses, major streets have also provided opportunities for higher-density housing outside of the established single-dwelling neighborhood areas.

Goals & Objectives

The following draft goals and objectives were developed for the 122nd Avenue Station area with input and feedback from the study working group.

Foster a stronger “Sense of Place”

- *Create focal points of activity (nodes) that support concentrations of active businesses and residences*
- *Integrate neighborhood-serving businesses within areas that include established businesses that serve a larger market area*
- *Support light rail transit (MAX) investments with more intense development near the station area*
- *Create safe, defensible spaces*
- *Foster “greening” of the area through landscaping and sustainable stormwater management practices*

Enhance the Pedestrian Environment

- *Create streets and pedestrian connections that are convenient, direct, comfortable, appealing and safe*
- *Improve the appearance of 122nd Avenue and other key streets with trees and other features*
- *Minimize the visibility of surface parking and vehicle storage areas; cluster parking where possible to serve multiple uses*
- *Organize parking access points to reduce conflicts with pedestrians & traffic*

Manage Traffic and Transportation

- *Balance transportation modes and optimize the system*
- *Provide traffic calming and improve safety through street design*
- *Limit cut-through traffic in neighborhoods*

Improve Access to and within the Area

- *Ensure access to the area through connections to the broader system (traffic, transit, bike, pedestrian)*
- *Plan for new streets where appropriate*
- *Improve existing and add new pedestrian crossings across 122nd Avenue*
- *Improve and add pedestrian connections east and west to link with 122nd Avenue and other key streets*

Catalyze Future Investment

- *Build on synergies: link land uses and activities*
- *Foster a strong business environment to serve local and broader markets*
- *Emphasize high-quality design & durable construction materials*
- *Plan for foreseeable economic and development horizons, but do not preclude potential for new ideas or market changes*

Opportunities & Constraints

Following initial market, transportation, and land use analysis, as well as interviews with major property owners and consultation with City staff, a sketch diagram was prepared outlining an early understanding of opportunities and constraints within the study area.

The resulting illustration indicates the major open space anchors (Ventura Park, Ventura Park Elementary School, and Menlo Park Elementary School) and assets (Midland Park) and the major commercial nodes (the Safeway / Target shopping center at the southwest corner of Glisan/122nd and the Staples/Walgreen's shopping center at the northeast corner of Glisan/122nd). Existing major buildings were noted, as were existing higher-density residential developments. The two major civic nodes (the Midland Library and the MAX station at Burnside/122nd) were documented as well.

This diagram also posited potential sites for significant investment in the future. Specifically, sites were highlighted that had some perceived degree of potential for major redevelopment, small-scale redevelopment, reconfiguration, or expansion. Many of the more noteworthy sites occur in close proximity to the major intersections of 122nd and Glisan, Stark, and Burnside. These sites include the Tri-Met Park & Ride site on the SE corner of 122nd/Burnside, the Multnomah County Sheriff site on the SE corner of 122nd/Glisan, and the parcels at the SE corner of 122nd/Stark. Smaller-scale redevelopment opportunity sites occur at the SW corner of 122nd/Stark, at the NW corner of 122nd/Burnside, and to the NE of 122nd/Glisan. In general, there is greater potential for large-scale redevelopment on the east side of 122nd within the study area, while smaller sites offer small-scale redevelopment opportunities on the west side.

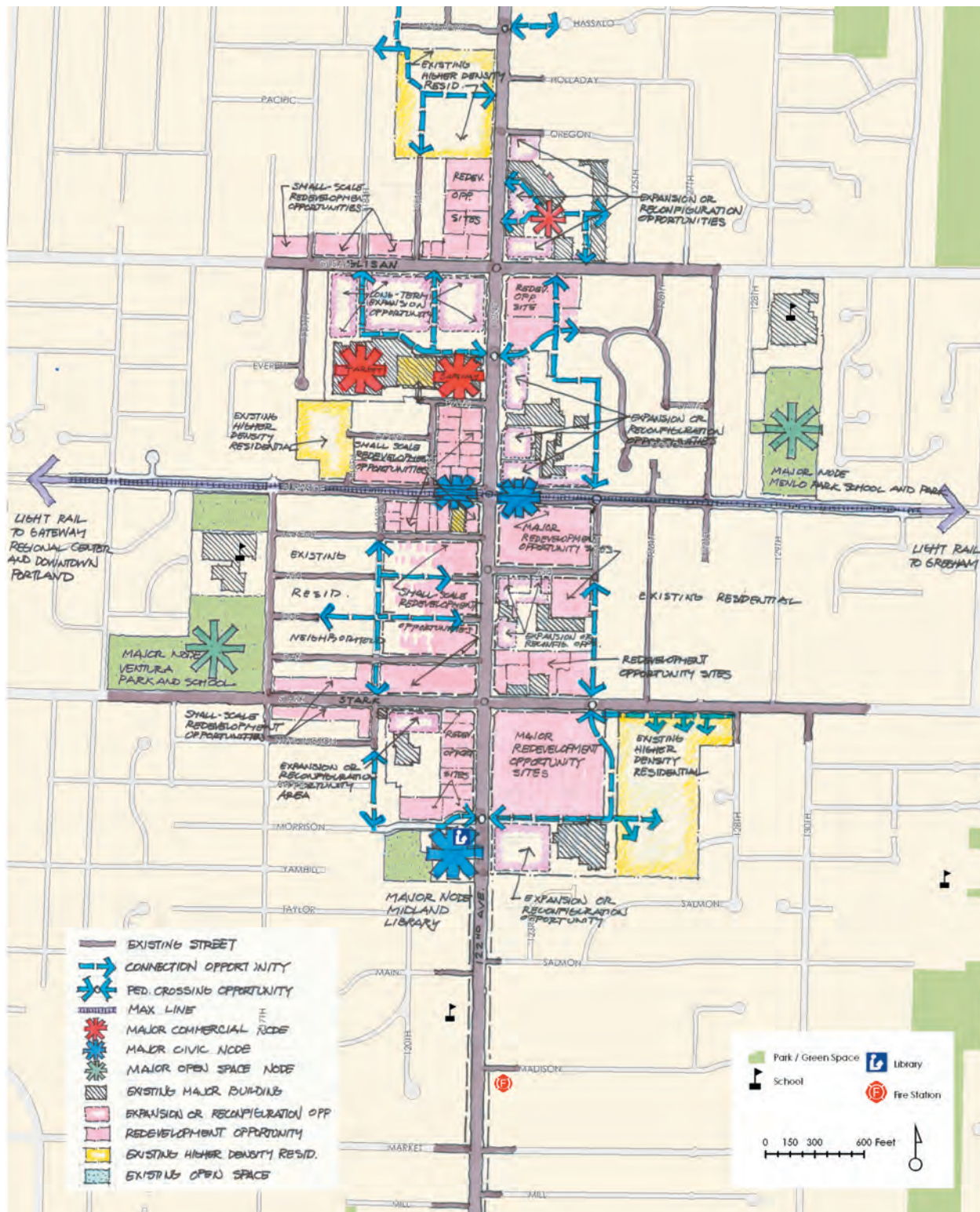
The existing transportation system also was scrutinized, and opportunities for new connections and/or pedestrian crossings were noted. Many of these connections were lined up with existing roadways in the study area, while others were drawn to provide better connectivity to the major commercial streets.

The opportunities and constraints diagram was presented to the public at the first scheduled Open House on February 7, 2005. Generally, the comments received included at this event included:

- Concerns about increased density;
- Desire for more green space;
- Desire for a better and safer pedestrian environment;
- Concerns about traffic flow in the study area;
- Hope for a more aesthetically pleasing 122nd Avenue corridor.

The opportunities & constraints diagram, further informed by these comments and the results of further analysis and study, formed the basis for the station area development concepts developed in the Spring of 2005.

Opportunities & Constraints



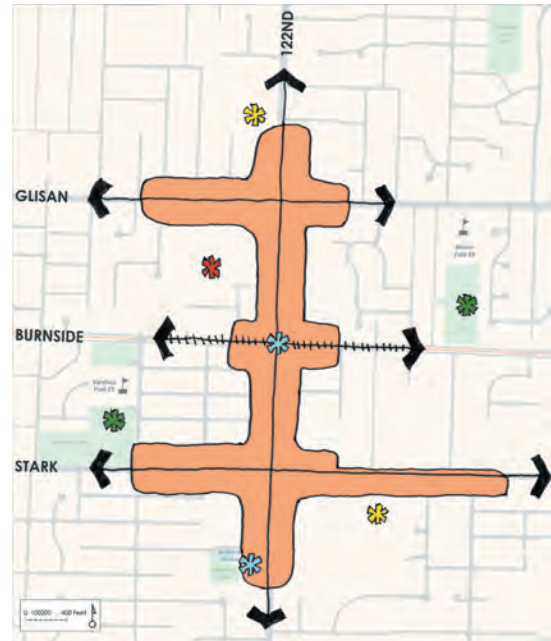
3. Concept Development

Alternative Concept Scenarios

Four development concept scenarios were developed for the primary study area. They illustrate a range of policy approaches to exterior display and storage – from maintaining the City’s current prohibitions on exterior display and storage, to relaxing these regulations in certain locations and situations, to removing these restrictions altogether. Presented here are general diagrams illustrating the essence of the four concept scenarios, as well as text descriptions for each. (Detailed diagrams for each scenario are located in an Appendix to this report.)

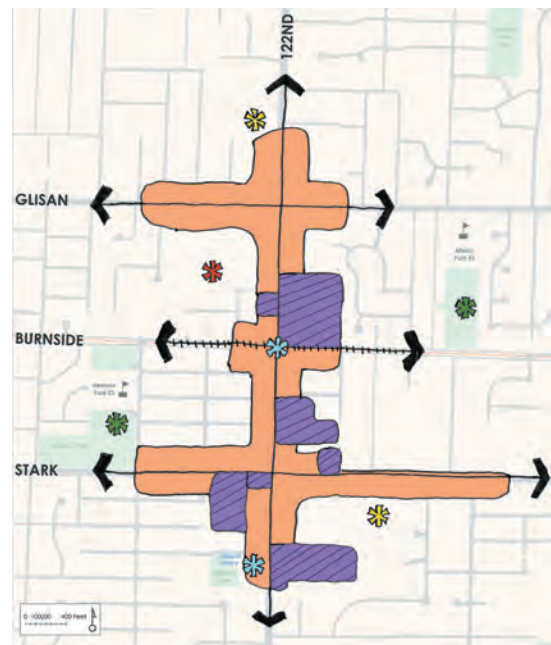
Scenario 1: Mixed-Use Station Area (Existing Policy)

Scenario 1 envisions a mixed-use station area and encourages higher-intensity commercial and residential development. This scenario represents the stringent maintenance of current zoning code prohibitions of exterior display and storage within the station area. It supports pedestrian activity by increasing densities, pedestrian amenities, and the orientation of buildings to the street edge. Because of the prohibition on exterior display and storage, this scenario would require any new lumber yards, auto dealers, nurseries, etc. to enclose their displays, inventory, and services within a building. Similarly, significant reconfiguration of existing sites with exterior display and storage would require more building area and less exterior display and storage.



Scenario 2: Mixed-Use Station Area with Auto Dealer Reconfiguration

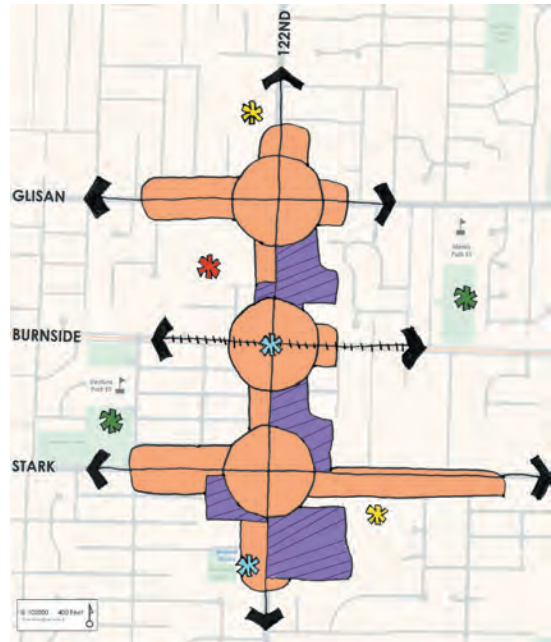
Scenario 2 encourages a mix of higher-intensity commercial and residential development throughout much of the station area. However, it would allow some flexibility for established auto dealers. Specifically, it would enable existing dealers in the station area to reconfigure their operations on their existing sites by permitting a limited amount of exterior display and storage. The allowance of exterior display and storage under this scenario might be contingent upon the meeting of various criteria, including perhaps the provision of significant landscaping or screening. Reconfigured buildings would be required to be oriented (and proximate) to the street. Because exterior display and storage still would be generally prohibited, new uses that traditionally utilize exterior display and storage (auto dealers, nurseries, lumber yards, etc.) would need to internalize their inventory and storage.



Alternative Concept Scenarios

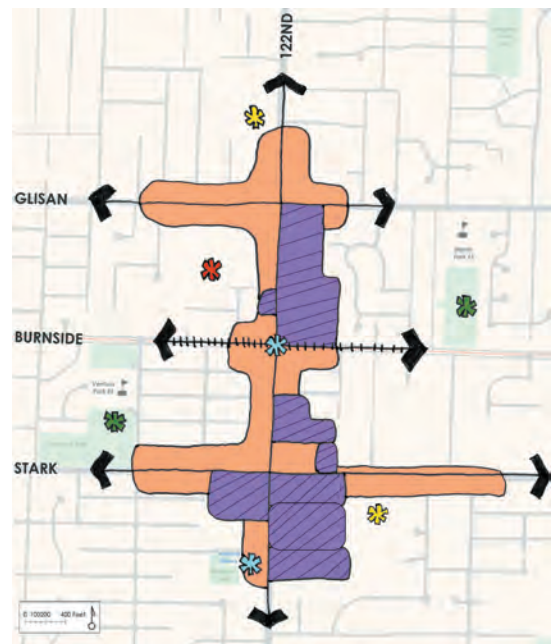
Scenario 3: Intersection Nodes

Scenario 3 calls for creating nodes of pedestrian oriented, community-serving, development at key intersections. The current policy regarding exterior display and storage would be maintained within the primary nodes surrounding the intersections of 122nd with Glisan, Burnside, and Stark. These nodes would become the focal points for pedestrian activities and amenities, and could include community-serving retail and office development as well as housing. Auto dealers also would be permitted within these nodes, but would be required to maintain their display and inventory within a building. Between these nodes, current regulations regarding exterior display and storage would be altered to allow greater flexibility for existing auto dealers as well as new or expanded uses that traditionally utilize exterior display and storage. As with Scenario 2, the building, expansion, or reconfiguration of such uses would require that buildings be oriented (and proximate) to the street, and might also require the meeting of various other criteria, including the provision of significant landscaping or screening.



Scenario 4: Auto Dealer Emphasis

Scenario 4 would allow considerable flexibility in the ultimate location of auto dealers and uses with exterior display and storage in the station area, including at key intersections and near MAX light rail. This scenario would represent a change in City policy by allowing exterior display and storage throughout much of the study area. The potential for the expansion of existing uses to potential redevelopment sites within the study area, coupled with the relatively strong purchasing power of auto dealers in general, could result in a station area with an even stronger auto dealer presence than is seen currently along 122nd Avenue and its major cross streets. Under this scenario, certain criteria in terms of orientation and proximity to the street, landscaping, and screening, would still need to be met for those uses utilizing exterior display and storage.



