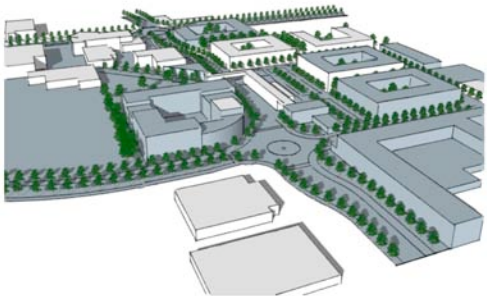
# Transit-Oriented Communities:

## a Blueprint for Bellingham, WA.

### 2011 Urban Transitions Studio (UTS)



WESTERN
WASHINGTON UNIVERSITY

March 10, 2011

# 1.0 Introduction

March 10, 2011

**2011 Urban Transitions Studio (UTS)**

## Transit-Oriented Communities: a Blueprint for Bellingham, WA.

**Overview**

The 2011 Winter quarter Planning Studio begins this year's Urban Transitions Studio project by examining redevelopment opportunities for six locations in Bellingham, Washington, employing urban planning principles known as "transit oriented communities". The course examined ways to achieve planning's social, environmental, and economic values through the master site plan process to foster the creation of transit-oriented communities. The objective of the exercise is to balance a community's social, environmental, and economic development objectives with local, state, and national and international sustainable development goals and ideals.

Because the problems that are presented in the studio project concern a variety of issues, underlying each project are questions concerning the appropriate "community fit," and the identification of constraints that must be overcome before a planning solution can successfully emerge. This course engages the student in methods for resolving policy conflicts; the analysis of physical, social and economic information; and the formulation and evaluation of planning alternatives that meet project objectives.

Students worked both independently and within a project team structure and were informed through conversations with "clients" representing the project community as well as our UTS partners. Meetings and interviews with client groups helped to inform the students about local problems and priorities and provide insights and access to information and resources. Students presented their draft, conceptual recommendations in a mid-quarter critique presentation before our UTS partners, followed by an formal presentation of their findings and recommendations at a public meeting that was held in Bellingham's City Hall on March 10, 2011.

**Urban Transitions Studio** is a collaborative partnership between WWU, Bellingham's Office of Planning and Community Development, and Sustainable Connections.

Beginning in 2010, WWU's Planning Studio class participated in a coordinated service learning curriculum that partnered several WWU classes with the City of Bellingham, Sustainable Connections, and other community and institutional partners in order to develop new urbanism planning concepts to help transition Bellingham into a more urban and sustainable community. Planning Studio is the first in the series of coordinated class investigations that emphasizes the preparation of the plan/design concept. Other classes participating in the Urban Transitions Studio program include: Planning Studio II (investigating approaches to plan implementation), Sustainable Design Studio (exploring green building technologies), and Environmental Impact Assessment (assessing the impact of the proposed development concepts). Each of the participating classes further build upon the planning concepts developed in planning studio. The program is intended to expand student learning by concentrating planning studies over the course of an entire year and incorporating multiple dimensions of the planning process that aims to effect change towards sustainable community development.

**Introduction to Transit Oriented Communities**

The sustainability of our cities—as measured by both the quality of life they provide, and the long-term environmental protection they promise to future generations—will determine the future of our planet. Considering the host of social and environmental challenges we currently face—including climate change, air quality concerns, water scarcity, food and energy security, poverty and declining social equity—the global trend toward urbanization demands that cities will need to be a part of the solution.

New transit investments offer more than a means of moving people from one point to another; they can also be an opportunity to support, and in some cases, create communities, by opening up new opportunities for people to gain access to, from, and within neighborhoods. By integrating land use, transportation, and housing policies to foster vibrant and safe mixed-use communities where residents, employees, and visitors can walk, bicycle, or take transit to reach their destinations, cities can continue to grow in a manner that is healthy for both people and the environment. If done well, this growth is an opportunity not a sacrifice, because the end result will be great urban places for people. Such is the vision of transit-oriented communities (TOC).

There is an extensive and growing body of published research providing evidence that well-designed TOC can lead to substantial social and environmental benefits. In brief, TOC have the potential to:

- Promote health by encouraging walking and bicycling, cutting air pollution, and reducing motor vehicle accidents.
- Lower expenses for transportation and housing.
- Reduce municipal infrastructure costs.
- Provide a high return on public investment in transit infrastructure.
- Help meet the growing demand for walkable neighborhoods.
- Curb land consumption and urban sprawl and thereby help to conserve working farms and forests, and protect natural ecosystems and water quality. and
- Cut energy consumption and greenhouse gas emissions associated with both transportation and the built environment.

In order to successfully promote TOC development that provide such benefits, we must first evaluate the opportunities within our existing transit infrastructure. Bellingham recently introduced a public transit system based on GO LINES – a transit system of frequent bus service along arterial streets that connect current and future areas of sufficient housing densities to primary destinations.

Each GO LINE transit route offers opportunities to examine development infill potential. A half-mile radius around GO LINE routes may encompass several distinct neighborhoods, topographies, and a range of development possibilities. Based on the "Blue Print for Washington State" typology for categorizing different types of TOC communities, the planning studio project begins with the assumption of the following order of TOC area types: Core, Urban Village, and TOC Corridor Hubs, and Neighborhood Nodes.

The Core is represented by downtown Bellingham, which offers the greatest potential for a high level of social, economic, and environmental sustainable development. Urban Villages represents Bellingham's primary strategy for infill development, through the redevelopment of underutilized districts throughout the city. Barkley Village, Fountain District, Samish Village, and other districts were identified in the city's comprehensive plan as intensive village development infill sites. TOC Corridor Hubs and Neighborhood Nodes represent other potential locations serviced by transit GO LINES that offer opportunities for infill development. Corridor Hubs represent linear areas along Go Line routes that could benefit from TOC development. Neighborhood Nodes are contiguous sites of several blocks serviced by GO LINES. Students in Planning Studio examined these Corridor and Node sites to assess their potential for additional urban infill development.

**Measures**
The overarching goal of TOC is to provide housing and transportation choices that give residents access to homes, jobs, recreation opportunities, shopping, and services to meet their daily needs, without having to rely on a motorized personal vehicle. This has the long-term result of increasing the quality of life in urban residential areas, reducing the cost of development, lessening the environmental impacts of development, and reducing transportation and energy-related greenhouse gas emissions. Potential site designs that meet the following performance goals would represent high-performing TOC.

- Bicycle and Pedestrian Connectivity: TOC areas should provide a complete pedestrian and bicycle network to facilitate safe non-motorized vehicle transportation and promote easy access to transit.
- Housing Affordability: TOC areas should provide housing that is diverse and affordable to a broad range of incomes to accommodate and encourage a diverse, mixed-income community.
- Residential and Employment Density: TOC areas should provide opportunities to accommodate future population and employment growth in order to support transit use, encourage economic development and promote social equity.
- Mix of Uses: TOC areas should include a range of uses to provide access and choices in housing, employment, stores and community services to meet daily residents' needs.
- Green infrastructure and Open space: TOC areas should provide park and open space, public areas, and recreational opportunities to meet the needs of a community with a moderate to high residential and employment density.
- Parking: TOC areas should include auto and bike parking policies and requirements that encourage housing affordability, safe pedestrian streetscapes, and less reliance on private automobiles.
- Urban design: TOC areas should feature well-designed buildings, streetscapes and public spaces that support pedestrian safety and promote neighborhood character and values.

**Policy Action**
Effective planning for TOC will require changes to the city's land use and transportation regulatory framework. The following planning objectives outline some of the possible policy changes that may be required to foster TOC development in Bellingham.

- Meaningful public engagement in TOC planning.
- Plan for public facilities and services within TOC
- Innovative land use regulations in TOC.
- Reform of auto and bike parking standards.
- Incentives for innovative and affordable housing types.
- Consider TOC as Transfer of Development receiving sites.

**The TOC Study Sites**
Six sites were identified by the UTS partners. The planning studio class formed study teams to undertake planning for these selected sites.

- Northeast Downtown TOC (a Node within the Core of downtown Bellingham).
- State Street TOC.
- WWU South Campus TOC.
- Fairhaven Transit Station TOC.
- Cordata Transit Station TOC.
- James Street TOC.

**Project Objectives, Assumptions, and Methodology**
Each team defined their project site boundaries, project objectives and assumptions prior to commencing design development. During the first week, students developed a project methodology and schedule, identifying a general approach to fact finding, resources, field evaluation, student assignments, and contact persons. The team methodologies were considered contingent and were updated periodically throughout the quarter. Students used their research methodology to develop a project critical path to show the linear progression of activities

over the 10-week study period. Student teams reported on their progress weekly.

**Standard of Excellence**
Planning studio is intended to serve two purposes: to introduce students to skills required in urban master plan making processes, and to positively contribute to public policy development in our case study partner community. Student team projects were evaluated based on the overall quality of their proposed solutions, the strength, clarify, and feasibility of their development concepts, the clear application of sound planning principles, and the overall quality of the written and graphic presentation. Only those projects that met an equivalent grade standard of "A-" or above were to be included in the final UTS Report to our community partners, and to serve as "proposed actions" in subsequent class investigations participating in the UTS program.

**Deadlines**
In order to achieve project objectives within the limited 10-week term, adherence to deadlines was essential. Deadlines for submission of reports included:

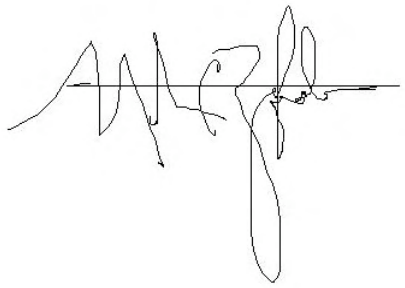
- Project Methodology / Critical Path. Week 2.
- Design Concepts, UTS critique. Week 4.
- Draft Narrative Report for Review. Week 8.
- Final Narrative Report and Graphics. Week 9.
- Published Report and Presentations. Week 10

**Product Deliverables**
Students were required to submit the following final product deliverables:

- A narrative and illustrated Master Site Plan, in final published format (hard copy, electronic PDF).
- Illustrations: Base Maps, Site Plans, 3D models and Renderings, Elevation Drawings, Photo journal.
- 20 x 30 inch Mounted Presentation Board.
- Public Informational Brochure.

The Planning Studio report entitled "Transit-Oriented Communities: a Blueprint for Bellingham, WA." serves as the "plan concept" chapter in the UTS 2011 Transit Oriented Communities investigation.

Respectfully submitted,



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# Chapter 1. Transit-Oriented Communities District Design Concept 1

## 1.1 South Campus Transit-Oriented Community

**Max Crystal, Skylar Hinkley, Nick Lennartz, and Kayleigh Schwab,**

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# Introduction

## 1.1. Purpose of the Transit-Oriented Community Subarea Plan

This document provides a policy framework for the creation of a transit-oriented community on the site currently being used as commuter and faculty parking-lots on the southern portion of Western Washington University's campus. The goal of the subarea plan is to guide further development towards the community vision specified in chapter two. Specific implementation measures must also be adopted to incorporate this vision into code.

## 1.2. Relationship to the Western Washington University Institutional Master Plan and TOC

Relationship to Western Washington University Institutional Master Plan

The Institutional Master Plan land use classifications for the proposed subarea include:

- Academic
- Student activities
- Open space
- Administrative/support (south campus transit center)[1]

Each of these land uses will be expanded upon in the Western Washington University South Campus Transit-Oriented Community Subarea Plan.

Relationship to TOC (Transit-Oriented Communities)

Western Washington University's campus and projected student population qualifies this subarea as a high priority for TOC (Transit-Oriented Community) development methods.

TOC development methods include:

- Supporting WTA high-frequency transit service
- Creating residential densities that will support safe, viable, and convenient opportunities to use transportation modes other than the private automobile
- Reducing residential parking demand
- Establishing parking reduction allowances for residential units within a mile of the WTA Primary Transit Network
- Reinforcing the link between land use and public transportation
- Encouraging land development proposals to utilize the full capacity of the existing multimodal transportation system, especially transit and non-motorized modes.

The south campus site provides ideal conditions to meet these TOC policies and goals as the site currently performs as a high-traffic transit area for pedestrian, automobile and bus service.

## 1.3. Community Characteristics

The character that currently defines the South Campus area is a predominantly transitional commuter area located between the educational facilities of WWU and the Bellingham Happy Valley neighborhood. The current scheme of

[1] City of Bellingham, Western Washington University Institutional Master Plan: An Addendum to the Western Washington University Neighborhood Plan, 2001. Bellingham, WA.

parking, bus infrastructure, open space, and student athletic facilities creates a highly diverse set of uses that are conducive to support greater infill development.

### 1.4. Issues and Opportunities

South Campus is framed by the Sehome Hill Arboretum and South Hill creating a sweeping valley view that looks upon the Chuckanut Foothills, a view that should be kept to compliment the additional residencies and academic facilities.

Currently the southern portion of Western Washington University's campus is being used as:

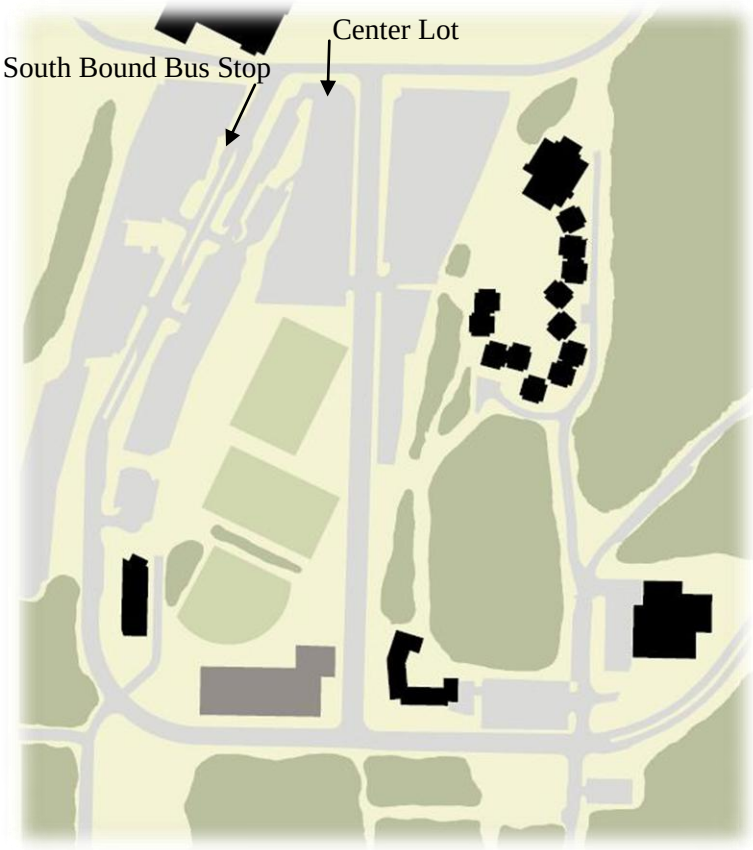
- Commuter and faculty parking-lots
- Camps Services:
    - parking services
    - police services
    - the student health center
- Athletic fields

If Western Washington University, as a premier institution in the State of Washington, is to grow over the next 50 years the only University owned property adjacent to the existing campus consists of this subarea plan of approximately 10 acres in size. Current uses of the property do not utilize this space to the highest potential, and thus the southern portion of Western Washington University's campus is largely underdeveloped. In comparison to the high density usage of the campus, this area offers tremendous opportunities for infill development.

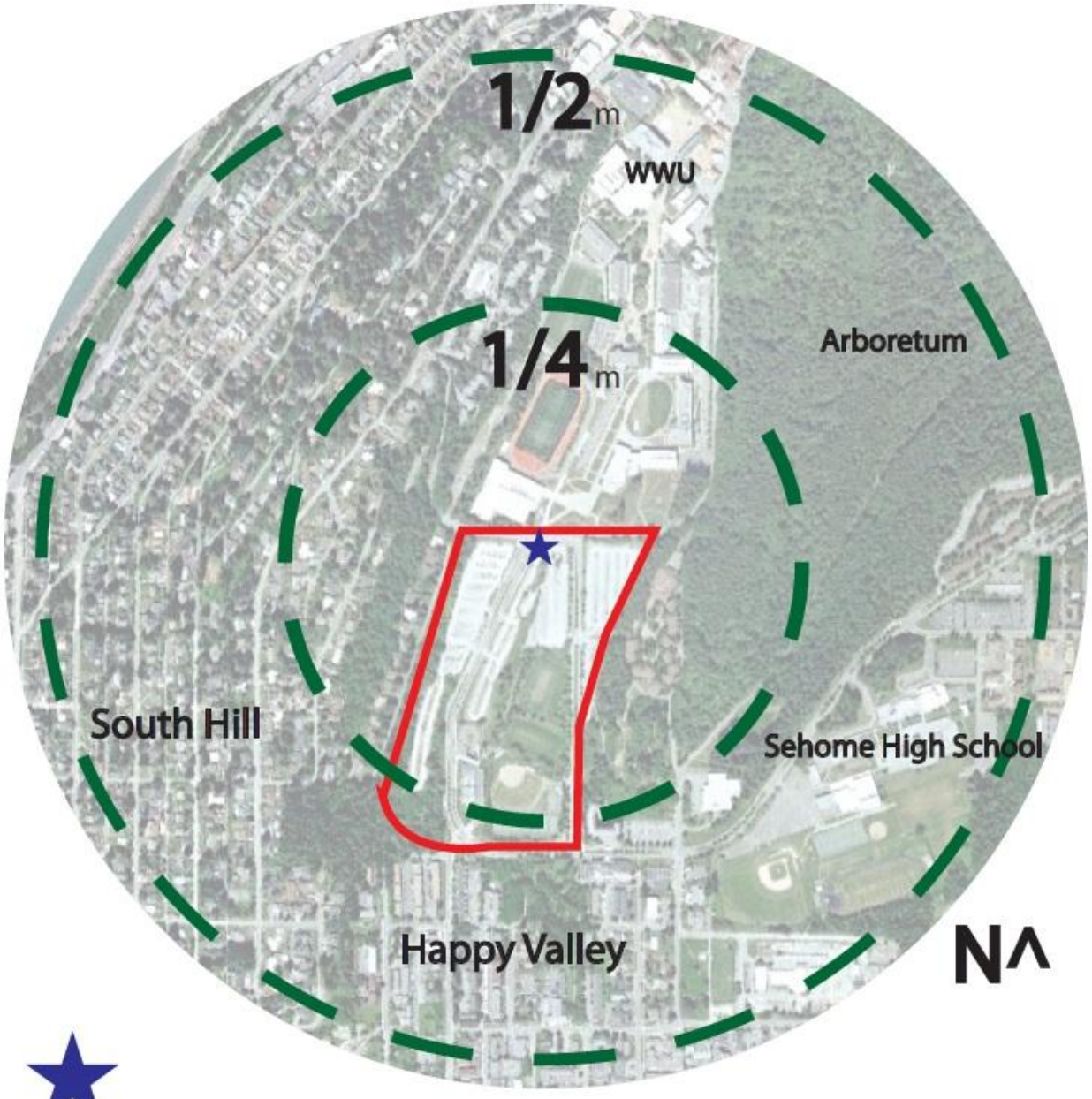
**Existing Conditions:**

View of Center Lot

View of South Bound Bus Stop on Bill McDonald



## South Campus: Walking Shed & Vicinity Information



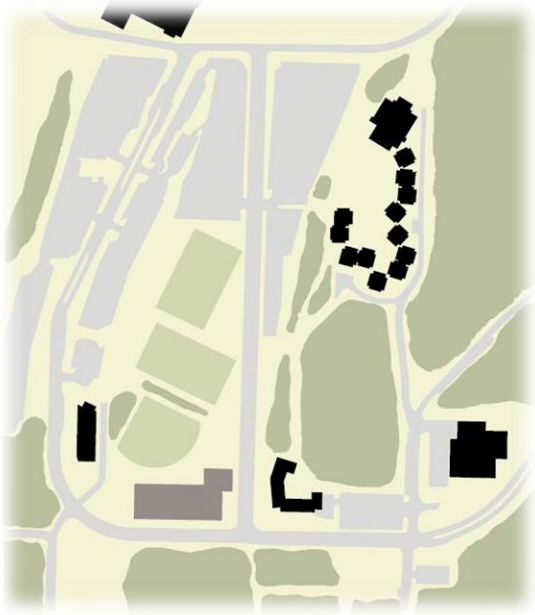

**Proposed Transit Center, Central District Area**

1.5 miles to WTA Downtown Center 1.25 miles to Train & Bus Station 1.1 miles to Park & Ride

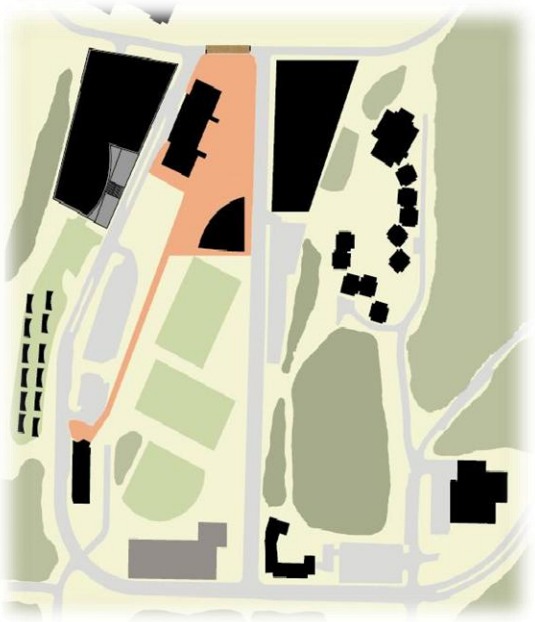
## 2. Vision

In the future, the southern portion of Western Washington University's campus can become a vibrant transit-oriented community. The concept includes: Increased residential development, institutional facilities, an outdoor theater, and a transit center that supports commuters and residents with a destination. The concept serves to significantly reduce automobile trips for services and access to educational facilities.

**Existing Building Footprint**



**Proposed Building Footprint**



### 2.1 User Profiles

When creating a new space for people it is imperative that certain assumptions are made in order to provide viable and desirable uses for those who will interact with benefit from the proposed development. The following is a set of profiles that aim to describe the demographic of potential users and assumptions that relate to the services and features of the South Campus redevelopment proposal. By administering a survey it has been determined that the potential patrons of this area would fall into three general categories: Student, Staff/faculty and Short term users (families, speakers, foreign students).

The following are four user profiles that are representative of these prospective patrons:

**Student**- Riley

- Age 20
- Travels by Bus
- Studies Biology
- Works at Zoe's Bookside Bagels
- Spends ~40 hours per week on campus
- Purchases 5-8 meals on campus per week
- Drinks 7 cups of coffee on campus per week
- Frequently travels downtown after class
- Currently does a majority of shopping at Fred Meyers

**Faculty**- Hayden

- Age 46
- Travels by Bus
- Teaches Math
- Spends ~70 hours per week on campus
- Purchases 4-5 meals on campus per week
- Drinks 10 cups of coffee on campus per week
- Currently does a majority of shopping at Haggens

**Visitor**- Xi Lin

- Age 23
- From Korea
- In Bellingham for 1 Quarter
- Studying English
- 2nd time in US
- Eats most meals on campus
- Occasionally visits downtown
- No current shopping routines

**Visitor**- Suzy & Thom

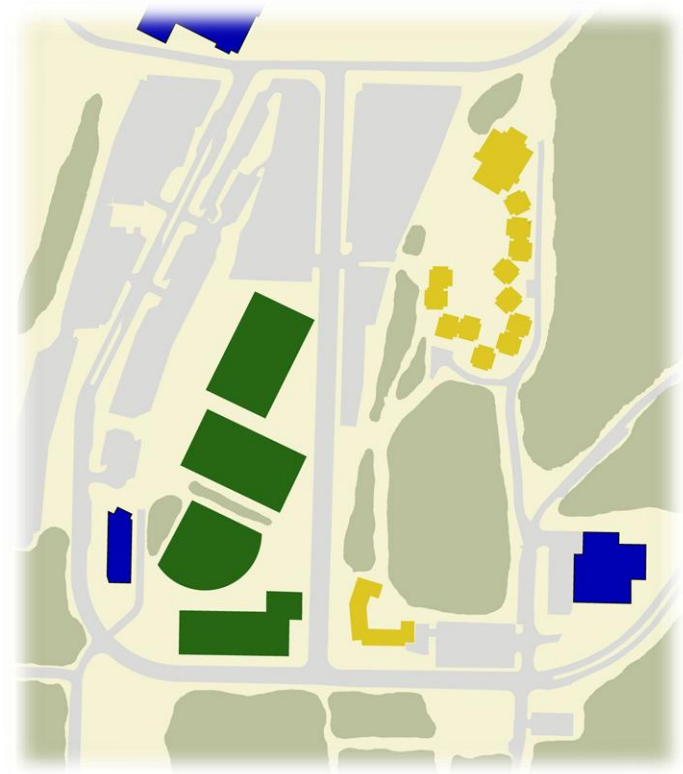
- Ages 52 & 49
- Live in Olympia
- Their child Riley attends to WWU
- In Bellingham for 1-3 nights
- Traveling with 14 years old child
- Middle-class status
- Occupation: Marketing representative and stay at home parent
- Drink 2-4 cups of coffee/tea per day

# 3. Characteristics of TOC District Plan

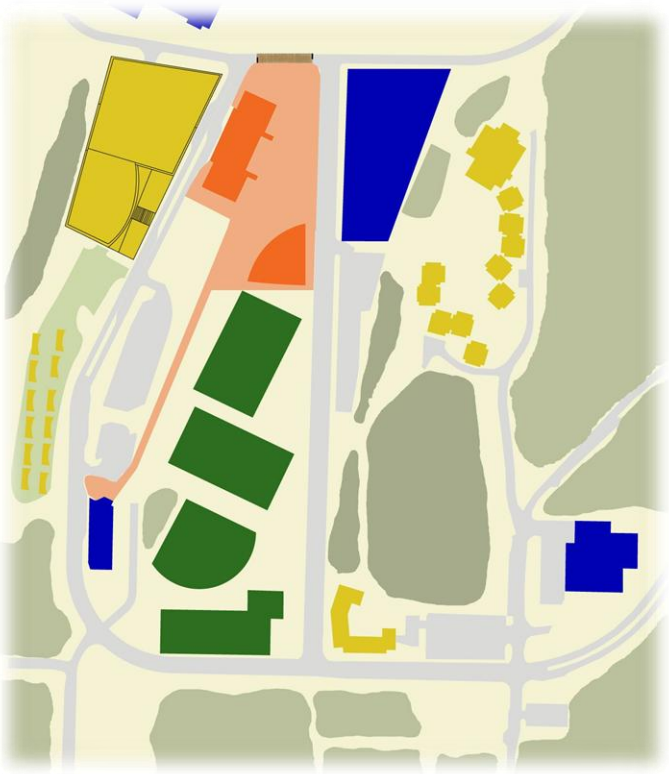
## 3.1 Design Concept

As an extension of Western Washington University, site analysis recommended an adherence to a similar architectural design to the surrounding buildings in an effort to create a fluid continuation of campus. It is suggested that the Campus Services Building, the Rec Center, the Academic West building, and Communications building, are used as a model for the architectural style for the proposed transit center, residential development, and academic facilities.