Concept Development Conclusions

These four alternative concept scenarios were presented to the public for consideration at a workshop held on April 2, 2005. Both scenarios 1 and 4 generally were not received favorably by the public – the former as being too stringent in terms of its treatment of existing businesses in the station area, and the latter because of concerns regarding the relative freedom it would grant to uses with exterior display and storage and that it ultimately would transform the area into an auto mall. The two scenarios that received the most favor were scenarios 2 and 3 – the former because it recognizes the role of auto dealers in the area and would allow them to continue to operate, and the latter because it would encourage the creation of pedestrian-oriented nodes of development with community-serving land uses.



At the April 2nd workshop, attendees expressed support for a development concept that supports existing local businesses, including auto dealers.



Workshop attendees also supported the notion of nodes with community-serving businesses.



4. Station Area Concept & Recommendations

This section describes the 122nd Avenue station area concept and recommendations in terms of connectivity, streetscape, sidewalk and setback standards, and site design considerations.

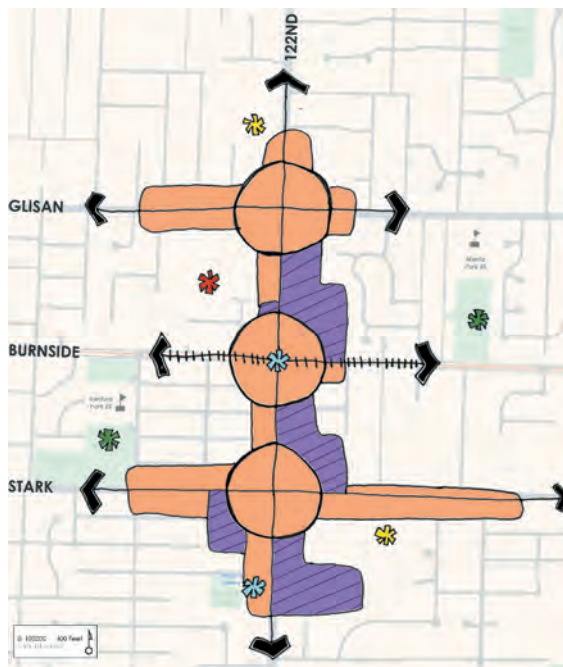
Development Framework Concept

Based on comments received at the April workshop and those received from the Study Working Group, a refined station area development concept was formulated – combining the favored elements of Scenarios 2 and 3 into a single concept. The concept for the 122nd Avenue Station Area blends the established auto-oriented uses in the area with aspirations for a more transit oriented and pedestrian-friendly future.

The concept focuses pedestrian-friendly development and community-serving land uses at key intersections in the area. These intersections – 122nd with Glisan, Burnside, and Stark – are well-served by transit, and are the key community entry points to the 122nd Avenue main street. Because of its proximity to a major MAX station, the intersection at 122nd/Burnside is envisioned as a mixed-use “node,” with housing as a key component. The intersections of 122nd with Glisan and Stark are current locations for retail and services, and the concept calls for building on this foundation in a more pedestrian-friendly manner. To encourage the envisioned development at these three intersection “nodes,” exterior display and storage would not be permitted in new development. Existing uses at the nodes with exterior display could be allowed to reconfigure under certain circumstances.

Between the intersection nodes, the concept provides for more flexibility to accommodate land uses such as auto dealers that feature exterior display and storage as part of their site development. The concept envisions exterior display areas that are well designed and landscaped to provide an attractive environment for customers, as well as to enhance the area for pedestrians, bicyclist, and motorists. Exterior display would be permitted or allowed under certain conditions for those sites that currently utilize exterior display. These conditions might include reconfiguration of buildings that result in orientation and proximity to the street and more

General Development Framework Concept:

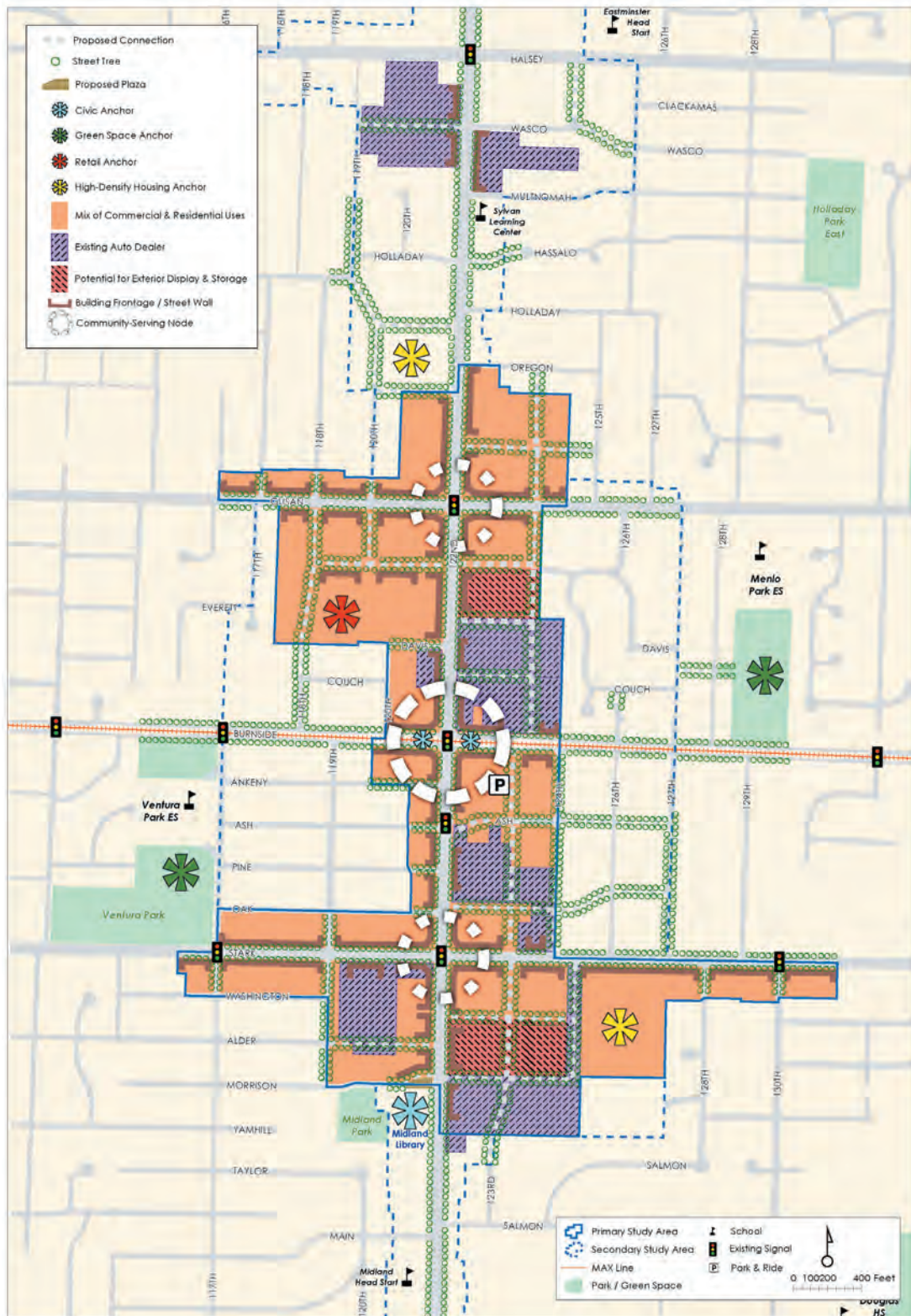


highly developed landscaping or screening. On other sites between the nodes, exterior display could be permitted for new or expanded uses, provided that similar criteria regarding building orientation and landscaping are met.

The station area development concept was presented to the public at the June 2005 workshop. The concept received general support from most attendees. Participants generally supported the notion of pedestrian-friendly nodes of development at the major intersections. They also supported the accommodation of new, expanded, or reconfigured uses that have exterior display and storage on certain sites between the nodes.

Development Framework Concept

The diagram below is a detailed version of the refined development framework concept.

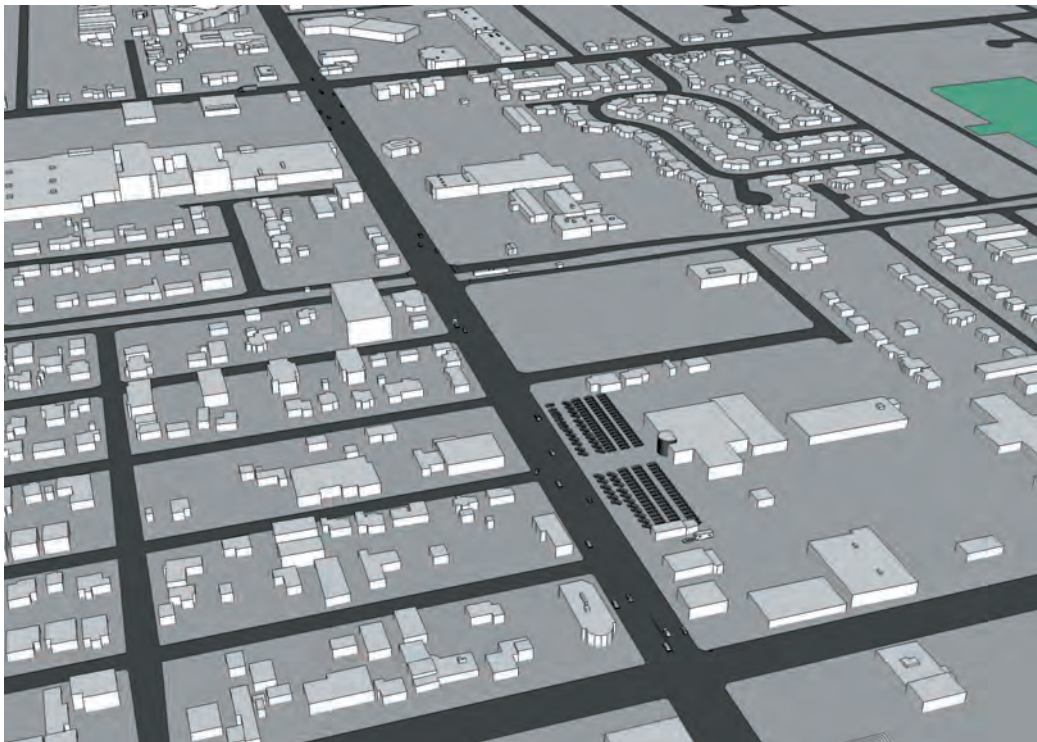


4. Station Area Concept

Development Framework Concept

4. Station Area Concept

Existing Conditions:

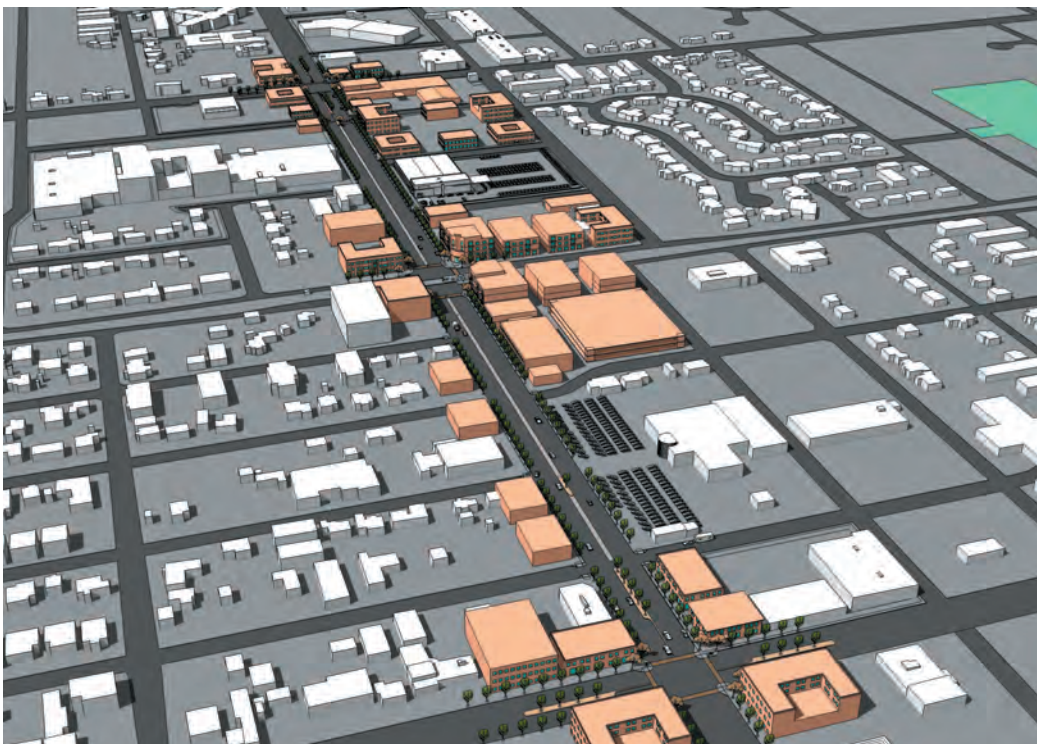


Glisan

Burnside

Stark

Future Development Concept:



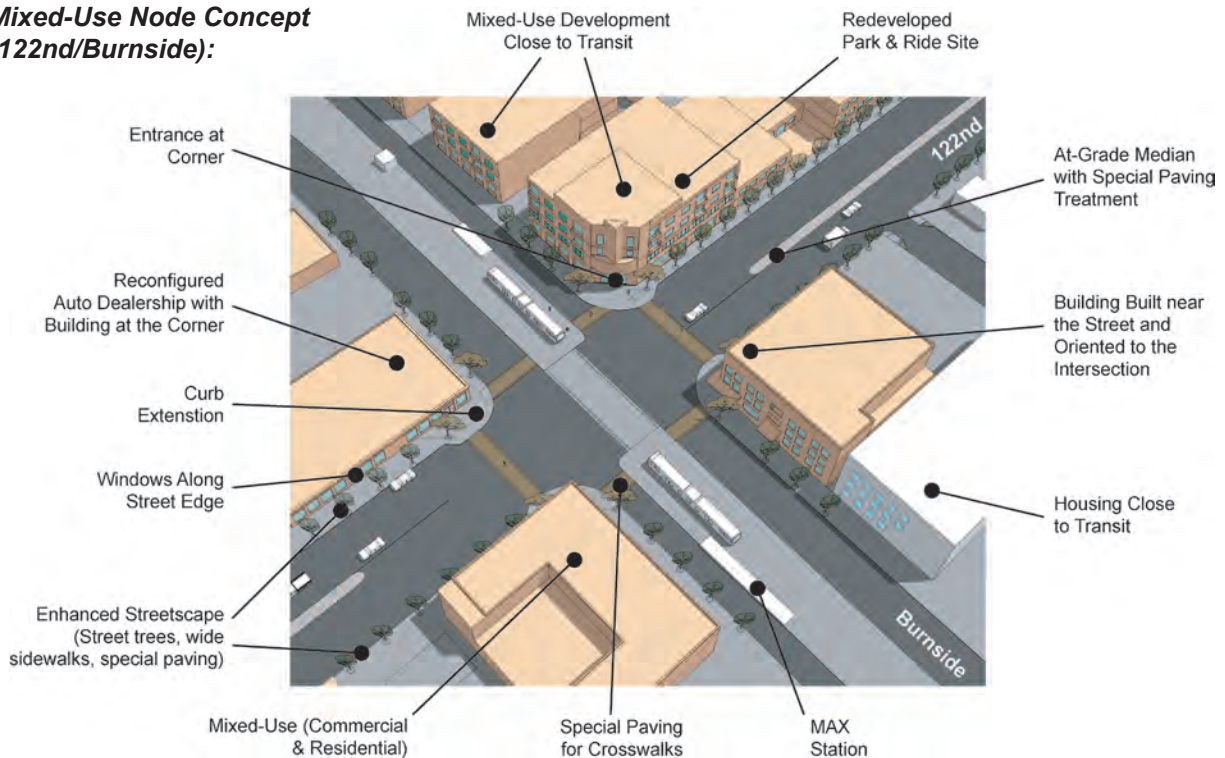
Glisan

Burnside

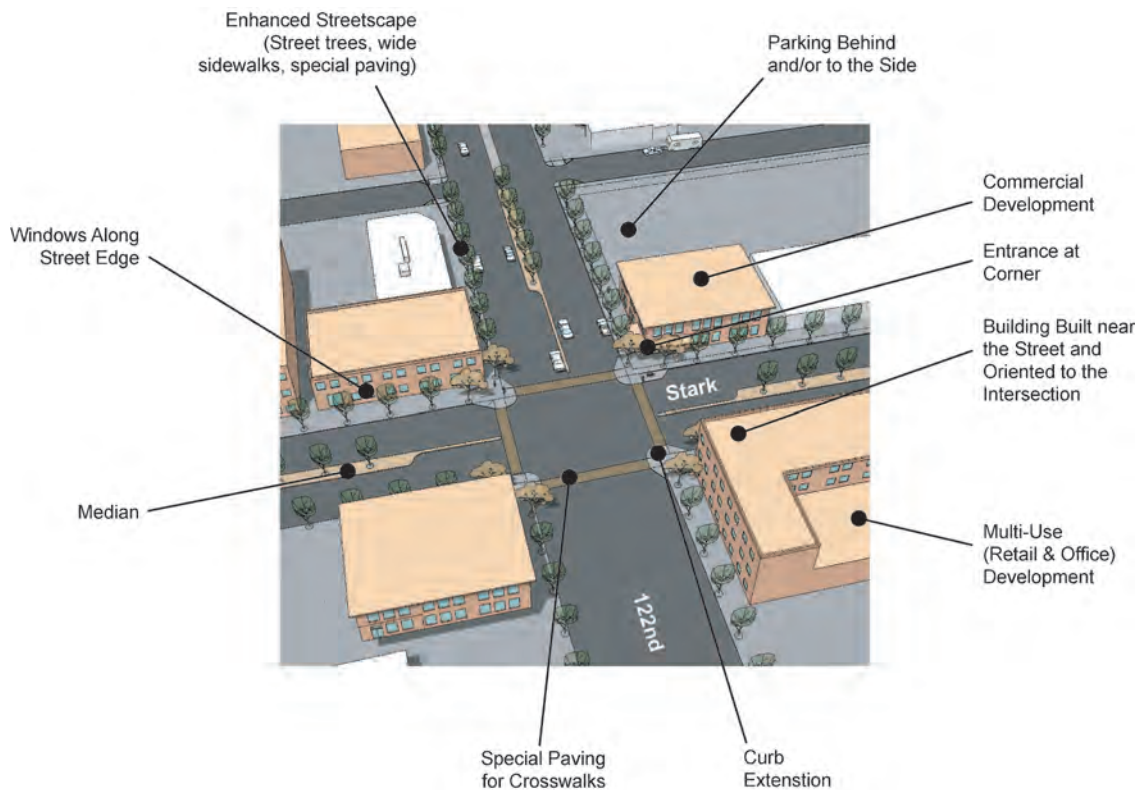
Stark

Development Framework Concept

Mixed-Use Node Concept (122nd/Burnside):

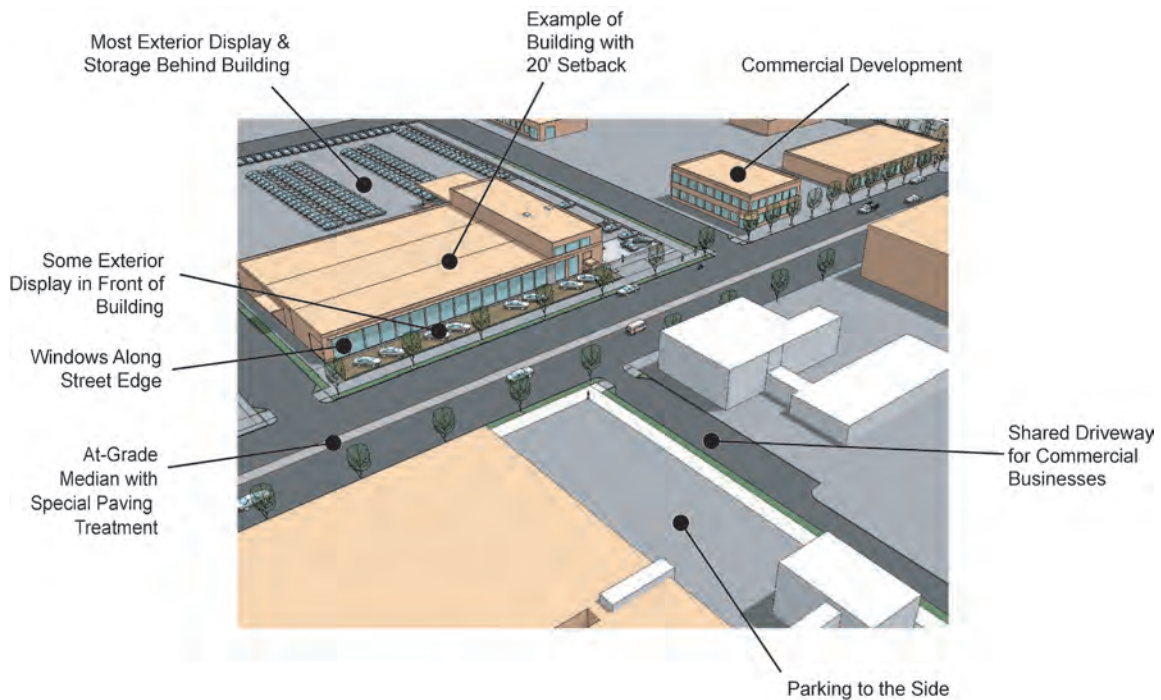
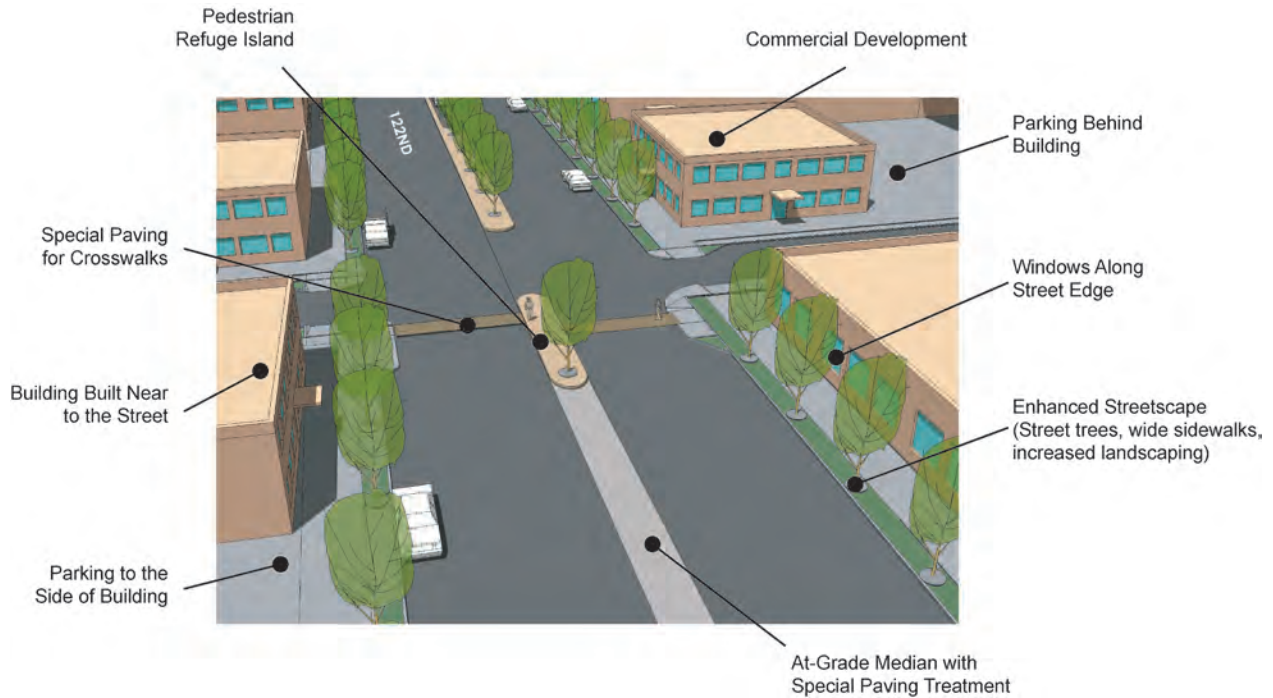


Multi-Use Node Concept (122nd/Glisan or 122nd/Stark):



Development Framework Concept

Concept Between Nodes:



Development Framework Concept

Example Images:



Corner Commercial Development



Commercial Streetscape



Corner Commercial Development



Mixed-Use Development



Higher-Density Residential Development



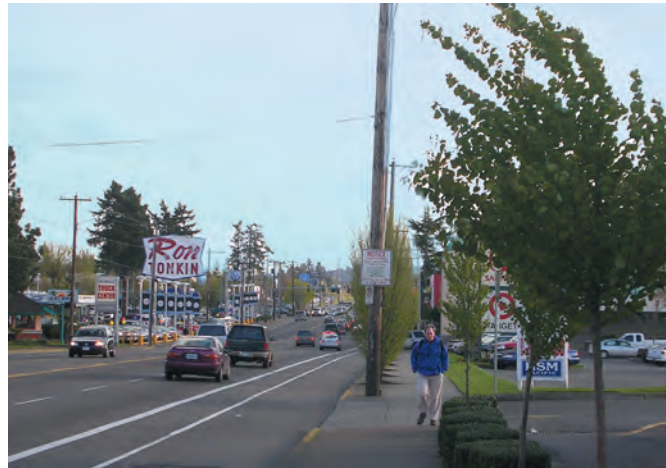
Corner Commercial Development

Development Concept: *Recommendations*

Intersection Nodes

In general, the areas around the major intersections of 122nd Avenue and Glisan, Burnside, and Stark should become nodes of pedestrian-oriented development that include community-serving uses. When coupled with streetscape and connectivity improvements, concentrations of retail, office, and residential uses at these 'community corners' will help foster a pedestrian-oriented environment. Because of its immediate proximity to MAX, the 122nd/Burnside node also should contain residential components. As described elsewhere in this report, these proposed nodes currently contain several key sites that have various capacities for future redevelopment. Also, these nodes are easily accessed over the near term by pedestrians, bicyclists, transit users, and autos. Recommendations for these nodes follow below; specific recommendations for setbacks, landscaping, sidewalks, streetscape, and site development appear elsewhere in this report.

- Define the size of the intersection nodes as being generally within 200 to 300 feet of the 122nd/Stark intersection or 122nd/Glisan intersection and within 300 to 400 feet of the 122nd/Burnside intersection. These dimensions correspond approximately to the proposed master street plan. These distances should be refined further, taking into account existing development patterns, zoning boundaries, taxlot boundaries, closer scrutiny of the master street plan, and other factors.
- Maintain the current prohibition on exterior display and storage for new developments within the node areas. Provide for limited reconfiguration of sites with existing exterior display areas over the near- and mid-term.



Development Concept: existing conditions (above) and potential future development & streetscape (below)



Areas Between the Nodes

In general, the areas between the nodes should allow for greater development flexibility, taking into account the functionality of businesses currently located in these areas, as well as market conditions and the potential for (re)development in the near- to mid-term. Recommendations follow below; specific recommendations for setbacks, landscaping, sidewalks, streetscape, and site development appear elsewhere in this report.

- Revise regulations that prohibit exterior display and storage. These revisions should be coupled with design requirements and regulations that provide a safer and more aesthetically pleasing pedestrian environment, minimize stormwater run-off and urban heat island effects, and allow for more intensive development to occur in the future.

Connectivity

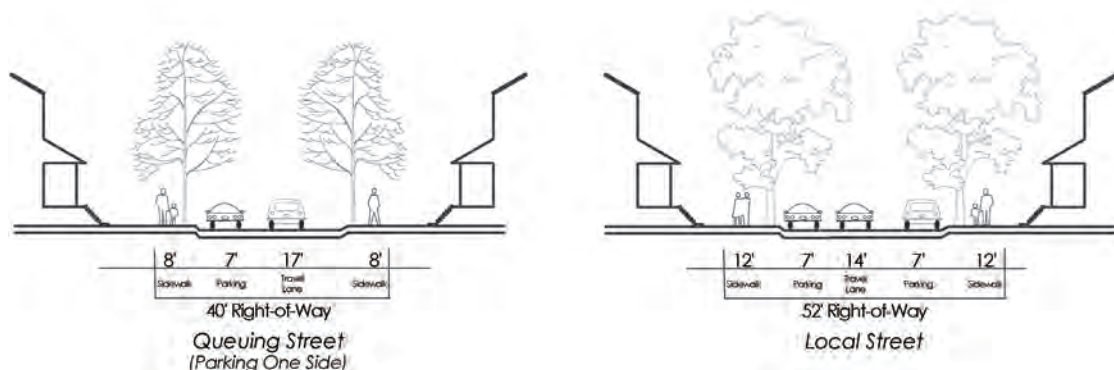
Streets and pedestrian connections provide access to activities. A network of connections allows users to choose the shortest and most convenient routes to a desired destination. Increasing “connectivity” – the frequency of connections to destinations – therefore increases the number of choices someone has to get from one point to another. A high degree of connectivity is particularly important in a transit station area, where walking is expected to increase over time as a travel mode of choice. Unlike inner Portland, which features a dense street network that provides multiple options, the 122nd Avenue station area and its surroundings are served by a widespread and discontinuous network of streets.

To improve connectivity, new streets or connections are required by the City when large properties redevelop; street locations are determined according to a master street plan. The 122nd Avenue station area does not currently have an adopted master street plan. In the absence of an adopted plan, Portland code currently states that new streets for the area should generally be based on a block size of 400 by 200 feet and should connect to the surrounding street grid.

A draft circulation plan was developed and presented to the public at the April workshop. In some cases, improvements were recommended for roadways, such as SE 119th Avenue south of SE Washington Street, that are currently unimproved. In other cases, new connections were recommended as extensions of existing streets – such as SE Ash Street east of SE 124th Avenue or SE Alder Street east of SE 119th Avenue. Lastly, some entirely ‘new’ connections were recommended. (A copy of the Draft Circulation Plan can be found in the Appendix.)