While continuing the academic aesthetic of campus was determined to be of high value, the proposed transit center, residential development and academic facilities will have a unique sense of place that differentiates this site from the rest of the university due to the open nature and mixture of uses on the site. Vendor's Row outside of the Viking Union is the only other site on campus that allows for commercial activity that is not affiliated with University. The proposed transit center will have expanded services that are not explicitly University affiliated, giving students, residents and faculty a place to enjoy services that are emotionally detached from the school. These destinations will still be conveniently located to respond to market demand while fulfilling the transit-oriented goals of being able to work, shop, and live within a short work, bus ride or bike ride.



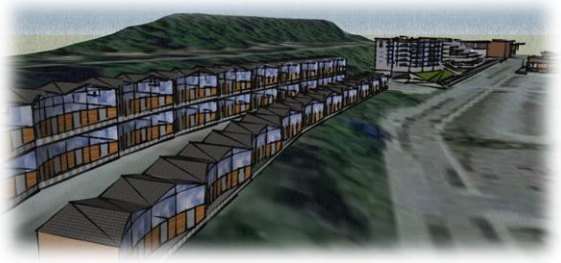

Existing Land Uses



Proposed Land Uses

### 3.2. Residential

Over the next fifty years Western Washington University will likely see an increase in enrollment. In an effort to maintain the medium size feel of the University, it can reasonably be expected that an additional 5,000 FTE (full time equivalent) students be enrolled, totaling Western's enrollment to about 19,000 FTE students. Given this increase in student enrollment and associated faculty employment it is proposed that the University provide for a portion of the increase in housing demand.



The plan suggests that the University provide around 250 additional residential units. This would increase on campus housing by about 24%. A variety of housing options is encouraged to cater to the diversity of users in students, faculty and visitors.

The majority of residential units would be supplied by creating a five story apartment building. This apartment building would be comprised of a mixture of studios, one bedroom, two bedrooms, and three bedroom units. All units should have a kitchen facility. There should also be the ability to rent furnishings for any unit. A select number of units may be set aside for the use by guests associated with the University including visiting professors, lecturers, parents and other university short term guests. Short term housing rentals may range from daily use to quarter-long use. In addition, the facility will have underground parking, onsite laundry facilities, common lounges and computer labs. Green roofs will serve as community gardens and open space while also providing hands-on educational opportunities.

To further provide a variety of residential options a 120 unit cluster of townhomes is proposed. This residential development will offer users a more secluded, independent living option for meeting the diversity in housing needs.

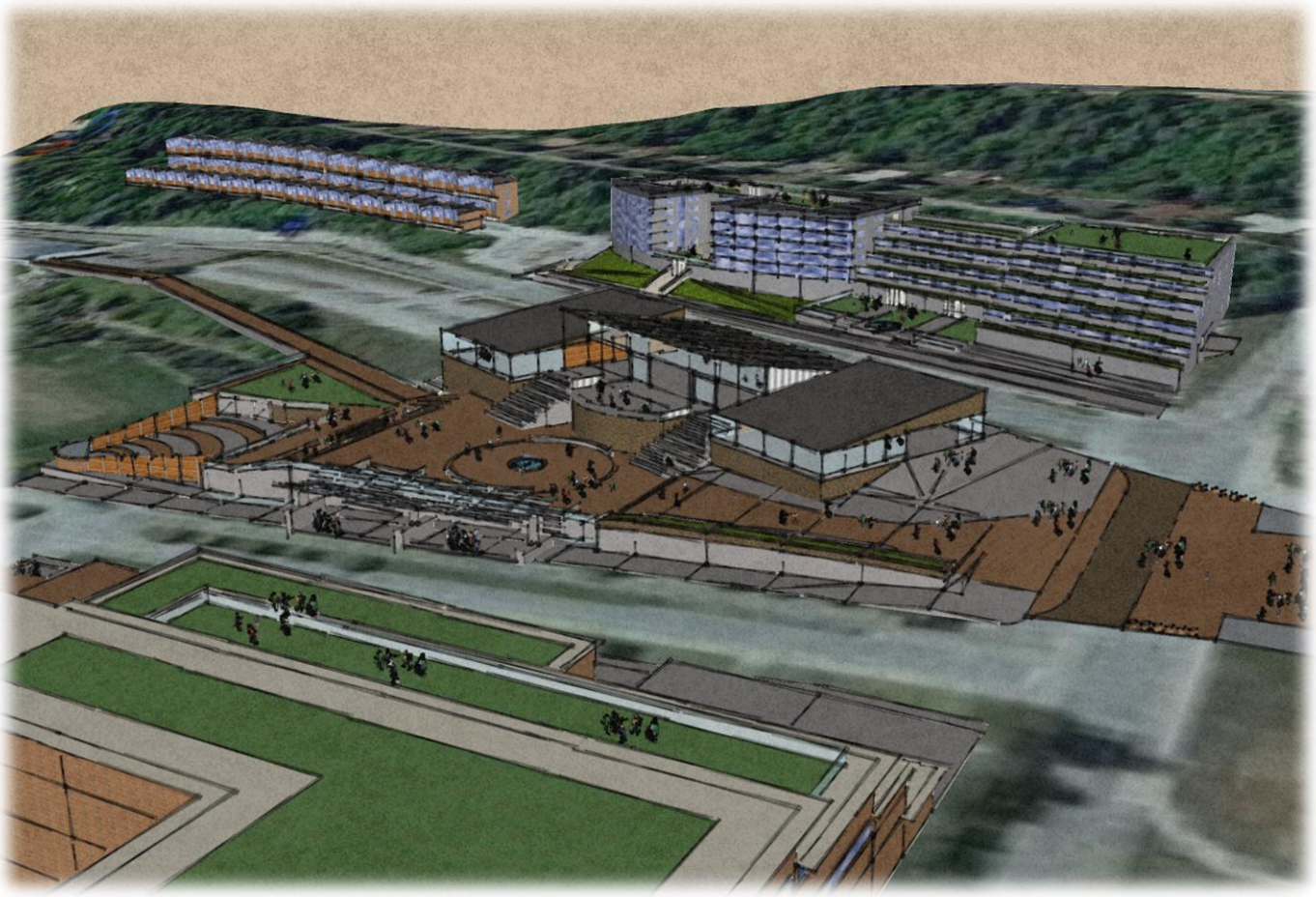
### 3.3. Commercial

The proposal includes a transit center with an open market and vendors. This covered market would allow for commuters to utilize a vendor service while waiting for the bus. The open market design allows for flexibility and versatility. It is predicted that the majority of vendors will offer food services, selling items such as fresh produce, or prepared meals. The market will also provide a center for community activities such as a space for students to showcase art, or provide spaces for student organizations. In addition to the open market space, this site could support permanent commercial uses such

as a café, bistro, restaurant or bar depending on market demand.

### 3.4. Metrics

| Land Use | Existing Sq Ft | Proposed Sq Ft | Existing Units | Proposed Units |
|---|---|---|---|---|
| **Residential** | **0** | **318,000** | **0** | **250 with up to four residents per unit**<br><br>**1,000 residents-increasing on campus residents by 24%** |
| **Commercial** | **0** | **39,600** | **0** | **Up to 64 small vendors at 10X10ft slots**<br><br>**Up to 6 large commercial activities at 30X30 ft slots** |
| **Institutional** | **14,800** | **80,000** | **1-Campus services** | **Approximately 40 classrooms at 1,500 sq ft** |
| **Parking** | **There are currently 2,000 parking spots and there should be no change to the number of parking spots due to the creation of underground parking facilities.** | | | |

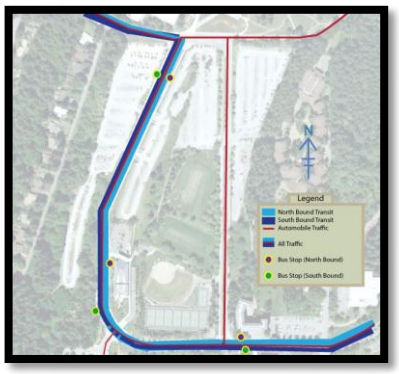


### 3.5. Circulation, Streetscape and Parking

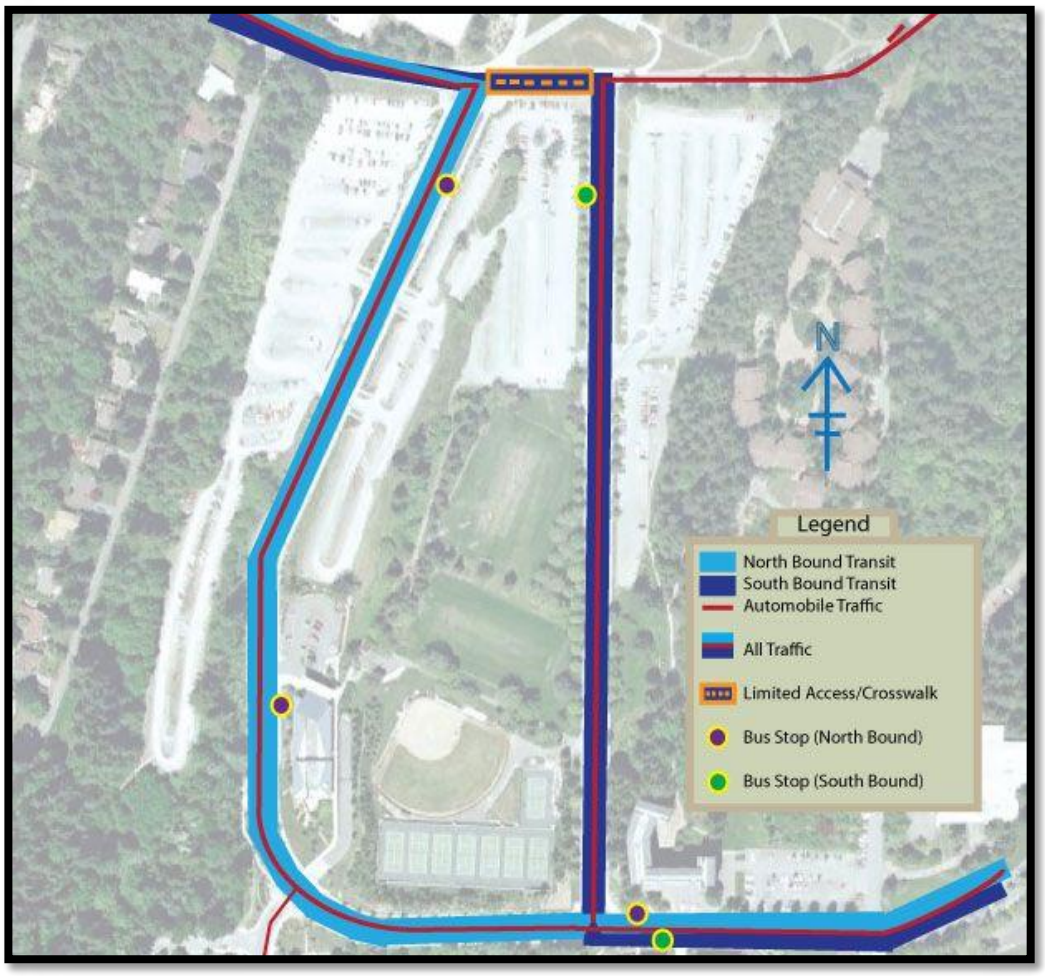
Circulation

In an effort to improve traffic circulation and pedestrian connectivity a full service transit center is proposed. The proposed transit center would be on the parcel of land between Bill McDonald Parkway and South College Drive. In order to ensure the success of the transit center the WTA bus routes traveling south through campus would need to be slightly changed. Rather than driving south on Bill McDonald Pkwy the buses traveling south through campus would use South College Drive. This change would drastically increase pedestrian connectivity and make a transit center feasible.

With both north and south WTA bus routes dropping students off on the same parcel of property, the parcel becomes a pedestrian island and transit center becomes feasible. The transit center becomes a destination to be utilized by both commuters going north and south on WTA routes. This is a significant improvement to the current layout in which the bus stops are arranged across the street from each other on Bill McDonald Pkwy.



Existing Bus Route




Proposed Bus Route

Figure __ Changes to WTA Bus Routes through Western's Campus

Given that south bound bus routes will now be making a left on to Bill McDonald Pkwy from South College Drive, there will need to be a method of handling the change in traffic flow. Currently it is common to see a back up of automobiles going south on South College Drive. With the proposed change in bus routes it is important that the traffic flow on South College Drive not adversely affect the timing of bus routes. Two possible methods of addressing this concern are as follow: The first is the installation of a traffic signal at the intersection of South College Drive and Bill McDonald Pkwy. The second is the creation of a three way stop at the intersection of South College Way and Bill McDonald Pkwy to facilitate southbound bus access onto Bill McDonald Pkwy.

The installation of a traffic signal at the intersection of South College Drive and Bill McDonald Pkwy would increase monetary expenses, however, if effectively synchronized with the other traffic signals on Bill McDonald Pkwy the additional traffic signal may maintain the flow of traffic in a way comparable to the existing arterial usage.

The creation of a three way stop at the intersection of South College Drive and Bill McDonald Pkwy would act as a traffic calming measure and increase pedestrian safety, while also addressing the concern of bus routes being unable to efficiently make a left onto Bill McDonald Pkwy. However, the creation of a three way stop would reduce the arterial function and flow of Bill McDonald Pkwy at the intersection with South College Drive.