There was general consensus among participants that a ‘tailored approach’ to circulation was appropriate for the study area. Specifically, attendees felt that this area of Portland has a very different street and block pattern from the grid found in the close-in sections of Portland. There was support of a circulation plan that more closely fit the character and development pattern of the area. Attendees voiced some support for increased connectivity in the area, but also shared some concerns about certain connections and the impacts those connections might have on local businesses or nearby residential areas.

Example Local Street Sections:



Connectivity

The circulation plan was later revised to bring the plan into closer conformance with City and Metro goals for street spacing and to facilitate future development. Connections were adjusted and, in some cases, added to allow for more easily developable blocks and to more closely line up with existing roadways. A revised connectivity plan was presented to the public at the June workshop. As presented, the plan represents aspirations of what a street grid may eventually look like in the area, rather than a guide for immediate roadway construction. Current City practice holds that new connections are put into place only when practical and during significant (re)development.

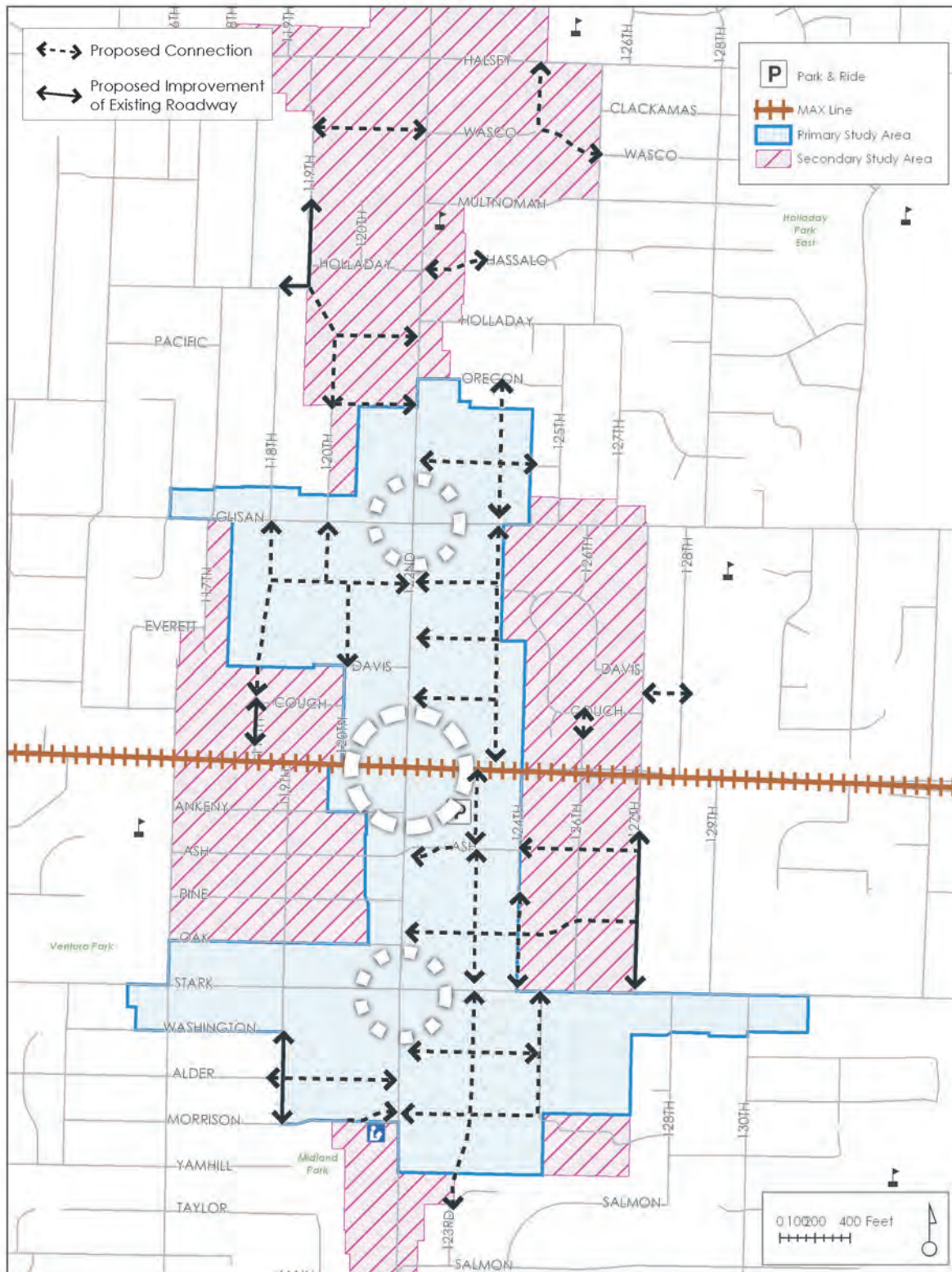
Except in the case of improvements to current roadways, the draft plan does not posit the types of connections that would eventually be installed. Instead, it provides approximate locations as a framework for the Portland Office of Transportation (PDOT) to utilize for determining locations for future roadways or pathways. While it was not determined whether or not individual connections would be local streets, private circulation routes, or pedestrian pathways, the working assumption throughout this process was that in all cases these future connections, at a maximum, would be of a 'local street' type. Also, it generally was assumed that new connections most likely would come as a result of significant redevelopment rather than through an active road-building effort by the City.

Local Street Examples within the Study Area: SE Ankeny and SE Pine



Connectivity

Connectivity Plan:



4. Station Area Concept

Connectivity: *Recommendations*

The following are recommendations to improve connectivity in the study area:

- **Master Street Plan.** A master street plan should be adopted for this area. Such a plan will help guide future development and provide property owners with a clearer understanding of the implications for their properties. The connectivity plan proposed in this study should be used as the basis for this master street plan, but should be reviewed in greater detail by the Portland Office of Transportation. Planning for additional streets and connections in East Portland should also be done for those areas not included in the 122nd Avenue study that lack a master street plan.
- **Signals.** Continue working to develop a clear understanding of the future improvements needed for the traffic signals along the 122nd Avenue corridor within the station area. While implementation funding is uncertain, the Portland Office of Transportation (PDOT) has indicated that they are currently working on a list of potential signal operations improvements such as:
 - Reviewing signal timing and optimization.
 - Installing countdown “ped heads” to let pedestrians know how much time is left to cross.
 - Using a “leading pedestrian interval” to allow pedestrians to occupy the crosswalk before starting the parallel traffic.
 - Revising the loop detection layout to provide for more efficient “free” operation. (For example, the revised spacing at Powell and 82nd Avenue has helped.)
- **Access Management.** Access management is a tool that can be used to improve the traffic circulation at major intersections and also to make 122nd Avenue more pedestrian friendly. From field observations, it appears that some existing driveways are not being utilized (or are very under-utilized). These types of driveways could become part of the sidewalk and therefore enhance the pedestrian environment along the 122nd Avenue corridor. There is also the opportunity in some instances to combine driveways as new development occurs in the area. As new roadways are installed with redevelopment, driveways could even be further consolidated by removing them from 122nd and placing them along these new streets. Developing an access management plan would greatly assist the City in making decisions in the future related to land development opportunities within the project area.

Streetscape

Local and regional plans posit 122nd Avenue as a “main street,” while the area of 122nd between Glisan and Stark is considered a “station community” and “pedestrian district” focused on the MAX station at Burnside. In order to beautify the station area, improve the pedestrian environment, and increase the safety of pedestrians, potential streetscape elements were explored and a streetscape concept plan was developed for 122nd Avenue and its major cross streets.

Curb Extensions:

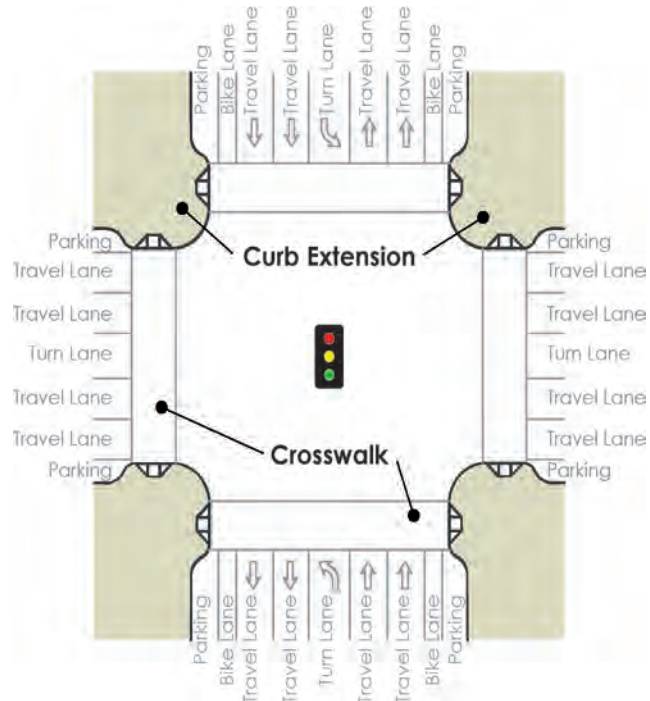
Curb extensions, also known as bulb-outs, are useful tools for reducing the pedestrian crossing distances in areas with on-street parking. Curb extensions increase pedestrian visibility, help control vehicular speeds, and enhance transit to an urban area. Curb extensions also provide a narrowing feel to the roadway at intersections.

Curb extensions must be designed to accommodate a variety of vehicle types. However, due to the speed, traffic characteristics, and importance of alternative modes along 122nd Avenue, the level of accommodation of large vehicles should be minimal.

Generally, curb extensions should be constructed to the full width of the on-street parking and should not block bicycle lanes. Special consideration is required in many situations for addressing drainage in conjunction with curb extensions. Also, the location of existing driveways may be a factor in retrofit situations.



Curb Extension Example



Example Detail: Curb extensions at the intersection of 122nd and Glisan

Streetscape

Medians:

A median is the area of a roadway that separates opposing directions of travel. Curbed medians can either be traversable (hardscape that can be crossed by a pedestrian) or non-traversable (planted to discourage pedestrian crossing). Medians can enhance traffic flow on a given street by reducing cross movements and left turns.

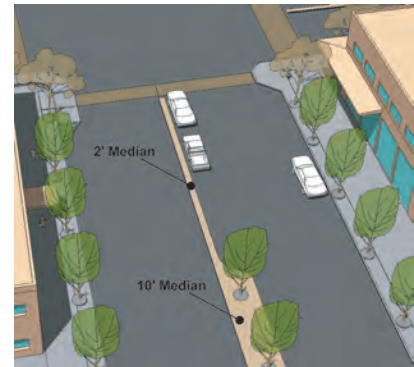


Median Example

Medians also can serve aesthetic and traffic calming functions. If landscaped medians are used, plantings should be low enough so that they do not obstruct visibility and spaced far enough apart to allow for pedestrian passage. Medians provide friction between the median and the motor vehicle driver, which may help in calming traffic speeds.

Where medians are required to maintain acceptable traffic flow and safety, it is important to evaluate options that reduce the impact on pedestrian crossing and safety. When medians are not needed for turning movements but are needed for pedestrian crossings, the width of the pedestrian crossing median should be a minimum of 6', and preferably 8-11'. In tightly constrained areas, a 4' median can be used, and a 2' median can be utilized to

control turning movements at locations near the left turn bays of signalized intersections (such as at 122nd/Glisan and 122nd/Stark). Median installations can be accompanied or augmented by curb extensions, mid-block crossings, pedestrian refuges, or other treatments to further improve pedestrian safety. Median type, width, and length should be determined following an engineering study of circulation characteristics of the surrounding transportation system, as well as of development patterns, driveway locations, and pedestrian and bike needs.



Potential median treatment on 122nd Avenue



Unique paving material in center turn lane

Another type of median, utilized elsewhere in Portland and the region, is one that is at-grade but employs a different paving treatment. Such a treatment would enhance the streetscape and provide the appearance of a median, but would still allow left-turns. Because of its unique appearance and texture, this specially-paved median would discourage drivers from traveling in the center turn lane. A specially-paved median could evolve over time; discrete sections of it could be transformed into full medians as driveways are consolidated and new connections are constructed.

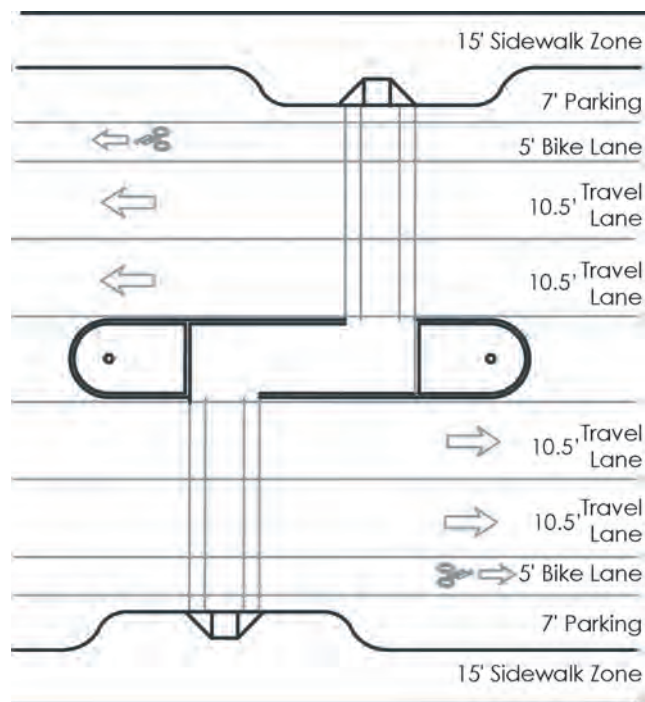
Streetscape

Pedestrian Crossings and Refuge Islands:

Pedestrians need to have frequent, safe, well-designed crossings of the major streets within the study area. The use of various infrastructure elements (including curb extensions, channelization islands, and median islands) can reduce the crossing distances for pedestrians while improving pedestrian visibility and safety. In some situations, the use of mid-block pedestrian crossings may be viable and could enhance pedestrian mobility and circulation within the study area. Pedestrian refuge islands, approximately 10' in width, could be utilized at key locations, and should be accompanied by curb extensions to further shorten crossing distances. A "Z" crossing design can further increase pedestrian safety by requiring pedestrians to look towards on-coming traffic before leaving the pedestrian refuge. Such islands must comply with City standards, including appropriate striping, signage, and signalization as required. Their precise locations should also be examined in conjunction with local bus stops to facilitate transit-related pedestrian crossings.



Existing pedestrian refuge island on 122nd north of Glisan



Proposed pedestrian refuge ("Z" crossing)

Trees and Landscaping:

Besides providing a street with a more inviting and visually pleasing effect, landscaping, especially trees, can be a traffic calming technique. Trees provide a vertical element, much in the same way that adjacent buildings do, which has an impact on the vehicle driver. A row of trees gives the appearance to the driver that the roadway is narrower, thereby calming traffic. Trees and other landscaping features need to be located in the appropriate location so that sight distance, especially at intersections, is not compromised. The same consideration should be given to landscaping features located at pedestrian crossing islands and medians.

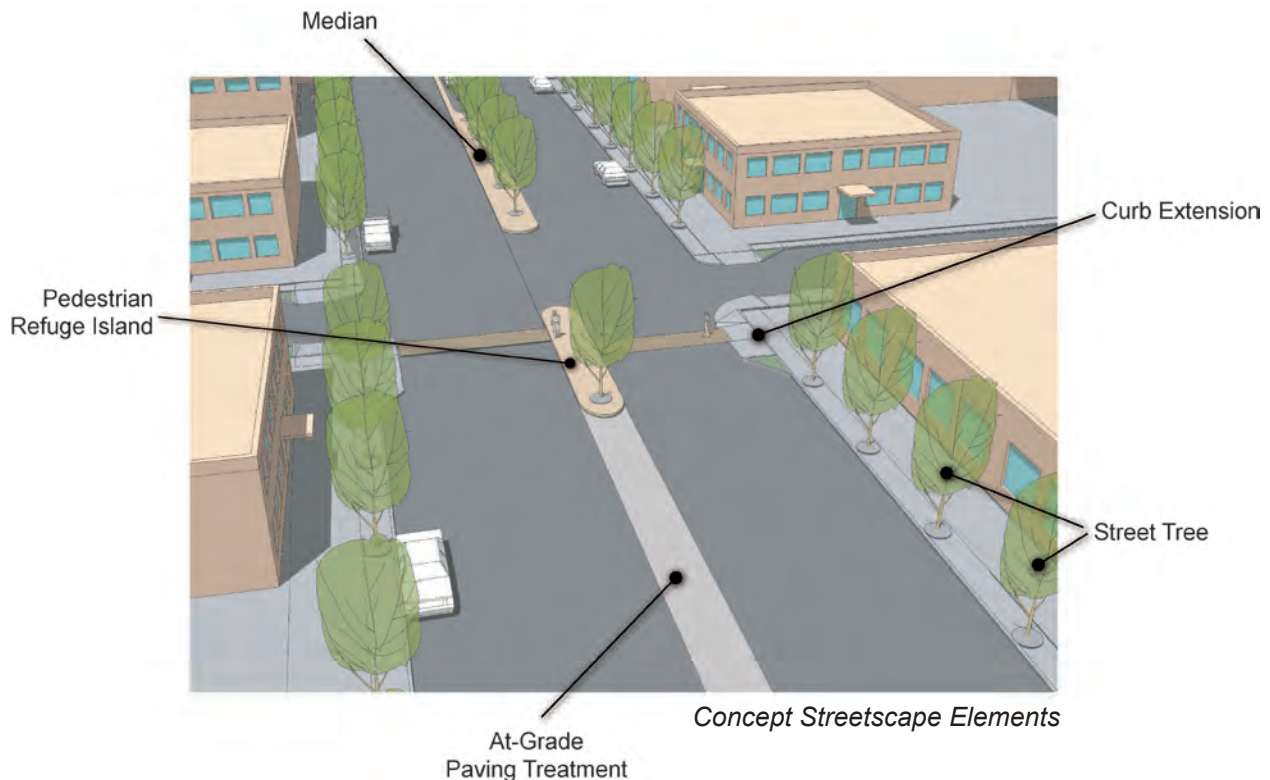
Streetscape

Draft Streetscape Plan:

Elements of a draft streetscape plan were prepared and presented to the public at the April workshop. This diagram included ideas for street trees and pedestrian-scale lighting throughout the study area, curb extensions at the major intersection nodes, and medians and pedestrian refuge islands at select locations. Attendees generally supported the beautification of the station area as well as the notion of making the area safer and more attractive for pedestrians. Specific concerns arose around the curb extensions, especially in those situations that would require the elimination of free right turn lanes. Concerns were also raised about the intersection of 122nd and Burnside – about signal timing, MAX prioritization, turn movements, and the risky behavior currently exhibited by pedestrians crossing against signals in order to catch MAX trains. (A copy of the Draft Streetscape Plan can be found in the Appendix.)

Refined Streetscape Plan:

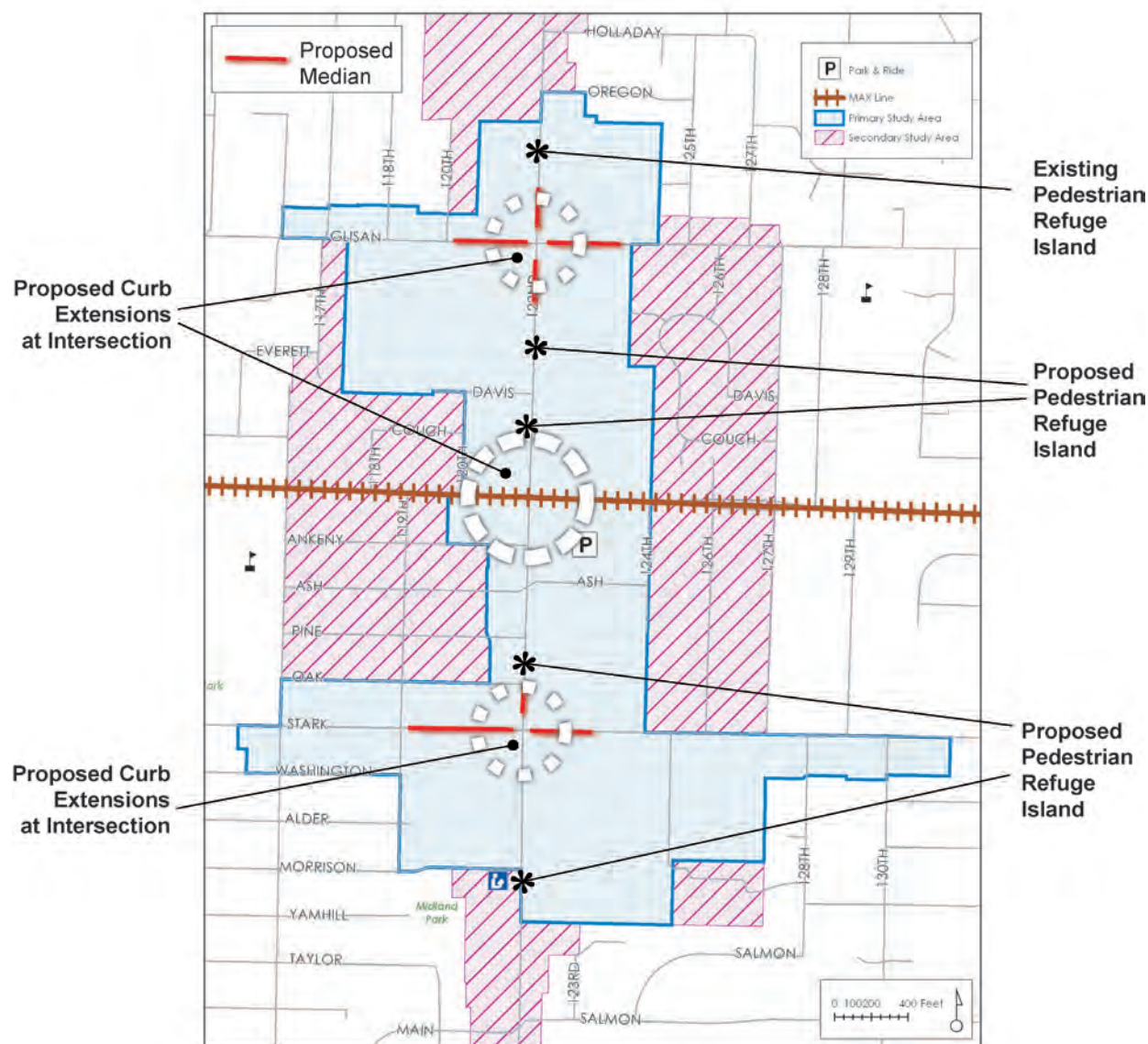
The refined streetscape plan was developed following the workshop and revisions to the connectivity plan. The refined streetscape plan maintains the notion of curb extensions at the intersection nodes. It also provides more specific locations for modest medians designed to improve safety by limiting conflicting left turn movements. It recommends several locations for pedestrian crossing islands on 122nd Avenue (see Streetscape Plan map). In areas not taken up by curbed medians or pedestrian islands, a unique pavement treatment could be utilized, such that the roadway be given a median-appearance, while still allowing full vehicular mobility across this treatment. Concepts for street trees, landscaping, sidewalks, setbacks, and frontage requirements were also presented, and are discussed in detail below.



Streetscape

The refined streetscape plan was presented to the public at the June workshop. In general, attendees supported the idea of making infrastructure improvements that would increase safety for pedestrians. However, attendees strongly recommended that all such improvements (medians, curb extensions, pedestrian refuge islands) be studied thoroughly prior to implementation to ensure that traffic flow and turn movements would not be hindered as a result of their installation. It also was suggested that analysis of recommended improvements be coordinated with studies for new roadways and improved access management.

Refined Streetscape Plan:



Streetscape: *Recommendations*

Streetscape recommendations include the following:

- Streetscape Improvements.** Opportunities exist to improve the pedestrian environment and traffic flow throughout the station area. Some suggestions include the installation of curb extensions, medians, and pedestrian crossing islands – with specific locations coordinated with the proposed connectivity plan. The installation of any of these devices will require further analysis. Curb extensions may conflict with the current configuration of some of the intersections along 122nd Avenue and further analysis would be needed to be able to balance the demand for right turning movements and the ability to make pedestrian crossing safer. Given proper study and analysis, the minimum recommended streetscape improvements (and locations) include the following:
 - Curb extensions at the major intersections of 122nd and Burnside, Glisan, and Stark;
 - Curbed medians of varying lengths on all four legs of the 122nd / Glisan intersection;
 - Curbed medians of varying lengths on the east, west, and north legs of the 122nd / Stark intersection;
 - At-grade median treatment (special paving material) at areas between intersections without curbed medians;
 - Pedestrian refuge islands with curb extensions on 122nd in the following locations: adjacent to the Midland Library; north and south of NE Davis; and between SE Pine and SE Oak;
 - Up-graded paving materials for crosswalks in key locations.
- On-Street Parking Study.** The on-street parking-related issues deserve additional analysis. From field observations at various times during the day, it appears that the current on-street parking on 122nd Avenue is not utilized to its full potential. A possible solution would be to work with the merchants and property owners in the area to develop a parking plan that would take into consideration the elimination of on-street parking at key locations along 122nd Avenue in order to create traffic calming elements and pedestrian amenities, such as curb extensions and planting areas. At a minimum, an in-depth on-street parking inventory should be conducted, as well as a study of those points at which unused parking areas are being used as *de facto* travel lanes, potentially endangering bicyclists and pedestrians.

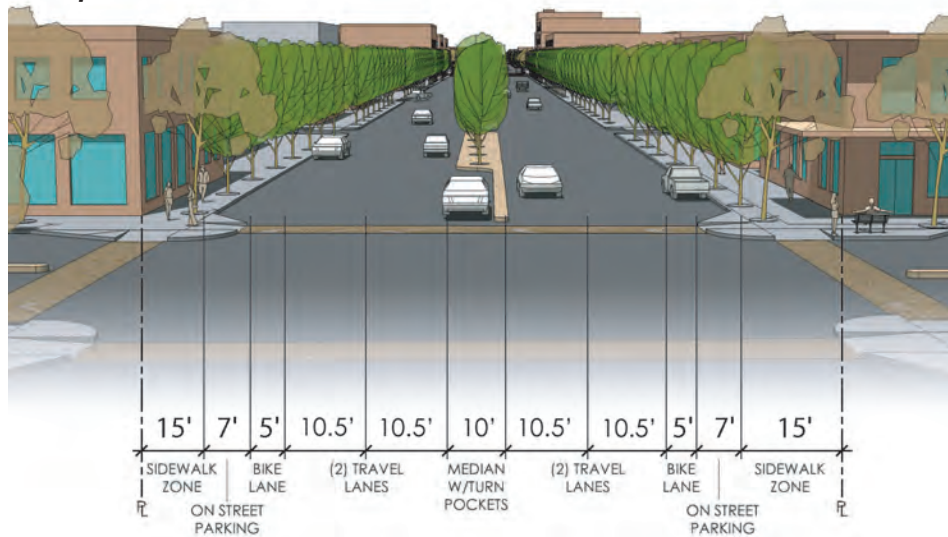


Mid-block curb extension used in conjunction with current pedestrian refuge north of Glisan

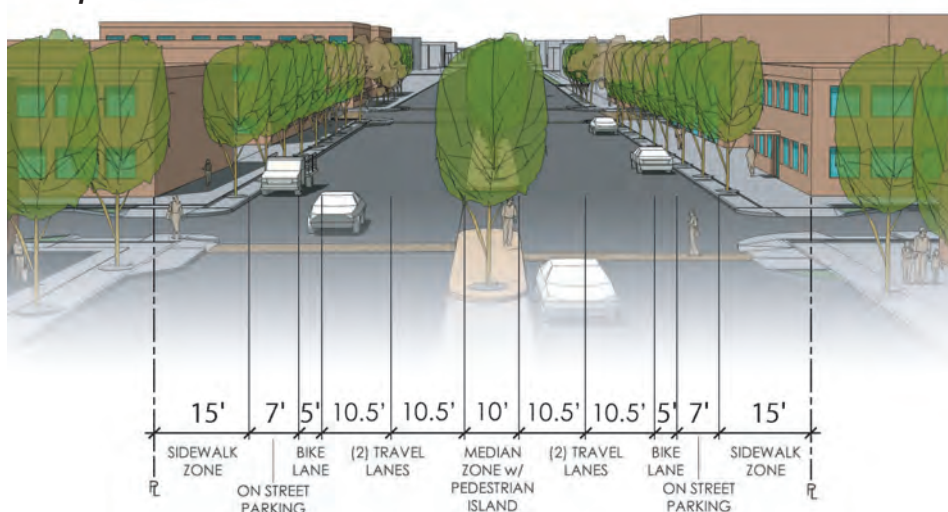
Streetscape: *Recommendations*

- Refinement Plan.** The development of a refinement plan would be the next step for this project. A detailed traffic analysis should be undertaken for the intersections along 122nd Avenue to determine existing conditions and analyze models of projected future conditions (perhaps at five, ten and twenty year periods). This study should also include a more detailed review of traffic accident data in order to develop solutions to the types of accidents and any consistent and problematic patterns that occur in the station area. This level of analysis would help to determine the type of improvements that need to be in place in order to support the additional land development proposed in the area. This analysis and planning could be utilized to develop a comprehensive capital improvement program for the area. The refinement plan should also incorporate the access management plan and traffic safety analysis discussed above.