Additional circulation changes are proposed in an effort to increase connectivity and pedestrian safety. In order to allow WTA (Whatcom Transportation Authority) commuters to comfortably walk from the transit center to Western's main campus it is proposed that West College Way between Bill McDonald Pkwy and South College Drive be limited to south bound buses only. This will allow pedestrians to cross freely, without the frequent interruption of the automobile. Vehicles going north on South College Drive will have to turn right onto West College Way, and vehicles going west on West College Way will have to turn onto South College Drive. Similarly, vehicles going north on Bill McDonald Pkwy will have to turn left onto West College Way, and vehicles going East on West College Way will have to turn right onto Bill McDonald Pkwy.

Proposed Closure to West College Way

Parking

While the focus of transit oriented growth is not on providing parking, multimodal transit does include the individual automobile and thus parking is a continued concern. Parking will be provided in a number of underground parking facilities. Given the topography of the proposed site for institutional facilities, underground parking is feasible. Underground parking facilities will also be feasible due to the topography of the proposed residential site. The intention is that residents will not need to bring a car due to the proximity to the transit center, thus no new parking will be provided, though existing parking amounts will be provided through proposed underground facilities. Additionally, it is also proposed that the surface parking-lot adjacent to the campus services parking-lot be extending, creating one combined surface parking-lot.

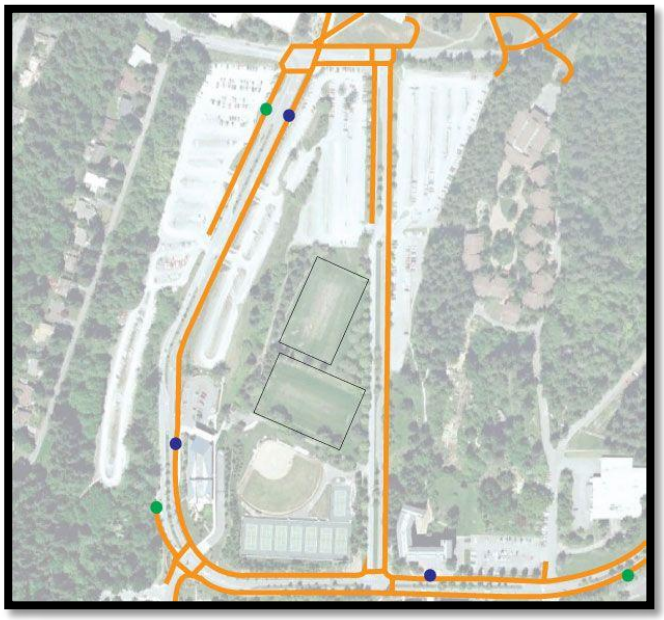
### 3.6 Parks, Plazas, and Neighborhood Connections

The transit's centers open market design will serve as covered public space. Frequent service provided by WTA will allow the transit center to act as a destination, furthering the connection between Western Washington University and downtown Bellingham.

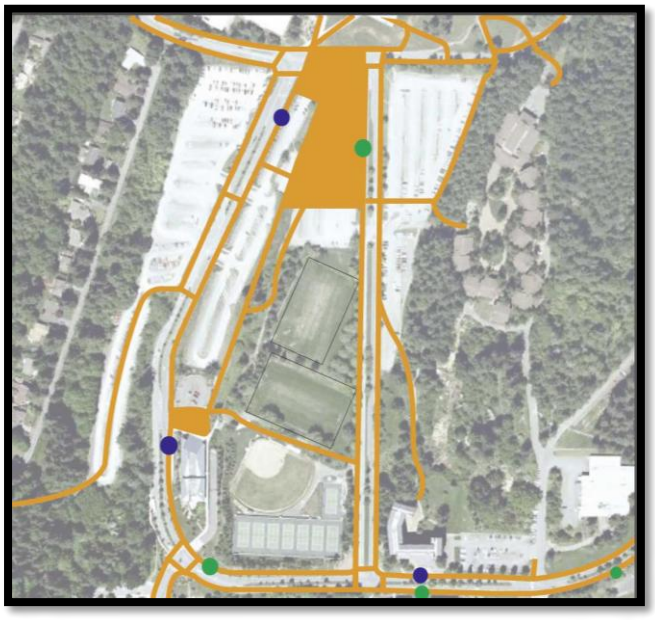
A large plaza will connect the transit center's covered market with the south bound bus stop. An outdoor theater is also adjacent to the large plaza and transit center. The outdoor theater can function as public seating, or as a venue for performances.

### 3.7 Capital Facilities

The Western Washington University South Campus Subarea contains basic capital facilities, such as utility infrastructure, streets, bike lanes, and sidewalks. The creation of a transit center is the most significant improvement of capital facilities within this subarea proposal. Within this proposal pedestrian infrastructure will see a number of improvements. The closure of West College Way for pedestrian and limited bus use should allow for safer travel from south campus to the main campus. Additional sidewalks and trails are recommended to improve pedestrian connectivity on the site, connecting the transit center with the health center, adding a side walk along the entire length of both sides of South College Drive, adding cross walks, connecting Fairhaven College to the proposed academic facilities, and connecting the residential development with the City of Bellingham trails near 20th Street are all recommended pedestrian improvements.



Existing Pedestrian Infrastructure



Proposed Pedestrian Infrastructure

# 4. Relationship of Planning Concept to TOC Goals

## 4.1 TOC and LEED ND

The proposed plans for a transit oriented community on Western Washington University's South Campus emulate the principles of Transit-Oriented Communities (TOC) and LEED-ND.

Transit Oriented Communities

The fundamental principles of Transit Oriented-Communities as put forth in Transit-Oriented Communities: A Blueprint for Washington State[2] are:

- Pedestrian and Bicycle Connectivity
- Housing Affordability
- Residential and Employment Density
- Mix of Uses
- Green Infrastructure and Open Space
- Parking
- Urban Design

In an effort to meet these principles the South Campus Community will:

- Increase pedestrian connectivity from the proposed transit center to Western's main campus by reducing traffic on West College Way to authorized vehicles only.
- Increase housing densities and affordability by creating a variety of residential units adjacent to the transit center.
- Create a mixture of uses by locating residential, commercial, and institutional uses within a short distance from the transit center.
- Increase usable public space by creating a public plaza adjacent to the transit center.
- Maintain parking needs by providing underground parking facilities.
- Create urban design standards that encourage pedestrian use.

The creation of a transit-oriented community on Western Washington University's south campus seeks to improve the quality of life for residents and commuters, while minimizing the environmental and social impacts of single occupancy commuter trips.

LEED-ND

LEED-ND offers standards in an effort to encourage smart growth, urbanism, and green building[3]. The following are LEED-ND principles that should guide the development of the South Campus Transit Center Proposal:

- Smart Location and Linkage
- Neighborhood Pattern and Design
- Green Infrastructure and Buildings

The South Campus Transit Center would be located on underutilized space and intends to increase the proximity of housing to jobs and institutional facilities. This relates to the Smart Location and Linkage requirements outlined in LEED-ND.

The proposed transit center, proposed changes to circulation, and the increase in usable public space are a few examples of how the South Campus Transit Center proposal would create a neighborhood pattern and design that would meet LEED-ND standards.

Many of the proposed buildings should exhibit green roofs and solar panels. All proposed buildings will need to be LEED certified which is required under state law for publically funded buildings, and also required for LEED-ND certification.

While the goals of the South Campus Transit Center are first and foremost related to the quality of life of the residents and commuters utilizing the space, the principles laid out by LEED-ND and Transit-Oriented Communities: A Blueprint for Washington State stand as a guide to reach the goal of increasing quality of life.

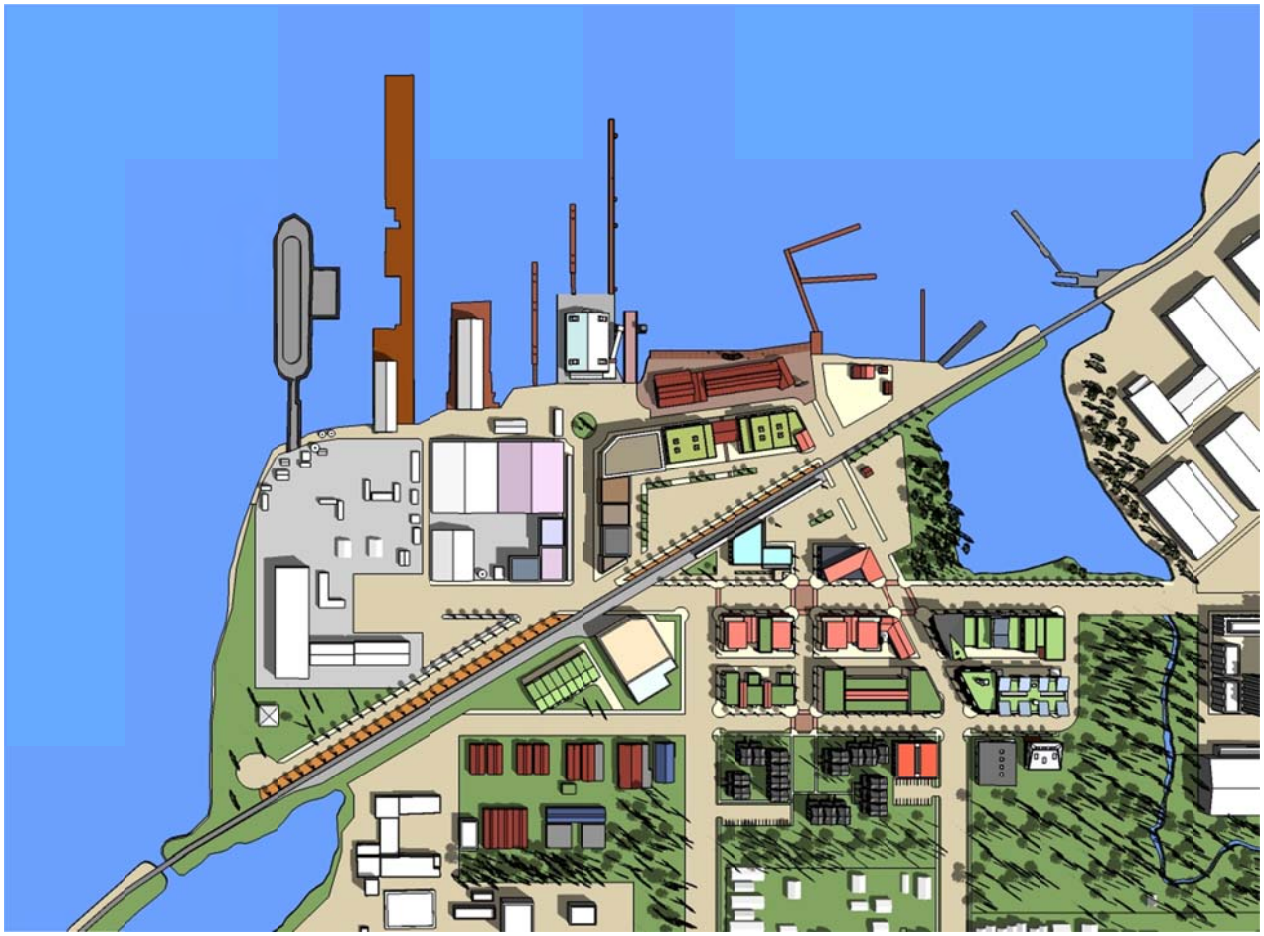
[2] Transit-Oriented Communities: A Blueprint for Washington State, Furturewise, GGLO, Transportation Choices Coalition, http://futurewise.org/resources/publications/TOC%20Blueprint%20Final%2011-23-09%20for%20Website.pdf

[3] U.S. Green Building Council, LEED 2009 for Neighborhood Development Project Checklist, http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148

# CHAPTER 1. TRANSIT-ORIENTED COMMUNITIES DISTRICT DESIGN CONCEPT 2

## 1.2 Fairhaven Terminal Transit Oriented Community

Trevor Hennings, George Juszynski, Nick Sund and Justin Sant



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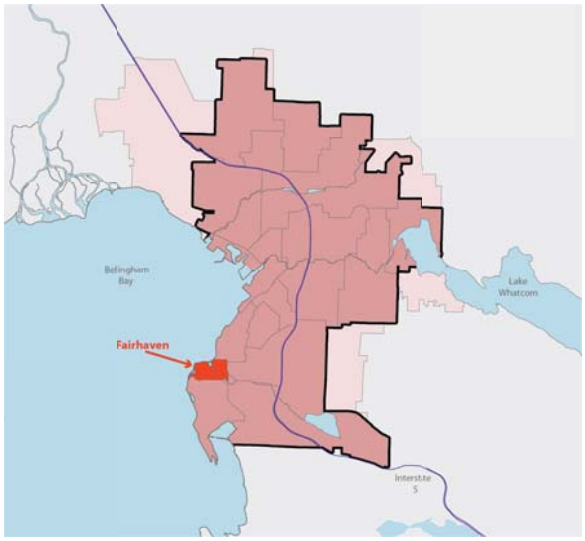


**Fig 1.2.1: Vicinity map**

## 1. Introduction

### *1.1. Purpose of the Fairhaven Terminal TOC*

The Fairhaven Terminal site is located west of Fairhaven's Historic District and Padden Creek, east of Marine Park, north of the Padden Creek/Larrabee Greenway, and south of Harris Bay. It straddles both sides of Harris Avenue and is connected to McKenzie Avenue, 4th Street, 6th Street and 8th Street. The area has served as a maritime industries site for 160 years and also serves as a major transportation node for Bellingham and the region. As a major transportation node, this area is a particularly good location to develop into a transport-oriented community (TOC).

**Fig. 1.2.2: Aerial view of the Harris Bay**

The goal for redevelopment is to transform this area into a TOC, to provide housing, commerce and employment while encouraging walking, bicycling and use of the existing transport facilities. The goal of the TOC is to provide all the necessities of daily living within a five minute walk from the center of the community and to minimize the necessity of automobile use to accomplish the tasks of daily living.