Example Street Section for Node Areas:



Example Street Section for Areas Between the Nodes:



Sidewalks & Setbacks

Pedestrian Environment

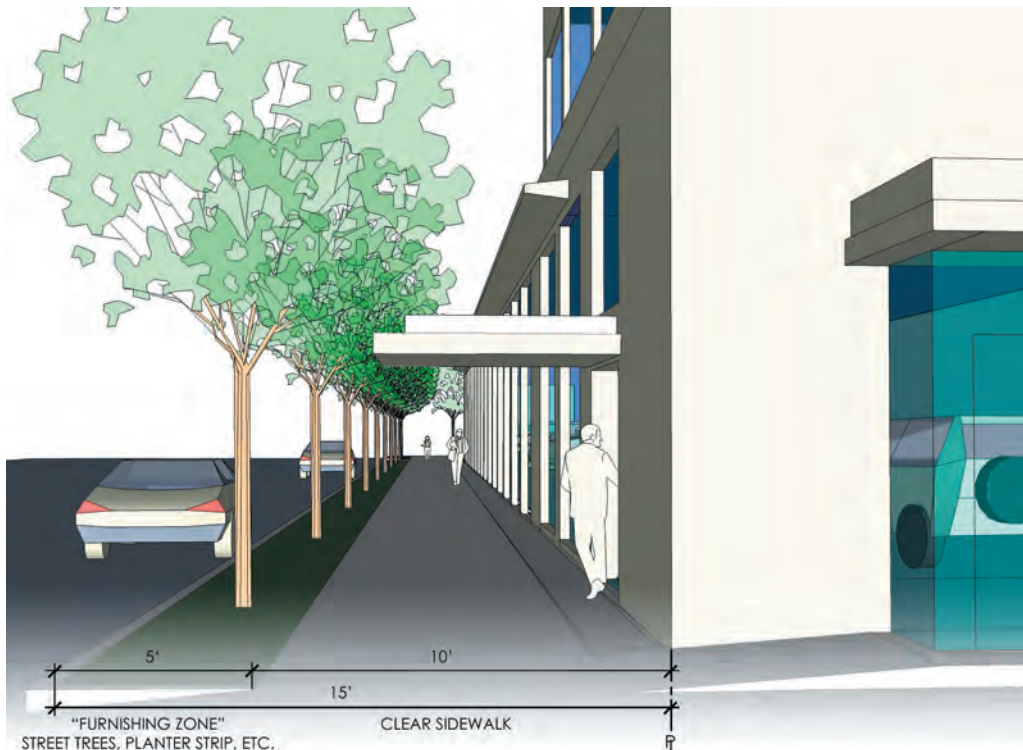
The public was generally supportive of the ideas presented regarding potential sidewalk design, landscaping, building frontage requirements, setback allowances, ideas for exterior display and storage, and restrictions on temporary exterior signage.

In general, all of the pedestrian environment design concepts contain a 5' furnishing zone between the curb and the sidewalk, and an 8'-10' concrete sidewalk to the property line. These improvements to the public right-of-way would most often be made during the redevelopment of individual properties. Several permutations illustrating these concepts are presented below.

At the nodes, the preferred treatment of the furnishing zone area is to use a permeable paving surface, such as pavers or porous concrete. This approach provides an area that can serve pedestrians as an extension of the sidewalk area, but allows for stormwater runoff infiltration.

In areas between nodes, the furnishing zone should be either landscaped or hardscaped to manage sidewalk stormwater runoff. A landscape treatment may be preferred for "greening," aesthetic, and stormwater management purposes when ongoing maintenance is likely.

0' Setback. There are currently no required building setbacks in the study area; this illustration represents the typical condition allowed under current City code. It depicts a 5' furnishing zone with a permeable surface and street trees, a 10' sidewalk, and buildings built to the property line with entrances oriented to the major streets.

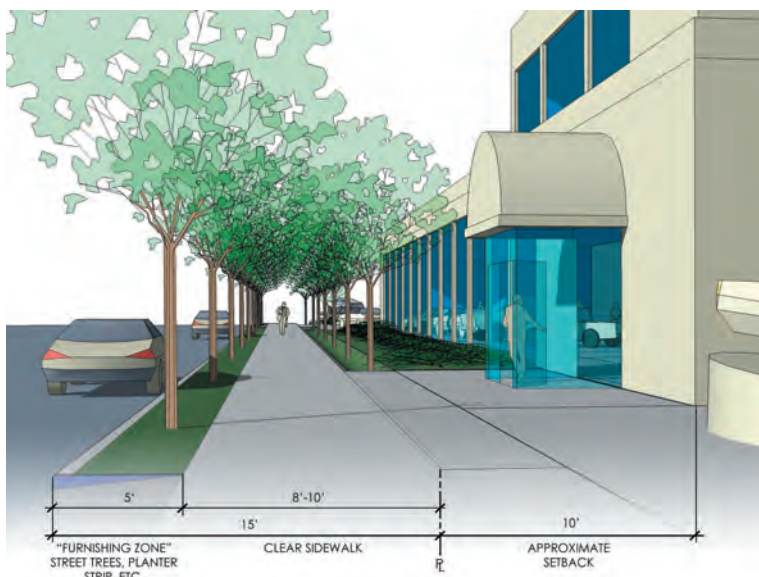


Sidewalks & Setbacks

0' Setback with Hardscape. This scheme utilizes a permeable hardscape such as concrete pavers or porous concrete in the furnishing zone (with trees in wells), thereby providing a larger sidewalk area. This condition is envisioned for the community-serving nodes at the major intersections of 122nd and Glisan, Stark, and Burnside – where pedestrian activity is expected to be the greatest.

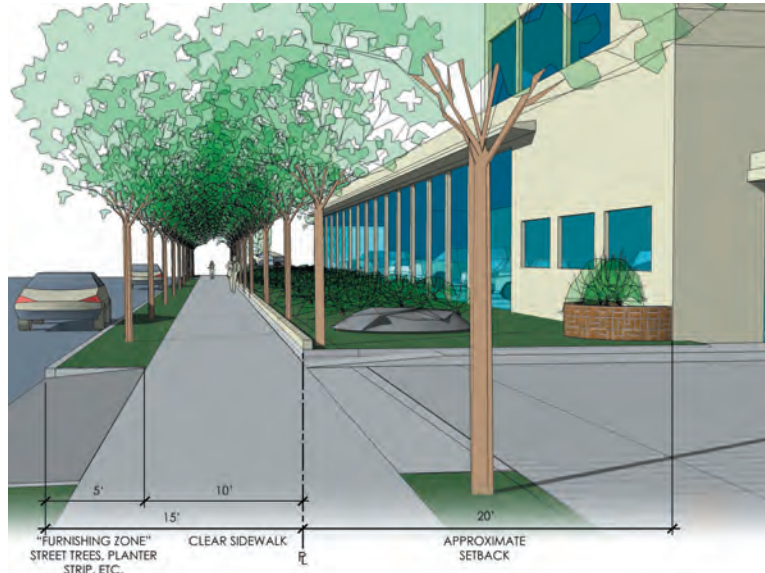


10' Setback. This variation allows for a 10' setback between the property line and the building frontage. This setback would allow for additional landscaping, perhaps even a second row of trees. A 10' setback is currently allowed under existing City code. At the intersection nodes, this setback may be hardscape to allow for outdoor seating, etc.

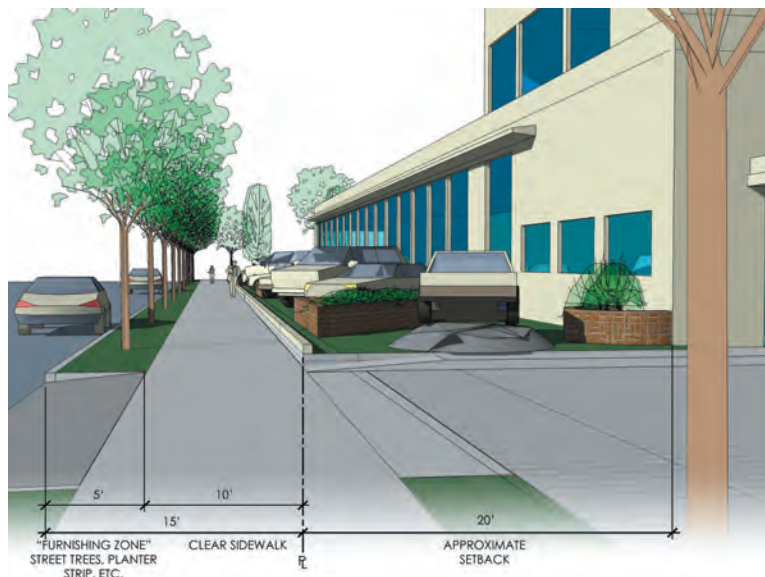


Sidewalks & Setbacks

20' Setback with Landscaping. In the areas between the nodes, a 20' setback may be allowed for certain uses and developments, provided that certain criteria (regarding building frontage, landscaping / screening, window and entrance orientation) are met. This variation would allow for generous landscaping – even a second row of trees – between the sidewalk and the building.

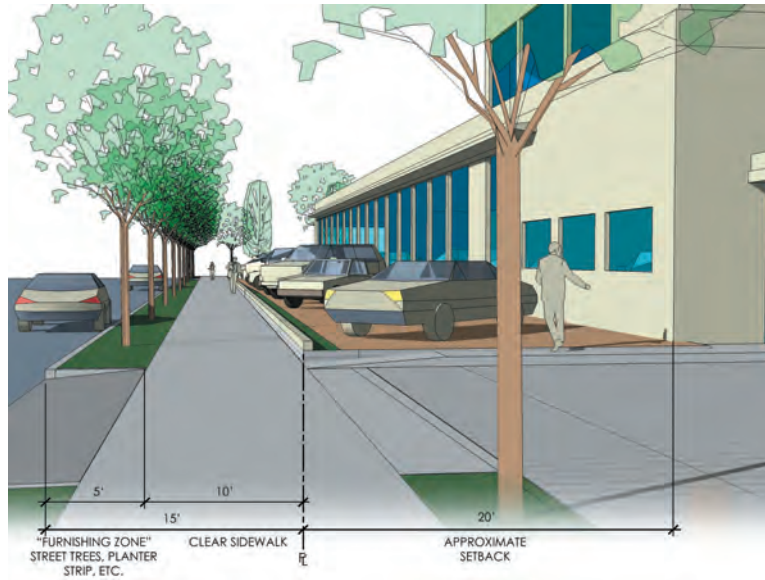


20' Setback with Landscaped Exterior Display. In the areas between the nodes, a 20' setback may be allowed for certain uses and developments provided that certain criteria (regarding building frontage, landscaping / screening, window and entrance orientation) are met. These criteria may also be imposed to allow for limited amounts of exterior display of products such as automobiles. In this variation, generous landscaping is utilized as an integral part of a tasteful exterior display.

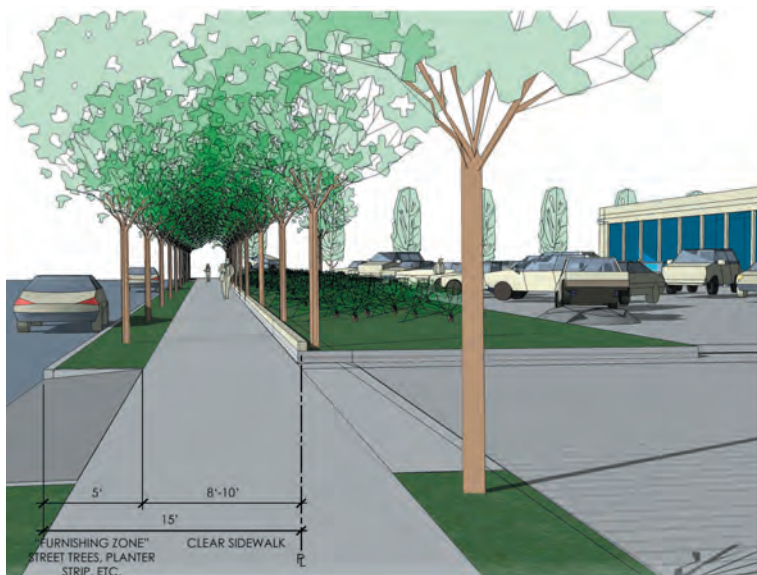


Sidewalks & Setbacks

20' Setback with Hardscaped Exterior Display. In the areas between the nodes, a 20' setback may be allowed for certain uses and developments provided that certain criteria (regarding building frontage, landscaping / screening, window and entrance orientation) are met. These criteria may also be imposed to allow for limited amounts of exterior display of products such as automobiles. In this variation, a plaza (with unique pavers) is created between the building and the sidewalk for exterior display.



Setback for Reconfigured Sites with Exterior Display. In this variation, which would only apply to existing auto dealerships that are reconfiguring, a generous landscaped buffer would be required between the back of the sidewalk and a limited amount of exterior display.



Sidewalks & Setbacks: *Recommendations*

The following recommendations are for the areas in the public-private interface – those areas in which private property (building frontages, setbacks, landscaping) meet the public realm (sidewalks, furnishing zones). General recommendations to apply throughout the study area include the following:

- Regulate the amount, type, and duration of temporary signage and displays in the public right-of-way or in setback areas.
- In order to foster a stronger pedestrian environment, improve building frontages and landscape areas by allowing no more than 50% of a site's frontage on transit streets to be dedicated to open vehicle parking, storage, or display.
- To improve pedestrian visibility and safety, provide enhanced pedestrian-scale lighting.
- Implement improved streetscape, including upgraded sidewalks, street trees, lighting, etc.
 - Street trees should be of a significant size capable of providing ample shade for the entire sidewalk width; tree canopies should be high enough such that there is high visibility for ground-floor businesses.
 - Street furniture and amenities (benches, trash cans, fountains, public art) should be consistently applied throughout the study area.



Improved streetscape, minimal setback, windows and doors oriented to the street

Specific recommendations for intersection nodes and the areas in between are as follows:

Intersection Nodes

- Maintain existing maximum building setback standards of 0-10 feet.
- Require windows and doors on all street frontages to enhance visibility for retailers, and provide opportunities for “eyes on the street.” Primary entrances should be provided on the primary transit street, and should be oriented towards node corners when development occurs at an intersection node
- Use special trees and plantings to give further distinction to the nodes.
 - In nodal areas, street trees should be placed in wells surrounded by hardscape, thereby allowing for wider sidewalks in the areas where pedestrian activity is expected to be the greatest.



Temporary signage should be limited in the right-of-way and in setback areas

Sidewalks & Setbacks: *Recommendations*

Areas Between the Nodes

- Allow building setbacks of 0-20 feet for uses that incorporate exterior display or have residential components.
- Require windows and doors on all street frontages to enhance visibility for retailers, and to help promote “eyes on the street.” Primary entrances should be provided on the primary transit street.
- Provide incentives for developers / property owners that provide a second row of trees along the back of sidewalk on private property. Such a provision should be a requirement for any renovation projects that might be exempted from the maximum setback due to existing building configuration.
- Allow exterior display of merchandise in the zone between buildings and the sidewalk according to design standards:
 - Separate display areas from the sidewalk with a protective landscape buffer and, where possible, a minor grade difference
 - Use special concrete or pavers for hard surfaces to create a plaza-like display area. Consider a minimum percentage (10-15%) of ‘soft elements’ (plant material and/or water elements) in these exterior display areas.

Site Design

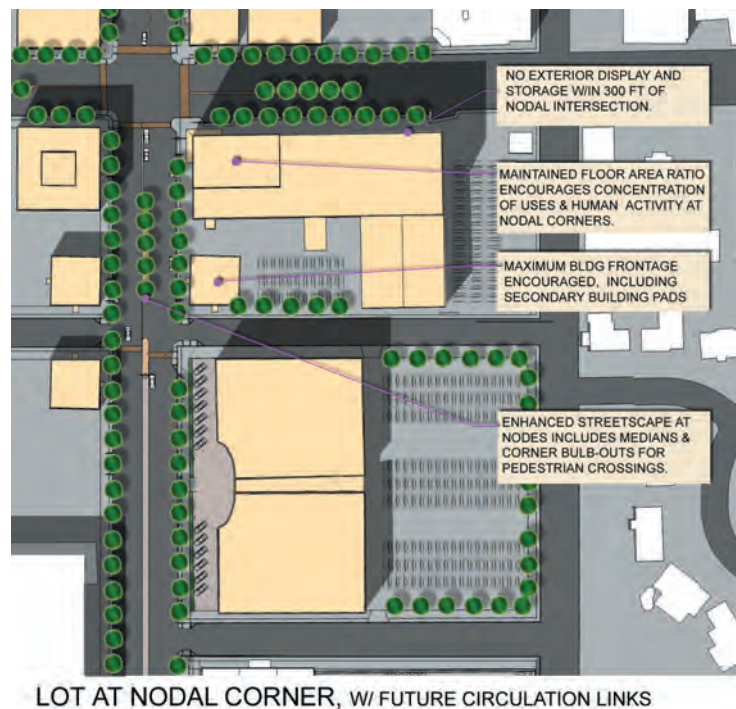
Throughout this study various site development and configuration issues were used to evaluate approaches to exterior display and storage, setbacks, landscaping, building frontage, and site coverage. These design variables were analyzed against the programmatic needs of various commercial enterprises, including retail, office, and residential uses, as well as auto dealerships. A primary goal of this analysis was the development of recommendations that would allow for flexibility in terms of site development while providing for a vibrant, consistent, and pedestrian-friendly streetscape. The resulting recommendations vary for developments within the intersection nodes and those in the areas between the nodes – in order to best support and concentrate human-scaled uses at the nodes.

The following parameters were utilized in developing these various diagrams:

- Setbacks at nodes ranging from 0'-10' (maximum allowed under current code = 10');
- Setbacks between the nodes ranging from 0'-20' (maximum allowed under current code = 10');
- FAR* minimum of 1:1 at nodes (current minimum is 1:1);
- FAR* minimum of 0.4:1 between the nodes (current minimum is 1:1);
- Exterior display and storage not allowed at nodes in new development;
- Exterior display and storage allowed in certain circumstances between the nodes. (Note: additional landscaping may be required to off-set stormwater and urban heat island impacts.)

Node Example:

This diagram shows a typical development at an intersection node, as well as of a property just outside that node. At the node, exterior display & storage is not allowed within 200'-300' of the intersection, the minimum floor area ratio (FAR) of 1:1 is maintained, the current 10' maximum setbacks are maintained, and maximum building frontage is encouraged. An enhanced streetscape is indicated, with unique street trees, modest medians, and curb extensions to ease pedestrian crossing. Taken together, these site development considerations encourage a concentration of uses and pedestrian activity at the nodes. The development just south of the node is still oriented to the street, but has a larger (20') allowable setback,



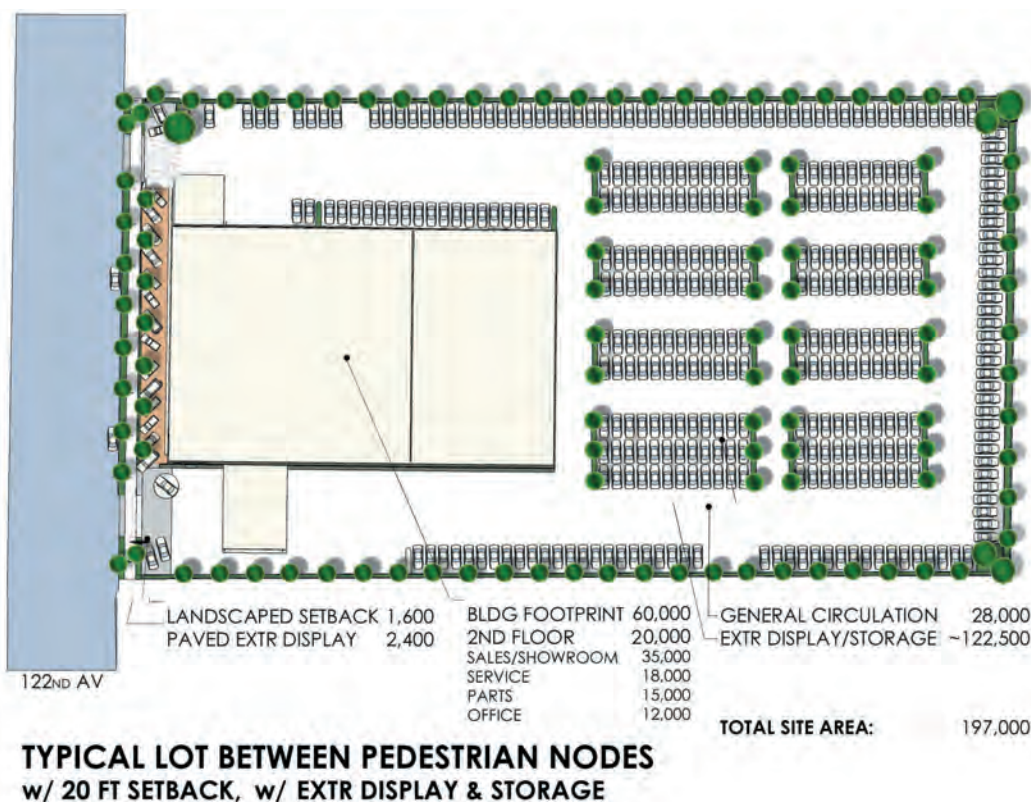
Site Design

a less intensive FAR requirement, a modest amount of exterior display allowed between the building and the street, and exterior display allowed behind the building. (Note: a variation of this diagram appears in the Appendix.)

Examples for Sites Between the Nodes:

The following three diagrams illustrate various site designs for sites between the intersection nodes. Specifically, these examples demonstrate: a typical new development with exterior display and storage, the potential reconfiguration of a site that currently utilizes exterior display and storage, and a redeveloped site with new transportation connections. (Additional site design variations can be found in the Appendix.)

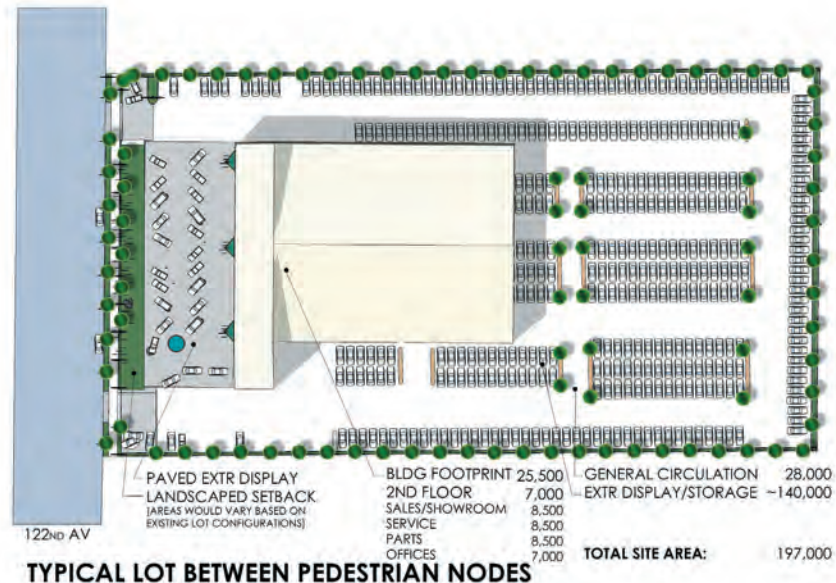
The diagram below shows a *typical lot utilizing exterior display and storage*. As shown, the development achieves an FAR of 0.4:1. A 20' setback is shown with a modest amount of exterior display that is presented in a landscaped plaza. Building frontage is maximized, and all exterior storage is to the rear of the site.



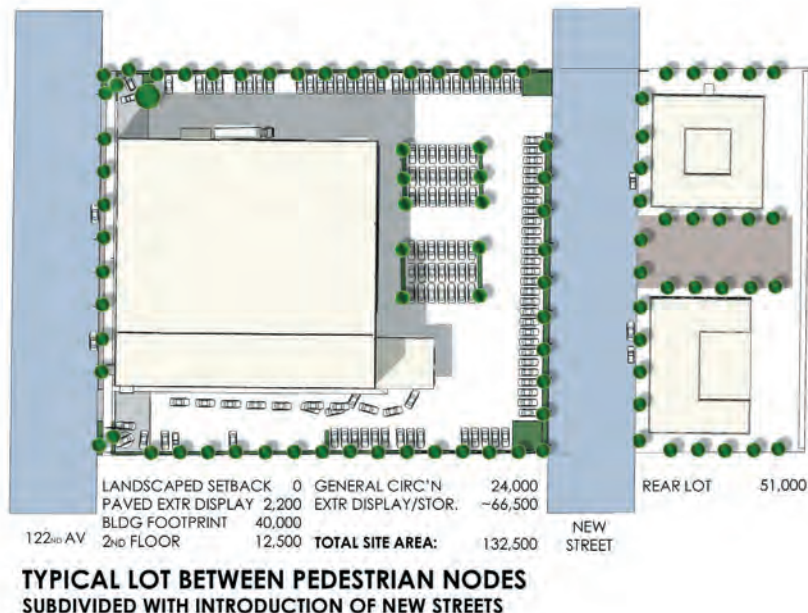
* Note: FAR stands for "Floor Area Ratio." FAR is the ratio of building floor area to total site area. In this case, a minimum FAR of 1:1 is recommended, meaning that a developer or property owner would be required to construct a building with a total floor area equal to that of the total square footage of his/her site. Such a building (or buildings) would be multiple stories, so as to provide un-built areas of the site for landscaping, parking, plazas, etc. An FAR of 1:1 or greater (2:1, 3:1, etc.) generally indicates a multi-story building, while an FAR less than 1:1 (0.7:1, 0.5:1, etc.) generally indicates a single-story building that will take up less than the total site area.

Site Design

This diagram illustrates a *typical reconfiguration of a lot utilizing exterior display and storage*. The building is located closer to the street and exterior storage is located behind the building. Exterior display is allowed between the building and the street; the exact size of this display area is determined by existing development and reconfiguration feasibility. Ample landscaping exists between the display area and the sidewalk.



This last diagram demonstrates how a site may be *redeveloped in the future with the introduction of new connections* based on the master street plan. The commercial development to the left is built near the primary street (122nd Avenue), with parking and/or exterior storage located behind the building. Development to the right – potentially residential – has been oriented to the new street.



Site Design: *Recommendations*

The following recommendations are for site design and development within the 122nd Avenue station area. General recommendations to apply throughout the study area include the following:

- Consider applying design standards or guidelines to commercially-zoned properties. This will improve and/or ensure the compatibility of uses and the quality of design, and complement the design overlay zone currently applied to higher-density, residential-zoned properties.
- In order to improve and/or ensure the compatibility of uses (specifically between retail and residential uses), exclude or closely regulate the use of commercial loudspeakers.

Recommendations for the nodes and the area in between are as follows.

Intersection Nodes

- Maintain the current minimum FAR of 1:1 to encourage higher-density development at the nodes.* Consider allowing for lowering FAR requirements over the near term when a master plan demonstrating how properties will develop over time to achieve a minimum 1:1 FAR is provided. First phase buildings should be required to be built within maximum building setbacks and be oriented to the primary corner (122nd and Burnside, Glisan, or Stark).

Areas Between the Nodes

- Consider allowing flexibility on minimum FAR requirements for sites between the nodes. Based on modeling done as part of this study, it was determined that a minimum FAR of 0.4:1.0 could be achieved over the near term on the east side of 122nd (where most current auto dealers and larger parcels exist). Where FAR requirements are relaxed in the near term, developers and/or property owners should be required to provide a master plan demonstrating how higher FAR's (1:1) could be achieved in the future. First phase buildings should be required to be built within maximum building setbacks and be oriented to the transit street. For those properties that are being reconfigured, and where additions are being made to existing buildings, these additions should approach the street as much as is feasible.
- In the interest of mitigating stormwater runoff and urban heat island effect, maintain and/or strengthen landscape requirements throughout hardscape areas of each site – whether these hardscape areas are utilized for parking lots or exterior display and storage. Larger trees should be planted along the southern property line if feasible to provide greater shading across the site. In keeping with the landscape character of the area, the preservation of existing Douglas Fir trees and the use of conifer trees on-site should be encouraged.

5. Implementation Strategies

*This section presents strategies to
implement the recommendations of the
122nd Avenue Station Area Study*

Implementation Strategies

The following general strategies are proposed to implement the recommendations of the 122nd Avenue Station Area Study and foster the evolution of the area into a pedestrian-friendly district that combines new transit-oriented development with existing development types and patterns.

- Evaluate and revise existing policies, objectives, zoning map designations, and/or other regulatory elements to facilitate the development concept and design recommendations indicated in this report.
- Work with area property owners to facilitate redevelopment of sites or additions to existing development in keeping with the station area concept.
- Pursue refinement of the streetscape concept plan through more detailed analysis of driveway locations and other access management issues, traffic modeling, and preliminary engineering.
- Pursue funding for streetscape elements through public and private sources. These sources could include:
 - Local or regional transportation funding sources (such as the City's Capital Improvement Program (CIP) or the Metropolitan Transportation Improvement Program (MTIP));
 - Private financing opportunities such as through the creation of a Local Improvement District (LID) or Business Improvement District (BID).
- Work with City bureaus and other government agencies to identify opportunities for funding to meet multiple objectives through the implementation of streetscape or pedestrian improvements. For example, various landscaping techniques may achieve both streetscape and stormwater management goals.
- Consider directing economic development resources to the 122nd Avenue station area and main street to provide financial or technical assistance for transit-oriented redevelopment at key nodes.
- Work with TriMet other key stakeholders on a more detailed development program and redevelopment scheme for the park and ride facility at 122nd/Burnside. (This site presents the area's largest transit-oriented development opportunity.)
- Review and refine connectivity recommendations for the 122nd Avenue Station area, and adopt as a Master Street Plan for the area as part of the next *Transportation System Plan* update.

Appendix

The following materials appear in this Appendix:

- Policy excerpts from the *Outer Southeast Community Plan* & the *Hazelwood Neighborhood Plan*
 - Traffic Counts
- Alternative Concept Scenario Diagrams
 - Draft Circulation Diagram
 - Draft Streetscape Diagram
- Alternative Site Design Diagrams

Policy Background

Outer Southeast Community Plan

The following policies and objectives pertaining to the study area were adopted as part of the Outer Southeast Community Plan.

MAX LRT Corridor Policy

Ensure that private development reinforces and is reinforced by the public light rail investment by encouraging development of intense commercial and dense residential uses near the MAX light rail stations.

Objectives:

1. *Encourage the redevelopment of large underused or auto-oriented sites along 122nd Avenue to a mixture of commercial and residential uses.*
2. *Improve the pedestrian orientation of buildings and streets around light rail stations.*
3. *Increase housing densities within one-quarter mile of a transit stop to at least medium-density multifamily, as the appropriate opportunity arises, and apply transit-supportive zones to commercially-zoned land.*
4. *Increase housing densities within one-half mile of the light rail stations to at least the higher density single family designations as the appropriate opportunity arises.*
5. *Establish through connections at approximately 400-foot intervals from east to west and north to south directions as the opportunity exists.*
6. *Provide sidewalks and separate them from traffic by street trees and parked cars wherever possible.*

Hazelwood Neighborhood Plan

Policy 7: 122nd Avenue Subarea

Ensure that the 122nd Avenue commercial area develops in a nodal pattern to maintain the quality of adjacent neighborhoods and enhance the pedestrian and bicycle-friendly nature of areas in-between commercial nodes.