**Fig. 1.2.3: An example of mixed-use developments frequently found in a Transit-Oriented Community (TOC)**

### *1.2. Relationship of the Fairhaven Terminal Plan to TOC Goals and Policies*

This TOC plan will exhibit nine broad TOC goals that are tailored to the specific site characteristics of Fairhaven Terminal. This site will (1) *accommodates Bellingham's growing housing demand* by providing a dense and diverse supply of residential units of varying prices and rents, preventing sprawl outside the city limits and taking advantage of existing municipal infrastructure.

With a dense set of nearby residents, this site can help (2) *establish a dense and diverse mix of new commercial and light industrial uses* to support and be supported by the new residents.

**Fig 1.2.4: Fairhaven Shipyard, a local water-dependent industry**

**Fig. 1.2.5: Northern façade of the Bellingham Cruise Terminal**

**Fig. 1.2.6: San Juan Cruise and Alaska Ferry vehicle loading dock and pedestrian bridge**

At the same time, this site can (3) *conserve spaces that enable entrepreneurial start-ups and small industries* to provide nearby jobs that support the local economy.

If the future community is given a (4) *defined center and edge*, pedestrian oriented businesses and residents preferring a car-free lifestyle can thrive within 5) *a network of safe, walkable, human-scale streets*, built around (6) *characteristic structures that retain the area's maritime heritage*.

Finally, this site provides an ideal opportunity to utilize (7) *low-impact development techniques, sustainable buildings and green infrastructure* to minimize long-term operation costs and reduce municipal taxes.

In addition, this site can be an ideal place for (8) *education and inspiration* for both young and old, with a potential for a technical marine-oriented school, interpretive signage and swaths of native vegetation. Finally, this site can support (9*) useful public spaces* that support civic participation, entertainment and recreation.

### *1.3. Relationship of TOCs to Washington State's Growth Management Act*

The Growth Management Act[1] was enacted in 1990 to guide and coordinate sustainable stewardship of the state's land, economic and ecological resources. The GMA requires that municipalities develop long term comprehensive plans that encourage ecological stewardship, sustainable economic development and responsible land management. The GMA lists thirteen guidelines for planning of Washington state cities and counties. The GMA Planning guidelines addressed in the Fairhaven Terminal TOC are paraphrased below:

1. *Urban Growth:* encourage development in areas where infrastructure can be efficiently provided.
2. *Sprawl Reduction:* encourage compact development and infill.
3. *Transport:* encourage local and regional multi-modal transport systems

1Revised Code of Washington (RCW), Chapter 36.70A

### *1.4. Relationship of TOCs to Bellingham's Comprehensive Plan*

The *2006 City of Bellingham Comprehensive Plan*[2] states the need for 'urban centers' like the proposed Fairhaven Terminal TOC in Bellingham. These urban centers should be developed as unique neighborhoods (Vision for Bellingham (VB) 1), should reflect the city's commitment to waterfront access (VB 8), have a working waterfront (VB 21) and to make efforts to preserve historic character (VB5). Waterfront development should emphasize residential, recreational, professional, commercial and industrial uses (VB 54). The design guidelines express a commitment to development of neighborhoods that are transport, bicycle and pedestrian friendly and that minimize the need for parking (VB 14).

### *1.5. Community Characteristics*

<u>History</u>

The Town of Fairhaven was officially platted in 1883 by 'Dirty' Dan Harris and incorporated into the City of Bellingham in 1903. Harris was a harpooner, trader, rum-runner, a Northwest frontiersman, trail packer, sailor, land speculator and a developer, among many other things. He settled the land, made deals with the First Nations people, speculatively purchased land, and built much of the town with his own hands, gumption and entrepreneurial spirit. Dan reportedly spent his first $16,000 of real estate proceeds to construct a three-story hotel and a deep-water dock at 4th and Harris Streets. This site's main street, Harris Avenue, and nearby Harris Bay were both named after the infamous yet beloved Fairhaven founder.[3]

***Fig. 1.2.7: Dan Harris***

Originally known as 'Fairhaven Wharf', the Fairhaven Terminal TOC site has experienced significant water development since the late 1800s, hosting a wide array of industries. The site has been one of the largest contributors to the local industrial economy and has been one of the outstanding locations in Bellingham for manufacturing and industrial jobs. Past industries include shipbuilding, foundries, rail depots, saw mills, warehouses, and cold storage. In addition, Fairhaven Wharf was once home to the largest salmon cannery in the world, Pacific American Fisheries (PAF).

The Happy Valley trolley line ran along Harris Avenue from the late 1800's until to the early 20th Century. This early form of transit helped move residents inexpensively to and from home, work, downtown Fairhaven and nearby parks and playgrounds. It was part of a network of trolley lines that extended throughout the rest of the city.

**Fig. 1.2.8: Happy Valley Trolley**

A marina was built on the Fairhaven Wharf waterfront in the 1930s and lasted for almost 10 years before being destroyed in a storm in 1947. When the PAF can- labeling factory was shut down in the early 1980s, the Port of Bellingham lobbied and made the future side of the Fairhaven Terminal TOC the new southern terminus of the Alaska Marine Highway System (AMHS).

In October of 1989, the Bellingham Cruise Terminal officially opened with weekly service to Ketchikan, Alaska. In 1995, the former PAF office was

2 Retrieved from: http://www.cob.org/documents/planning/comprehensive-plan-code-amendments/comprehensive-plan/chapter-1-comp-plan.pdf
3 http://dan-harris.info/

converted into the first multimodal transportation facility, linking a new Amtrak, Greyhound, and public transit station with the cruise terminal.[4]

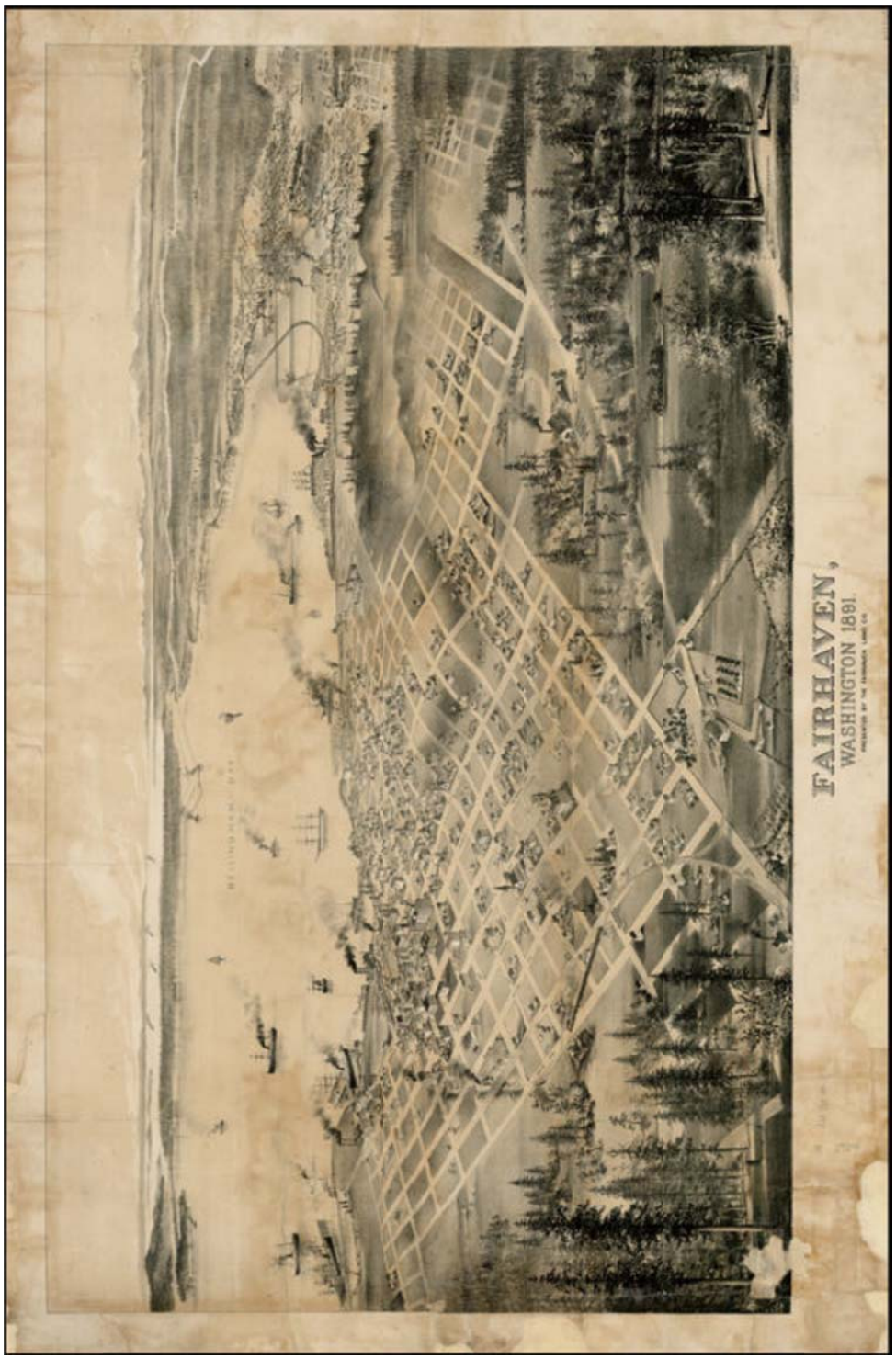


**Fig. 1.2.9: 1891 Map of Fairhaven**

4 http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=9536

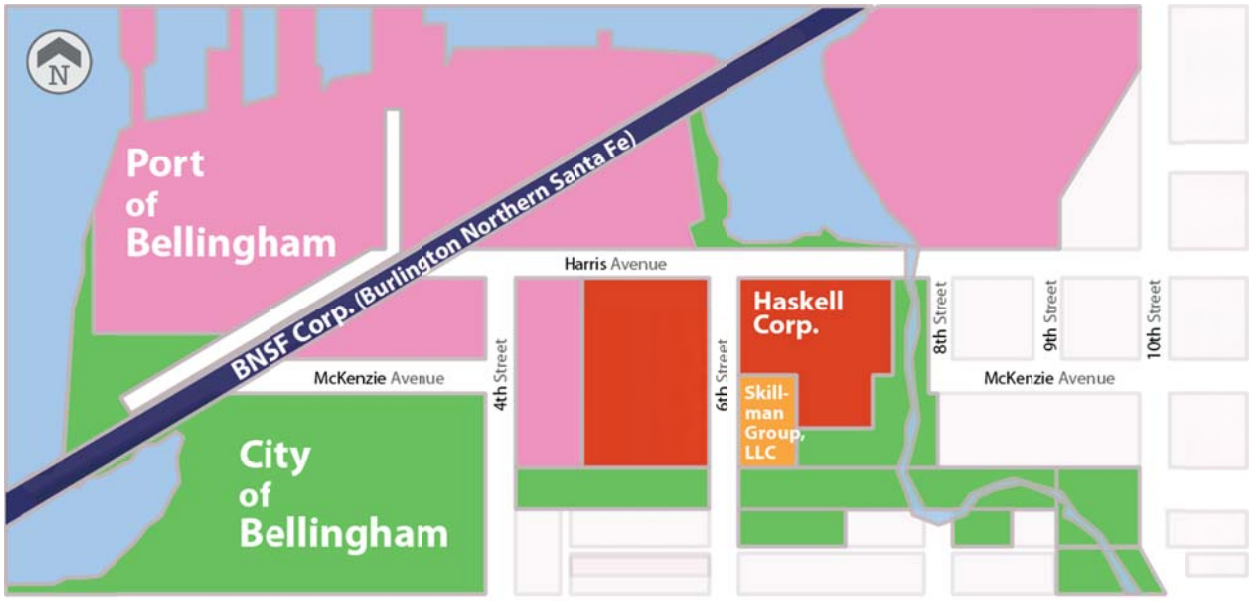


**Fig. 1.2.10: Existing Property Owners and ROWs**

Property Ownership

Within the site boundaries, the Port of Bellingham owns almost all the land north of Harris Avenue and east of the 4th Street, except for the railroad owned by BNSF Corp. and Padden Lagoon, Marine Park, and the Post Point Wastewater Treatment Plant, which are owned by the City of Bellingham. The port leases their land along the waterfront to an assortment of businesses for industrial, commercial and transportation related uses.

To the south of Harris Avenue, the Port of Bellingham owns the short-term and long-term parking lots along 4th street. Splinter Group LLC owns the Cascade Joinery property along 6th street. The remainder of the land between Harris Avenue, 4th Street, and the Larrabee Greenway is owned by Haskell Corporation.

Public Right–of-Ways

The Harris Avenue Right-of-Way (ROW) is 80 feet and extends past the railroad tracks, where it intersects a road and trail easement, running adjacent to the tracks and allowing access to Marine Park. The 4th and 6th Street ROWs are both 80' and travel north-south, from Harris Avenue (north) and through the greenway (south).

Though roads are not built, roadway easements exist on the property south of Harris and east of 4th where 5th Street and 7th Street should exist, halfway in between the 4th, 6th & 8th blocks. The Lower Padden Creek Greenway snakes along the west end of the Larrabee Avenue's ROW, and the McKenzie Avenue ROW is interrupted between Padden Creek (the east) and 4th Street (to the west). However, the roadway easement still exists for McKenzie Avenue between these two points, and water and sewer lines run underground east/west.

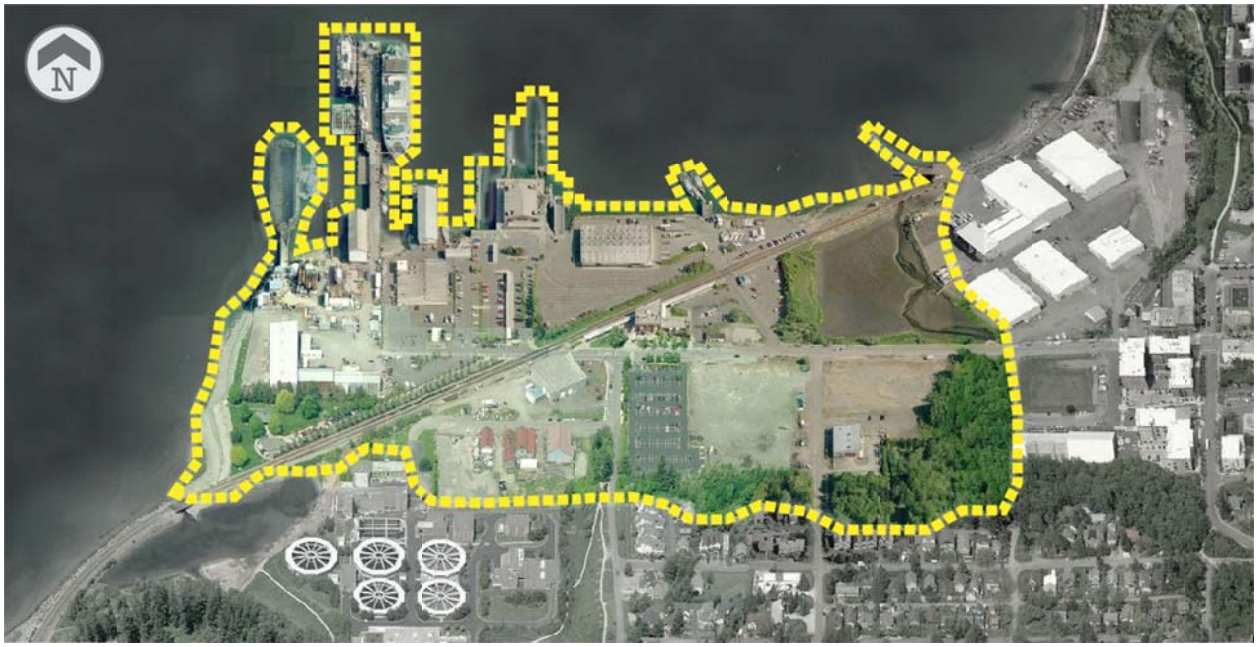

**Fig. 1.2.11: Site Boundary**

**Fig.1.2.12: Natural and Built Character Builders**

Existing Buildings and Land Uses

The Community Boating Center and public boat boat launch are located on Harris Bay between Padden Lagoon and the Fairhaven Cruise Terminal.

**Fig. 1.2.13: Community Boating Center**

The Community Boating Center offers community members affordable access to seafaring recreation, storage space and instruction for kayaking and sailing. The public boat launch, parking lot and public restrooms are adjacent to the boating center and frequently used by the boating public.

**Fig. 1.2.14: Public Boat Launch**

The Cascade Joinery is the only building that stands south of Harris Avenue and east of 4th Street. To the west of 4th Street, there is the Post Point Wastewater Treatment Plant, 4 old, small warehouses and a few sheds to the north that are all on land owned by the City of Bellingham. To the north of (West) McKenzie Avenue, a large building is oriented towards the railroad tracks along one of the rail spurs, formerly used by the company Brenthaven for distribution.

**Fig. 1.2.15: Cascade Joinery**

To the west of the railroad tracks, there is a gazebo in Marine Park and the All-American Marine's industrial building with some associated small mobile or transitory structures. Fairhaven Shipyard's dry dock is at the northwestern tip of the site, also surrounded by small mobile and transitory structures. Two large square warehouses and two long warehouses fill out the rest of the northwestern tip of the site, surrounded by parking fill out the rest of the site.

**Fig. 1.2.16: Fairhaven Transportation Center**

To the north of Harris Avenue lies the Fairhaven Transportation Center, including the Amtrak, Greyhound and Whatcom Transportation Authority's Fairhaven Station, all near the Bellingham Cruise Terminal (BCT).

**Fig. 1.2.17: Bellingham Cruise Terminal**

The upstairs of the BCT used for special events like dances, conferences and banquets. West of the terminal is a large warehouse, serving as storage space for the San Juan Cruises and other businesses, along with an office for the U.S. Coast Guard on the first floor.

Beyond the site, there is a light industrial area of seven large warehouses to the northeast, called the Fairhaven Maritime Industrial Park. Just beyond the greenway to the south, there are multi-family dwelling units. Single family units are further up the hill.

Natural Features, Parks, Trails, Vegetation & Street Trees

The small southern bay that defines the shoreline of Fairhaven is called Harris Bay, part of Bellingham Bay and greater Puget Sound, also known as the Salish Sea. Padden Creek flows from Lake Padden to the south of the site, towards Harris Bay to the north. As Padden

**Fig. 1.2.18: Post Point Water Treatment Plant**

**Fig. 1.2.19: POB Marine Park**

Creek flows past the western edge of the site, surrounded by a relatively thick riparian zone, it flows into the shallow and salty Padden Lagoon. The lagoon fills and empties with the tide, separated from the bay by the railroad bridge.

The site is relatively flat and starts above sea level by about 10 feet at shoreline edge, protected by riprap. The elevation gain from northern water's edge to the southern vegetated edge is only 20 to 25 feet.

**Fig. 1.2.201: Padden Lagoon**

The site is affected by a slight northwesterly sea breeze during the day and a southeasterly land breeze during the night. Throughout the year, winds come predominantly from south or southwest while winter winds occasionally come from the northeast.

The sun arcs across the sky to the south, reaching about 65 degrees high an noon in the summer and 18 degrees high in the winter.

A wooded greenway trail curves through the southern edge of the site, connecting Marine Park and the Post-Point Water Treatment Plant to the Bellingham and Whatcom County Interurban Trail to the southeast.

Street trees are planted along the northern edge of Harris Avenue, the access road to Marine Park, the access road to the Bellingham Cruise Terminal and the eastern edge of 4th street. Some landscape trees surround the train station, the Cruise Terminal parking lots and some of the industrial parking lots. Some trees dot the western and southern edge of Padden Lagoon, a few trees are anchored at Marine Park, and many trees surround the trail 'greenway' and Padden Creek.

Transportation Transit Lines and Parking

*Automobiles*

Automobiles access the site via Harris Avenue from the west, and 4th and 6th Street from the south. Harris Avenue is the official truck route for large vehicles. Trucks come from I-5, down Old Fairhaven Parkway, along Donovan Avenue and up 10th Street to Harris Avenue. The most recent traffic count by Public Works counted about 4100 automobiles per day passing through the Harris and 8th Street intersection. 3000 cars were counted either entering or leaving the along 4th Street. All roads have two travel lanes, one in each direction. Rental car businesses and taxi services are based at both the terminal and station.

*Bicycles and Pedestrians*

4th Street and Harris are suggested bicycle routes without lanes, and the greenway trail to the south is an approved route for bicyclists. The only sidewalks for pedestrians are on the north side of Harris Avenue, the north side of the Marine Park access road and both sides of the Bellingham Cruise Terminal access road. All streets with sidewalks already have street trees.

Only the north side of Harris has traditional, human scale street lamps. Bellingham Cruise Terminal and Fairhaven Station have much taller street lamps.

*Ferries & Cruises*

The Alaska Ferry system is part of the Alaska Marine Highway System (AMHS). The ferry runs on Friday evenings from the Bellingham Cruise Terminal. There are also several cruise lines that offer day cruises to the San Juan and Gulf Islands.

**Fig. 1.2.21: Alaska Cruise Ship**

*Passenger Train*

The Fairhaven station Amtrak is the fourth busiest train station in the state of Washington. In 2010, the station had over 63,000 boardings,[5] The Cascades route stops in Bellingham twice a day at 9:49 am and 8:58 pm Northbound and at 8:35 am and 7:40 pm southbound.

*Regional and Local Bus*

**Figure 1.2.22: WTA Bus**

The Fairhaven terminal is served by the WTA Red GO Line, route 401 which stops at the Fairhaven Station every 15 minutes. Route 105 serves the area on evenings.

[5] http://www.amtrak.com/pdf/factsheets/WASHINGTON10.pdf

**Fig. 1.2.23: Port of Bellingham Parking Lots**

*Parking*

There is on-street parallel parking on both sides of 4th and 6th Street and on the south side of Harris Avenue. There are perpendicular parking spots along the western McKenzie Avenue near the Water Treatment Plant.

There is extensive parking in the northwestern industrial area, serving All-American Marine, Fairhaven Shipyard, the former Arrowac Fisheries building and the large Port of Bellingham owned Warehouse 9. The Bellingham Cruise Terminal has a small two hour parking lot, a medium sized day pay parking lot, and a large long term pay parking lot in the southern most section of the site. A large triangular vehicle staging area for ferries and cruises makes up most of the site north of the railroad and east of the ferry terminal. Fairhaven Station has a small nearby two-hour parking lot, and a day parking lot across Harris Avenue.

## *1.6. Nearby Plans and Developments to Note*

Existing Plans for Port of Bellingham Land[6]

The Port of Bellingham has proposed several development alternatives for their property. They have divided it into 5 Areas:

*POB Area 1* - The Fairhaven Marine Industrial Park is outside but adjacent to the project area. The Port plans to extend a pedestrian trail, the South Bay Trail, down along the waterfront, splitting off west in front of the lagoon, and south between Area 1 and the lagoon.

**Fig. 1.2.24: Port of Bellingham Plan**

[6] http://www.reidmiddleton.com/commercial/2.htm

*Area 2* - The only changes for this area includes enhancing the area with public access, signage and parking.

*Area 3* - The suggested plan for this area calls for preserving the boat ramp, removing the Community Boating Center, and adding floats, parking and a grassy spot for kayakers.

*Areas 4 and 5* – Plans for this area suggest improvements to the fueling capacity of the Ferry Port (Area 4) and additional shipping haul-out capacity for the shipyard (Area 5).

Fairhaven Harbor Development[7]

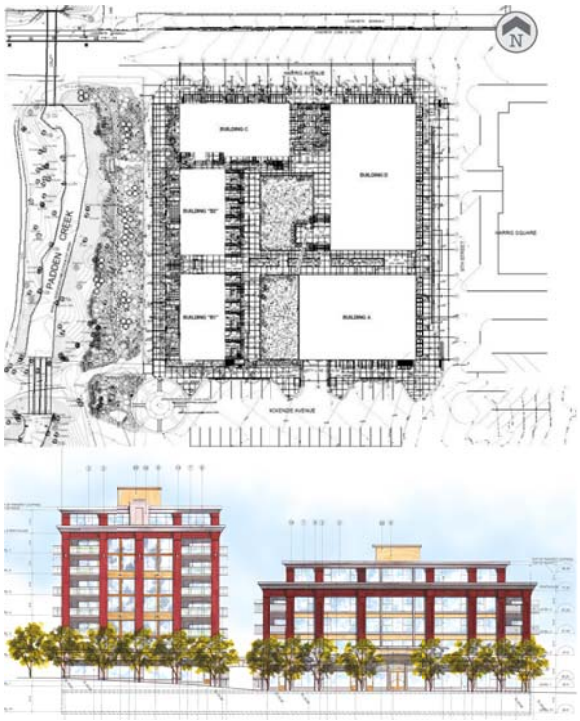

**Fig. 1.2.25: Proposed Development @ 8th & Harris**

The City of Bellingham approved the development application for the block encompassed by Harris, 8th St., McKenzie and 9th St. Fairhaven Harbor will be a mixed-use development of five including an eight story hotel, a four story condominium, and several three story townhouses.

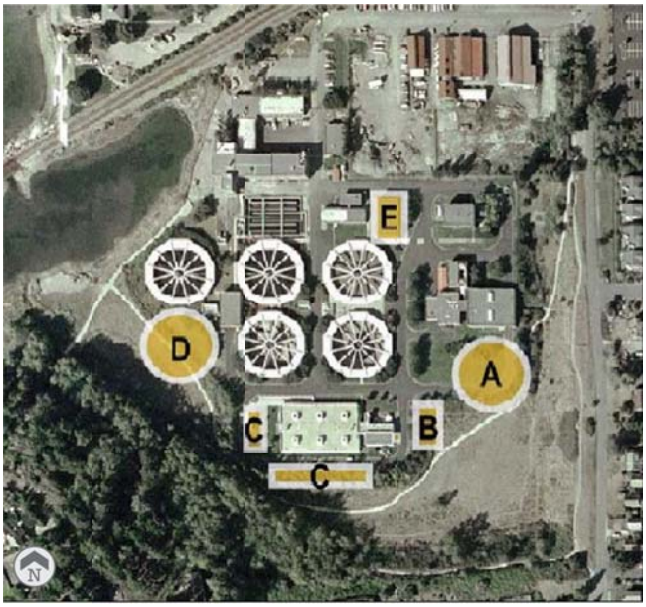


**Fig. 1.2.26 Expansion Plans for Water Treatment Facility**

The Post Point Wastewater Treatment Facility will be expanding its capacity. The expansion of the facility will remain within the current footprint. This will leave warehouse area to the north of the site available for development.[8]

### *1.7. Issues & Opportunities*

In general, this site is a prime candidate for a transit-oriented community. It can host a variety of transportation options near a dense development of housing and jobs.

The sites most promising features are the large patches of valuable, flat, undeveloped land near a prominent transit stop. Most open space is owned by small collection of land owners. This feature makes land assembly for public rights of way a much easier process.

A wide variety of public spaces and amenities are already in place and set the ground work for meaningful public spaces in the future. Street trees and sidewalks already exist on major streets and connect the area to nearby parks and greenways.

[7] http://www.cob.org/government/departments/pcd/fairhaven-harbor.aspx

[8] Expansion EIS, http://content.wwu.edu/cdm4/document.php?CISOROOT=/hcc&CISOPTR=5285&REC=1

The site's rich history of water dependent industries and water related uses provide a framework to develop an authentic and meaningful sense of place.