Objectives:

1. *Recognize the role which 122nd Avenue plays as a major traffic and transit street in future planning and development efforts.*
2. *Encourage construction of a mix of housing types and commercial/retail along 122nd to increase transit use and support local business nodes.*

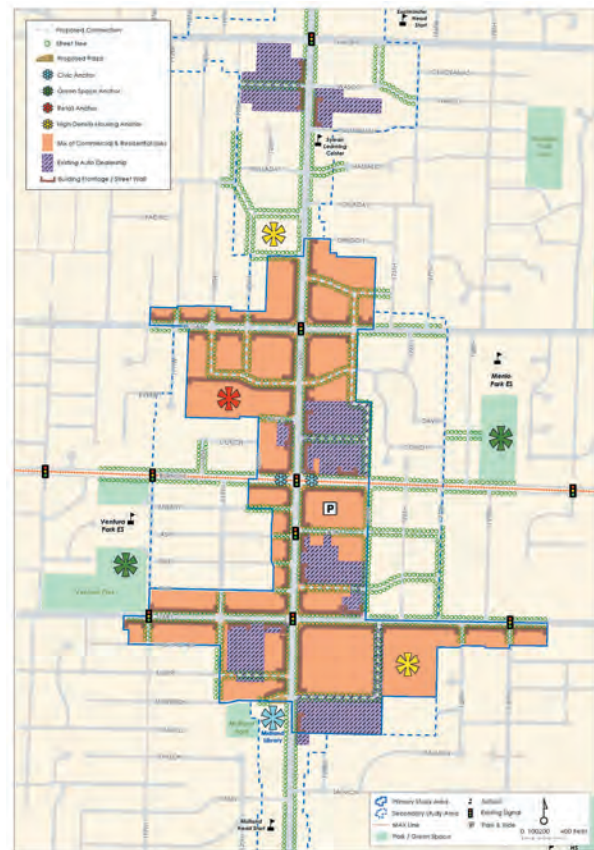
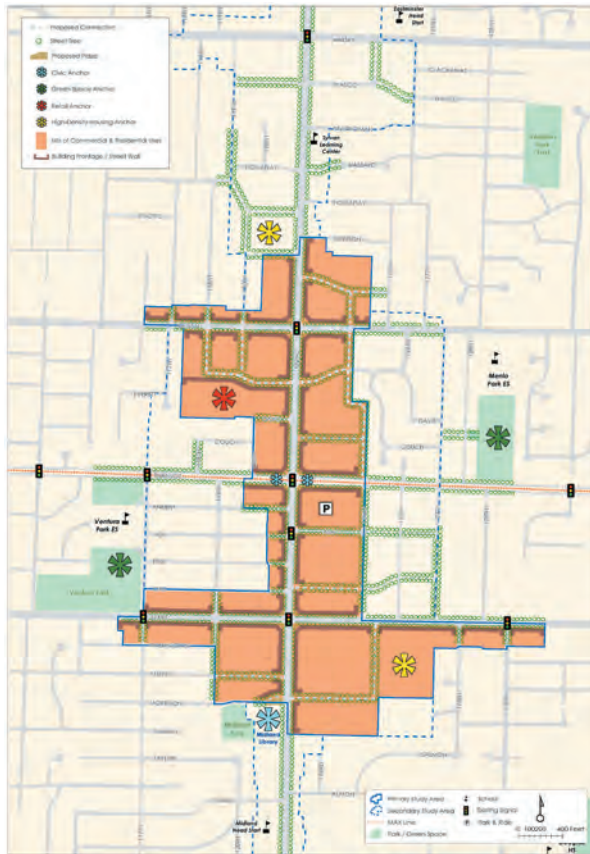
Traffic Counts

The following are traffic counts taken within the 122nd Avenue station area between 1996 and 2004. (Data provided by the City of Portland's Office of Transportation.)

STREET	DATE	VOL	East	West	North	South
GLISAN						
NE Glisan St, W/NE 122nd Ave	16-Sep-96	34880	18529	16351		
NE Glisan St, W/NE 122nd Ave	25-May-00	30486	16541	13945		
NE Glisan St entering NE 122nd Ave	14-Jan-02	26629	16316	10313		
122nd						
NE 122nd Ave, N/NE Glisan St	1-Oct-96	33070			15324	17746
NE 122nd Ave, N/NE Halsey St	7-Jul-03	31345			16131	15214
SE/NE 122nd Ave ent E Burnside St	8-Jan-98	30582			13544	17038
NE 122nd Ave, N/NE Halsey St	7-Jul-03	30345			15131	15214
NE 122nd Ave, S/NE Halsey St	7-Jul-03	28956			13648	15308
NE 122nd Ave, S/NE Glisan St	10-Aug-98	28838			13483	15355
NE 122nd Ave, N/NE Glisan St	13-May-98	28782			13465	15317
NE 122nd Ave, N/NE Glisan St	12-Sep-00	28085			13029	15056
NE 122nd Ave, N/NE Glisan St	8-Nov-04	27126			12804	14322
SE 122nd Ave ent SE Stark St	3-May-00	26960			12408	14552
NE 122nd Ave entering NE Glisan St	5-Mar-02	26951			12913	14038
SE 122nd Ave ent SE Market St	8-Jul-99	25569			12508	13061
NE 122nd Ave NB Left Turn, S/NE Glisan St	10-Aug-98	2108			2108	
STARK						
SE Stark St, W/SE 122nd Ave	3-May-00	34301	16692	17609		
SE Stark St, W/SE 122nd Ave	17-Sep-96	33446	15674	17772		
SE Stark St, W/SE 122nd Ave	20-May-98	31967	14732	17235		
BURNSIDE						
E Burnside St, W/SE 122nd Ave	1-Jun-00	9856	4877	4979		
E Burnside St, W/SE 122nd Ave	17-Sep-96	9364	4568	4796		
E Burnside St, W/NE 119th Ave	18-May-98	9125	4553	4572		

Alternative Concept Scenarios

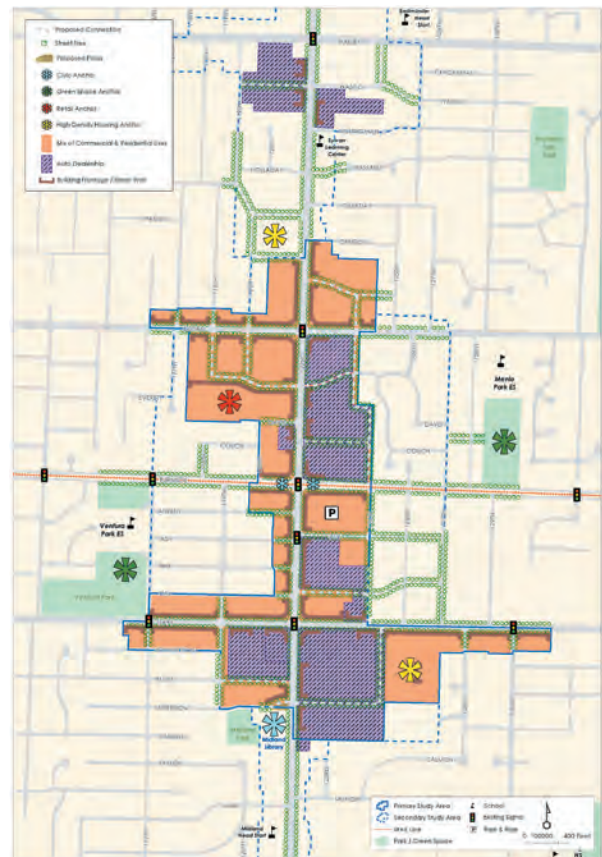
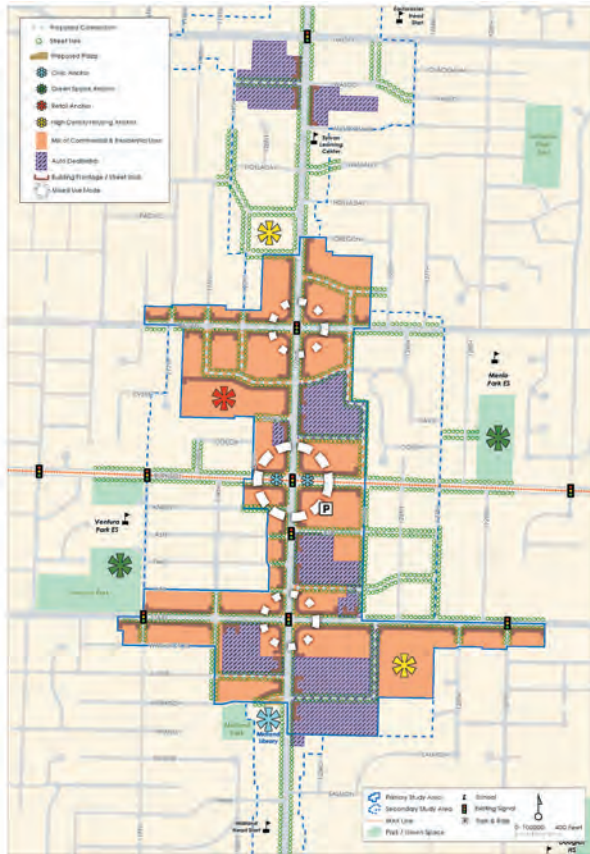
**Scenario 1: Mixed-Use Station Area
(Existing Policy)**



**Scenario 2: Mixed-Use Station Area with
Auto Dealer Reconfiguration**

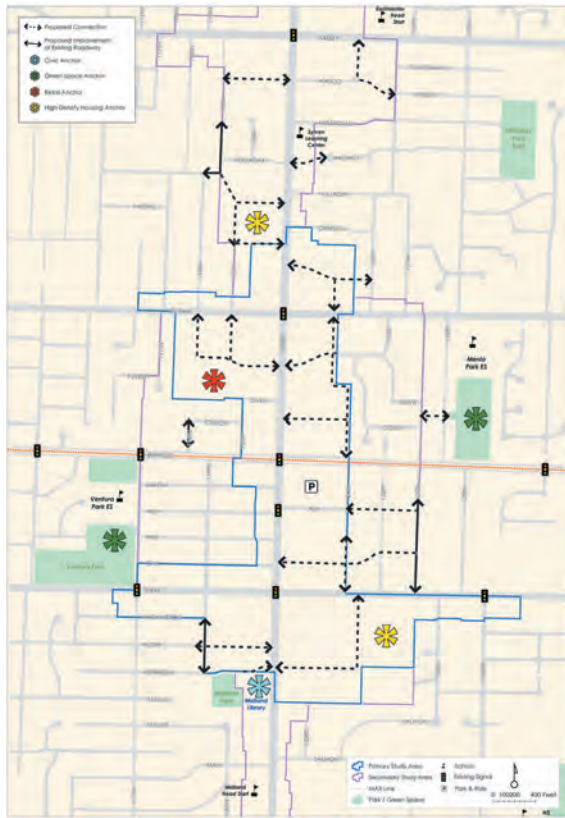
Alternative Concept Scenarios

Scenario 3: Intersection Nodes



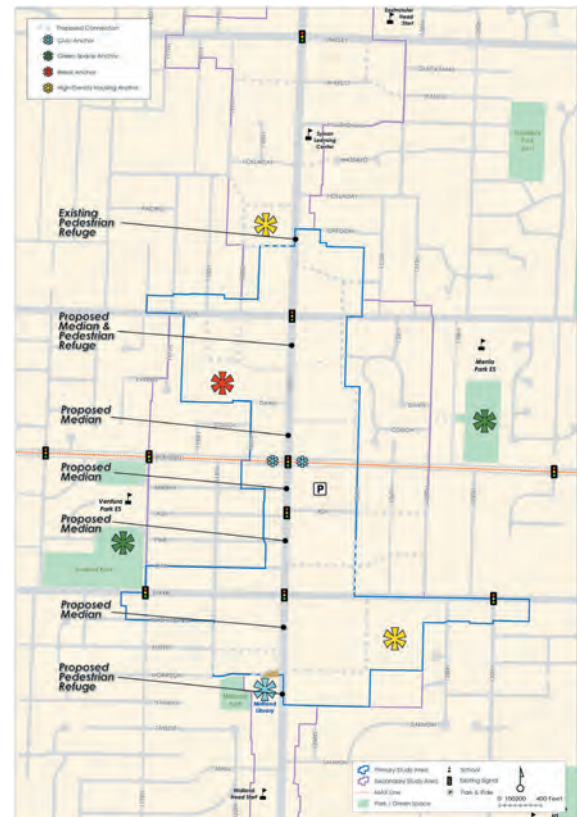
Scenario 4: Auto Dealer Emphasis

Draft Circulation & Streetscape Diagrams



Draft Circulation Diagram

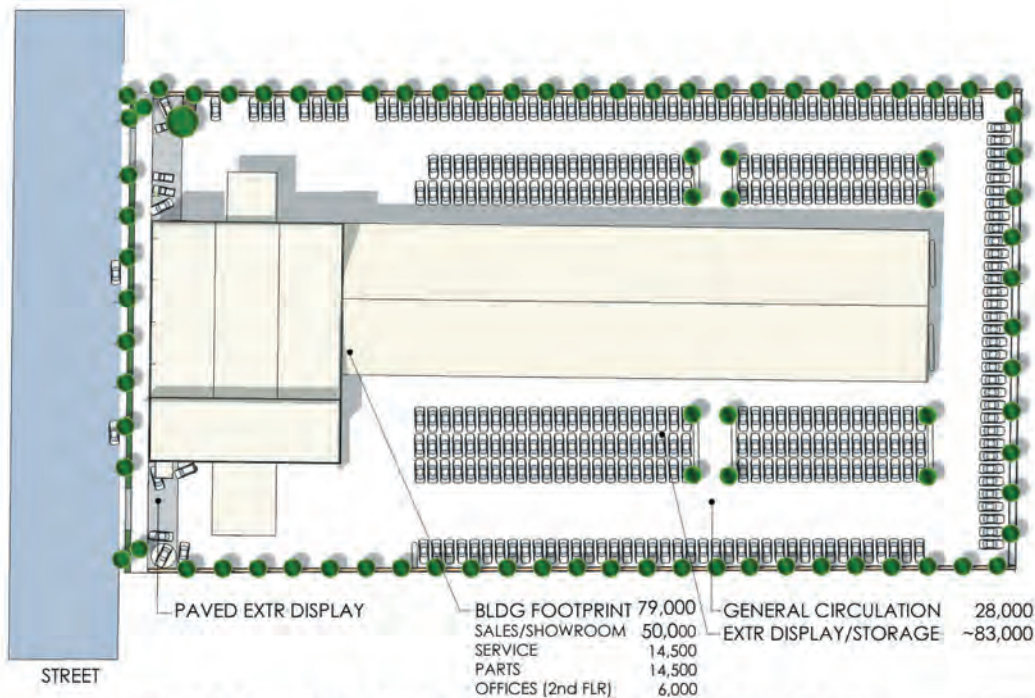
Draft Streetscape Diagram



Site Design



LOT AT NODAL CORNER, W/ FUTURE CIRCULATION LINKS



**TYPICAL LOT BETWEEN PEDESTRIAN NODES
w/ EXPANDED ENCLOSURE OF DISPLAY & STORAGE**

TOTAL SITE AREA: 197,000

Site Design