The Port of Bellingham's planned pedestrian trails along the waterfront and Padden Lagoon will improve pedestrian connectivity and bring more people into the site. Nearby developments will not threaten the prospect of a transit-oriented development and most nearby uses would support the creation of a TOC.

## 2. Vision

"Fairhaven Terminal will be a dense and vibrant transit-oriented community that embraces its industrial maritime heritage."

### *2.1. Profile of Clients*

In a market study performed by the Metropolitan Transport Committee of Oakland, California[9], local residents were asked to rank and order what they considered the most important neighborhood attributes. They are listed below in descending order of importance:

1. Safe to walk around at night
2. Safe and convenient to walk and bike for errands
3. Clean neighborhood
4. Short commute to work
5. Nearby places to spend time in the neighborhood
6. Need only one or fewer parking spots
7. Plenty of indoor dwelling unit space
8. Nearby park
9. Nearby outdoor recreation opportunities
10. Quiet streets

The MTC then analyzed the demographics of the respondents and developed several market segment profiles to describe which types of clients would most likely find living in a TOC attractive. The traits of these clients are characterized below:

9 MTC Demographic Segment for TOD : Choosing Where We Live; http://www.mtc.ca.gov/planning/ smart_growth/ tod/5-10/Briefing_Book-Choosing_Where_We_Live.pdf

Jack and Suzanne

Jack and Suzanne are a couple in their early twenties who have a one year old daughter. They prefer to live in an area where they are able to minimize travel and they value access to high-quality transit. They are renters, do not own an automobile and earn a modest income.

Martin

Martin is very well educated and in his early twenties. Martin is employed in the city as knowledge based, creative worker. He owns an automobile which he uses for weekend trips. He values on minimizing his commute and prefers to use transit over his auto.

Bill and Jackie

Bill and Jackie are in their thirties and also value minimizing travel and access to high-quality transit centers. They are both employed outside the home, are child-free, have average income, and have only one car in the household

Trina and Max

Max and Trina are in their mid-thirties and both work in professional jobs near their city. They have two elementary school age children. They most value access to quality schools, followed closely by travel minimization and transit accessibility. Trina and Max both have their own automobile, but prefer to use them, only when transit is inconvenient.

Phil and Katy

Phil and Kathy are in their early sixties. They have three adult children and are downsizing from their detached single family home in the suburbs. They both work. Phil is semi-retired and they earn a moderate income. They are interested in living in an urban environment with easy access to culture, shopping and entertainment. They own one car and prefer to use transit whenever possible.

*2.2. Plan Objectives*

The Fairhaven Terminal Transit Oriented Community plan will accomplish seven broad objectives.

The plan will define a meaningful center and edge to the community. It will provide dense housing for a diverse range of incomes and integrate a multimodal transportation network. The plan will concentrate and co-mingle an interesting mix of uses, buildings and spaces, and include walkable and human-scale streets & public spaces. The plan will preserve characteristic buildings and respect the areas inherited maritime style. Finally, the plan will utilize sustainable building practices and green infrastructure.

The plan objectives are listed below:

*Meaningful Center & Defined Edge*

*Dense Housing for Diverse Incomes*

*Multimodal Transportation Network*

*Mixed Land Uses & Buildings*

*Walkable, Human-scale Public Spaces*

*Maritime Heritage & Character*

*Green Buildings & Infrastructure*

## 3. Characteristics of Fairhaven Terminal TOC District Plan

### *3.1. Meaningful Center & Defined Edge*

The edge of the community is a natural boundary formed by the waterfront, the greenway and the creek. This natural boundary respects the natural features of the site, while also establishing a natural 'threshold', an organic gateway that signals the transition between Downtown Fairhaven to the new development.

The center of the development is at the intersection of the new '5th Street' and Harris Avenue, the circle in the middle of Figure 1.2.27. Practically all points of the site are within a easily walkable 1/4th mile from the center, and all new buildings are within an 1/8th of a mile from the center. Ensuring that the development is contained within these distances preserves the potential for the walkability of the neighborhood.

At the center, the Train Station and transit stop acts as a meeting and departure point for the majority of the community. This center is meant to attract people, orient visitors and gives a unique sense of place to the area.

The Commercial Core is represented by the dashed line in Figure 1.2.27. This ¼-mile-long stretch of Harris Avenue radiates an 1/8th of a mile east and west from the center.

The Commercial Core acts as the main pedestrian promenade and mimics the function and form of Harris Avenue in Downtown Fairhaven, relating and connecting the two communities.

The Commercial Core stops at Padden Creek and the Greenway to respect the natural boundary of the site and signal the transition into another community.

At the central intersection, sidewalks are wide, rows of bollards provide pedestrian buffers and the street is textured with brick pavers to indicate the frequent pedestrian crossing zone and automobile caution. The first floors of buildings have large pedestrian-oriented windows and doors. Abundant elements like street trees and 8-10 foot lampposts keep the scale of the center human.

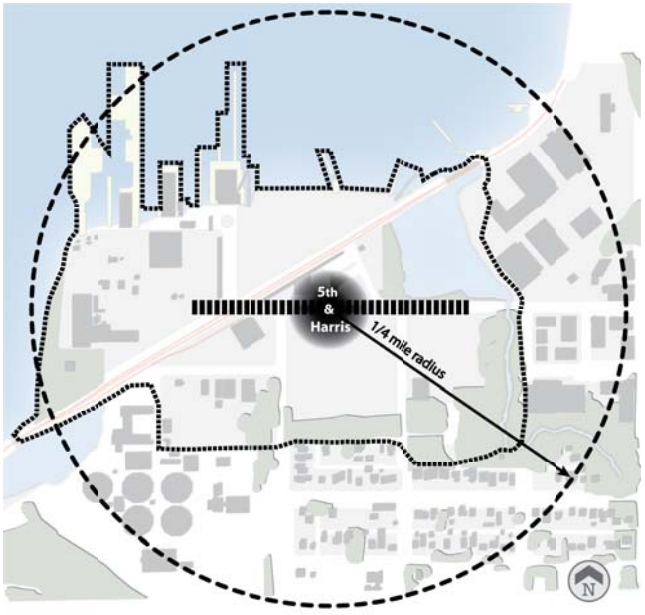


**Figure 1.2.27: The Center, the Edge & the Pedestrian Shed**

Finally, the 5th Street & Harris Avenue intersection will feature an artistic, yet functional center landmark. This landmark will be maritime-themed, acting as a visual representation of neighborhood character a view terminus from the top of Harris Avenue, and a wayfinding device for community member. Examples of suitable center landmarks include and intersection archway, a marine theme sculpture or collection of sculptures, or figureheads on the corner buildings at the center.

**Fig. 1.2.28: The Center**

*3.2. Dense Housing for Diverse Incomes*

Four types of housing will be included in the new TOC, serving different types of people with different levels of income. The four types of housing are:

1. *Mixed-use Residential/Retail/Office*
2. *Apartments & Condos*
3. *Townhouses*
4. *Live/Work Units*

Mixed-Use Residential/Retail/Office

**Fig. 1.2.29: Mixed-Use on the Commercial Core**

These buildings will be 3-4 stories high. Retail and other commercial enterprises will be located on the first floor of each building and thrive on streets with frequent pedestrian activity. These commercial uses will serve community members, visitors, tourists, ferry riders and commuters. Offices or residential units will be on the 2nd floors, and residential will round out the 3rd and 4th floors of these buildings.

The buildings will form a continuous streetedge with no setback. Awnings will be required on first floors, and balconies for higher floors will be incentivized. The majority of these buildings will make up the commercial corridor along Harris Avenue. Dwelling units will be 800-1200 square feet each, with a total of about 120 DU of this type of residence in the community.

**Fig. 1.2.30: Mixed-Use Residential/ Retail/Office**

Apartments & Condos

Apartments will be located on the south side of the commercial core blocks. These buildings will also be 3-4 stories and have about 120 dwelling units ranging between 900 and 1300 square feet. Units will have balconies, stoops and porches, depending on the floor, to encourage street socialization.

**Fig. 1.2.31: Apartments & Condos**

These apartments will have small 5 foot setback. The streets these units face, McKenzie Avenue, will have less noise and activity than Harris Avenue. The slower street life will feel more residential and private than the mixed-use units on the commercial core. Parking for apartments, condos and mixed use buildings will be located behind the apartments in service allies or underground when economically feasible.

**Fig. 1.2.32: Apartments & Condos in the new development**

Townhouses

Townhouses will also face McKenzie, opposite the apartments and condos. These townhouses will be three stories, containing two dwelling units each. Units are either organized a) 2 stories + 1 story, or b)1 story + 2 stories, each with side entrances for the upstairs residential units.

These townhouses will have larger 10 foot setbacks from the street and porches. The buildings will be organized around a shared community space. This shared space creates a secure and enclosed space for recreation and family life.

**Fig. 1.2.33 Townhouses**

The townhouse development will also have a connection to the Padden Creek Trail to the south. Along with on-street parking, there will be two small parking lots at the rear of the lot, accessible from the back service alley.

**Fig. 1.2.34 Location of Townhouses**

Live/Work Units

**Fig. 1.2.35: Live/Work Units**

Live/Work units will be 3 stories tall and located on McKenzie Avenue, across from the townhouses on 4th Street. These combination dwelling units will have a garage and workspace on the 1st floor and living space on the 2nd and 3rd floors. Balconies will be located on the second floor, and these units will share a community green space that buffers the development from nearby industrial uses. Garages will be located in front, and more parking will be located behind the units in a back alley.

**Fig. 1.2.36: (Above) Location of Live/Work Units**

*3.3. Multimodal Transportation Network*

Fairhaven Terminal will be served by a variety of transportation options. The South Bay Trail that connects to Boulevard Park will be extended and connected to Fairhaven Terminal. The planned pedestrian trail along the waterfront edge and adjacent to Padden Lagoon will connect to the Bellingham Cruise Terminal and the Lower Padden Creek Greenway. Additional entry and exit points have been added to the Padden Greenway and the thickness of the greenway will be extended north to better define the edge of the community.

The Amtrak passenger train continues to serve the area twice a day, and the Alaskan Ferry departs each Friday. The WTA Red Line makes its rounds every 15 minutes (401) during the day and every hour in the evening (105). Personal watercraft like kayaks and motorboats will continue to utilize the public boat launch, floats, and storage at the Community Boating Center.

Because of the convenience of nearby transit services and amenities, residents, employees, families and visitors to Fairhaven Terminal will require fewer vehicles to get on with their daily lives. There will be an expected decrease in the number of vehicle trips generated by the

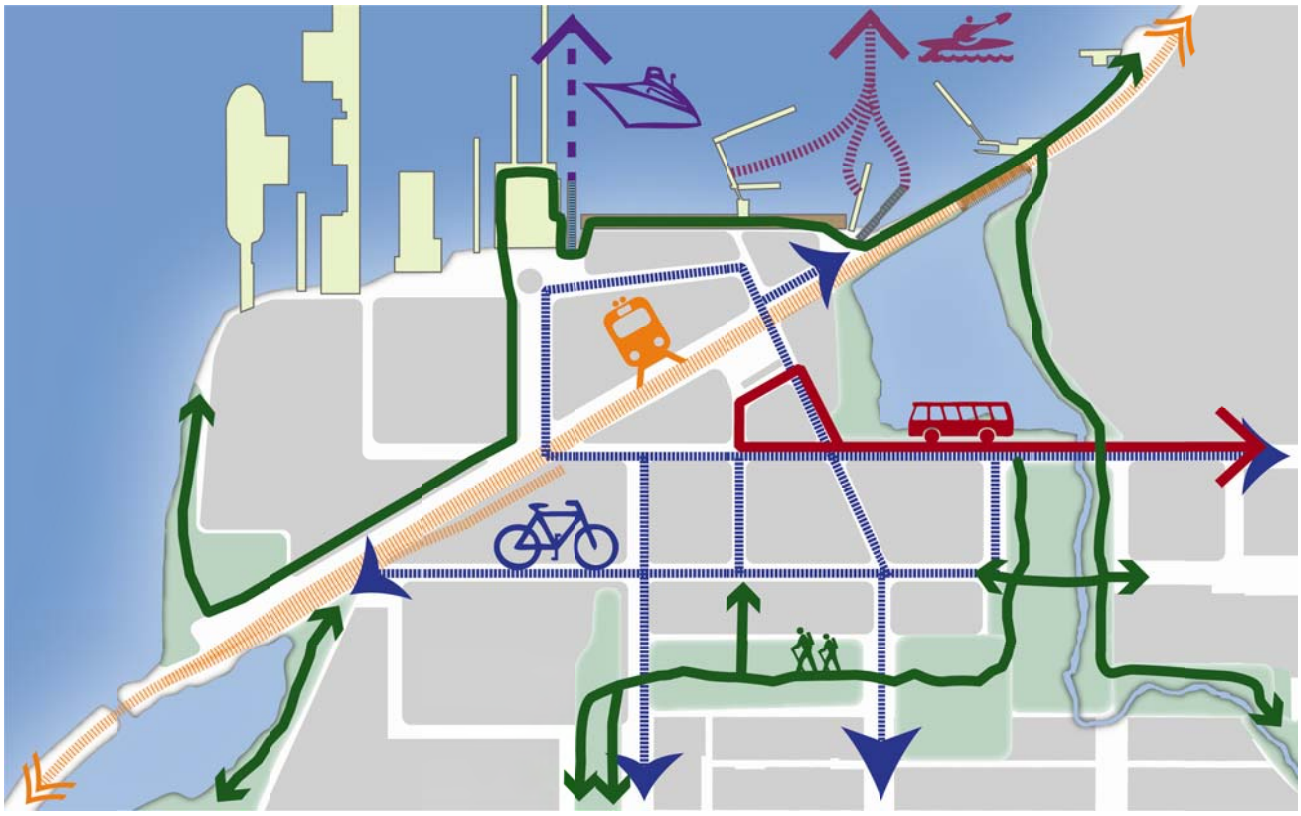

**Fig. 1.2.37: Transportation Network**

development, and consequently fewer parking spaces will be needed than a conventional suburban development. Decreased dependency on the vehicle will allow many families to reduce their number of household vehicles from 2 to 1.

Following TOD guidelines, the plan requires about 30% less parking spaces than conventional suburban developments. On-street parking is provided on all new and existing streets, and apartments, condos, mixed-use buildings and live/work units have access to additional parking on rear service alleys. Some four story buildings will utilize underground parking structures, and the southernmost residential block has its own small parking lot.

Bicycle lanes will be painted on all new and existing roads, and transportation impact fees will be reduced for projects that include bicycle storage sheds and additional bicycle parking. Public bicycle rack will people located in public spaces and between street trees on major roads.

All the residences and businesses within the Fairhaven Terminal TOC are within a five minute walk or bicycle ride to the center. Dense development of the center maximizes the utility of transit and encourages diminished use of the automobile.

### *3.4. Mixed Land Uses & Buildings*

The purpose of the TOC is to create an attractive, affordable, pleasant, walkable, and sustainable community that allows the residents to have choices on how to live and how to commute. There will be places for our children to play and for our parents to grow old comfortably.

To accomplish this objective, this TOC will provide a variety of uses within the same district. The Fairhaven Terminal TOC brings together housing, retail, dining, offices, industry and public spaces within the site boundary. Safe, co-mingled land uses work better together than single-use districts. Mixed land uses take advantage of economies of scale without creating disturbing nuisances.

**Fig. 1.2.38: New Land Uses**

Residential units are not concentrated into one place in the development, but are instead distributed at various locations of the site. A wide assortment of shopping, dining, jobs, entertainment and services are convenient and within walking distance to nearby residents and neighbors.

This pattern of land use supports local, pedestrian-oriented business. Additionally, employees of these businesses can conveniently locate their household near their jobs, whether they are white collar or blue collar, single or married, children or no children. The availability of transit, bike lanes and sidewalks also allows employees to get to work without a car.

*3.5. Walkable, Human-Scale Public Spaces*

The existing natural features of Fairhaven have been preserved and enhanced. Pedestrian trails on the site connect public places to each other and the rest of Bellingham.

A new public market and boardwalk will be located at the waterfront to give residents a 'third place'. A third place lends a public balance to the increased privatization of home life. It is a comfortable public space that is not like home and not like work; it functions as a space for activities between leisure and work.

**Fig. 1.2.39: Public Market & Boardwalk on the waterfront**

A third place has neither the baggage of work nor the nagging of home ownership. It acts as an informal meeting place for old friends, acquaintances and new relationships.

The space between the boardwalk and the market will feel like a community living room, a comfortable, well-kept area that connects people to other people, goods, services and nature. Residents or people passing through can enjoy the natural features of the site, recreate and socialize. This space will be suitable for public performances, street art, festivals and celebrations and other events.

**Fig. 1.2.40 Public Boardwalk**

The community's 'third place', the waterfront, will have a number of new and preserved uses, including:

a) A public market, featuring local food, beverages, arts, crafts, wares and other products for sale during the weekday. On the weekends, a farmer's market featuring local vendors comes to life. Vendors make use of the waterfront outdoor space during the warm months of the year.
b) A public pier and boardwalk, featuring views of Harris Bay and Bellingham Bay, street lamps for evening strolls and spaces to sit and rest.
c) An adaptable entertainment venue, nestled in the northwest corner of the public market
d) An interpretive park, connecting the built environment of waterfront development to the natural ebb and flow of the sea.

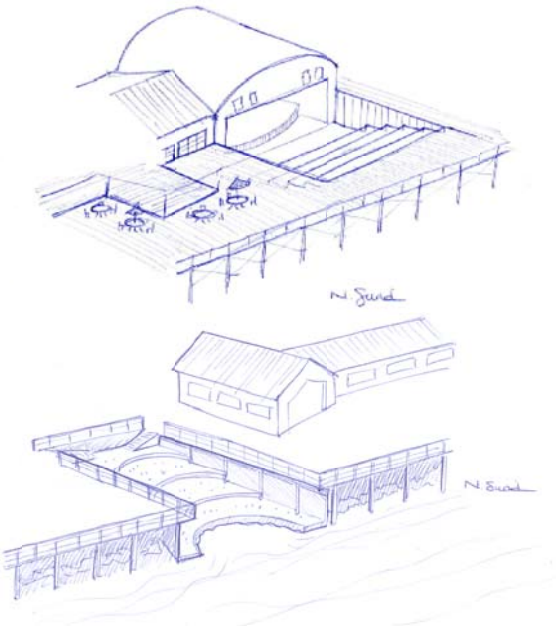

**Fig. 1.2.41: Concept sketches of the Adaptive Entertainment Venue (top) and Interpretive Park (bottom)**

e) The Community Boating Center will continue to rent boats, store kayaks and offer classes on sailing and boating skills.
f) The public boat ramp will continue to serve the community, retaining its ample parking.
g) Public restrooms have been preserved and are conveniently located between the train station, the public boat ramp and the boardwalk.

*3.6. Maritime Heritage & Character*

The plan strives to maintain a sense of place at Fairhaven Terminal by retaining the maritime and industrial heritage of historic 'Fairhaven Wharf'. This means that existing historic buildings are preserved and adapted to new uses whenever feasible, relationships between land and water are maintained and new structures are designed to respect the existing architectural style and vernacular.

**Fig. 1.2.41 Preserved Industrial Space**

Preserved Industrial Spaces

These industrial building on McKenzie Avenue, seen above, will remain in the plan to keep the new development connected to its history and architectural vernacular. They are low-rent spaces that can host many types of businesses and industries: manufacturing, distribution, small start-ups, storage, art studios, etc. These uses are also compatible with the nearby live-work apartments across the street.

**Figure 1.2.42: Land/Water Transition Example**

Maintained Relationships between Land + Water

Car traffic will be banned from the waterfront area and all buildings are considerably setback from the boardwalk. Short street lamps light up the boardwalk at night and temporary structures like pavilion tents are frequently allowed for vendors for farmers markets and special events during the spring, summer and fall months.

Appropriate Architectural Style

The architectural styles will have maritime related elements and relate to the history of the place. The plan encourages appropriate architectural features like shed and gable roofs, exposed wooden beams, large garage doors, and wooden piers. Reds, blues, grays, light greens and light browns are the most appropriate colors for buildings in the development.

**Fig. 1.2.43 Examples of Maritime Style Architecture**

*3.7. Green Buildings & Infrastructure*

In order to reduce the environmental impact of developing Fairhaven Terminal and reduce long term costs, the plan requires certicication under the sustainable building metric LEED, utilizes infill strategies like adaptive reuse and brownfield redevelopment and outfits buildings with green infrastructure.

**Fig. 1.2.44: On-site Renewable Energy Production**

Most buildings have their longest facades oriented south, allowing architects to design buildings that utilize passive heating, natural daylighting and natural ventilation from southern winds and sun exposure. Southern exposure will also facilitate the on-site production of renewable energy.

**Fig. 1.2.45: Permeable Pavement**

Developments within the TOC should utilize rainwater collection & stormwater mitigation measures. These types of stormwater mitigation strategies reduce the operational costs of buildings and reduce demand on public utilities. Examples of stormwater mitigation, also known as 'green infrastructure', include green roofs, roadside rain gardens, bioswales, green roofs and permeable pavement. These strategies should be incentivized and utilized as often as possible.

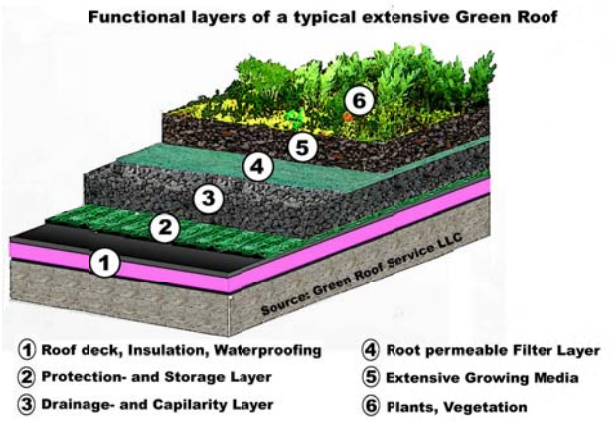


**Fig. 1.2.46: Green Roofs**

**Fig. 1.2.46: Streetside Raingardens and Bioswales**

*3.8. Metrics*

| | |
|---|---|
| Total Site Area | 2,650,000 square feet |
| Longest Site Width (N/S) | .25 mi |
| Longest Site Length (E/W) | .4 mi |
| Total Acres of Site | 60 |
| Acres of New Development | 13 |
| Number of Intersections | 27 |
| Linear Feet of Roadway | 8650 feet |
| Linear Ft. Roadway per Intersection | 320 feet |
| Longest Block Length | 300 feet |
| DU/acre | 25 |
| Parking Spots | 380 (500+ if underground parking utilized) |
| Parking Spots/DU | 1.2 |
| | |
| Institutional Space | 106,000 square feet |
| Office Space | 110,000 square feet |
| Retail Space | 116,000 square feet |
| Industrial Space | 186,000 square feet |
| Residential Space | 530,000 square feet |
| Public Parks & Natural Features | 635,000 square feet |

| *Types of Housing* | *Number of Dwelling Units (DU)* |
|---|---|
| Mixed-Use | 120 DU (800-1200 sq.ft. each) |
| Apt./Condos | 120 DU (900-1300 sq.ft. each) |
| Townhouses | 40 DU (1000/2000 sq.ft. each) |
| Live/Work | 16 DU (1300/1600 sq.ft. each) |
| *Total* | **328 DU** |

**Fig. 1.2.47: Bird's Eye Perspective of the Fairhaven TOC**

## 4. Relationship of Planning Concept to TOC and LEED ND Goals

The Fairhaven Terminal TOC adheres to the transit-oriented goals outlined by Futurewise, GGLO and the Transportation Choices Coalition in *Transit-Oriented Communities: A Blueprint for Washington State*. [10]

The success of a TOC can be determined from 7 separate measures.[11] These are:

1. Pedestrian and Bicycle Connectivity
2. Housing Affordability
3. Residential and Employment Density
4. Mix of Uses
5. Green Infrastructure and Open Space
6. Parking
7. Urban Design

*Pedestrian and Bicycle Connectivity*

Fairhaven Terminal TOC has 433 linear feet of roadway per intersection, and no block is longer than 300 feet before an intersection. Sidewalks, bike lanes and bike parking are present on each street.

*Housing Affordability*

A majority of the residential units at Fairhaven Terminal are small, multi-family units, affordable for households with low to moderate incomes. A diverse set of housing choices ensures a diverse mix of people in the community.

*Residential and Employment Density*

The ratio of employment space to housing space is about 4 to 5, allowing people to move into the neighborhood to get close to their workplaces and limit their commutes. Transit can also help bring people into their workplaces from other parts of Bellingham.

*Mix of Uses*

The types of uses in the area are balanced, for an optimal utilization of the space available on site. Other than the natural features of the site and the public parks, no major land use takes more than 50% of the site, nor less than 10% of the site.

*Green Infrastructure and Open Space*

About one third of the site has been preserved to respect the natural limitations of the site keep open space abundant for future community members. Buildings utilize stormwater mitigation measures like green roofs and rainwater collection. Street trees are planned on all major roads. Parking lots are planted with bioswales and paved with pervious concrete.

*Parking*

Parking maximums, rather than minimums, have been enforced as the development standard. About 30% less parking is needed in this community than a conventional suburban development, thanks to the decreased dependency on the automobile

Parallel On-street parking is available on main roads, and most buildings have parking on the rear service alley. A few parking lots have been maintained or planned behind buildings and off the street. They will include bioswales with native plants and pervious concrete. Underground

*Urban Design*

Fairhaven Terminal will include community-created design guidelines that preserve the maritime heritage of the site. The architecture of the community will pay homage to its contextual past, while preserving safe and active streetscapes that are designed for pedestrian and bicycle flow and access. Awnings will be required for first floors of building located on the commercial core to shelter pedestrians. Windows and doors will face the street. Gates and signage will follow community guidelines. Finally, balconies, porches and stoops will be encouraged to activate and monitor life on the street.

[10] http://www.gglo.com/files/Downloads/Our%20Insight/Blueprint_for_Transit-Oriented_Communities.pdf
[11] *Ibid.*

*4.1. LEED ND*

LEED-ND stands for Leadership in Energy and Environmental Design (LEED) for Neighborhood Developments. It is a rating standard created by the US Green Building Council.[12] This standard tests whether a new development is achieving a greater degree of sustainability than conventional developments. It uses third-party verifiers to determine whether a development can actually call itself 'green'. LEED ND categorizes sustainable developments into these five categories:

*Smart Location & Linkage*

Fairhaven Terminal is an infill and brownfield development project, saving forests and working farms in the county from being developed. Wetlands and habitat on site have been conserved, steep slopes and other physical constraints have been avoided.

The neighborhood is relatively dense, and in close proximity to amenities, housing, jobs and schools, water lines and wastewater infrastructure. Frequent transit, walkable streets and bicycle infrastructure decrease the automobile dependence of residents.

*Neighborhood Pattern & Design*

Streets have sidewalks, bike lanes, street lamps, street trees and bicycle parking. First floors of mixed-use building have awnings that shelter pedestrians. Many different forms of transportation come through the site, and frequent bus service by WTA helps residents quickly get downtown. Parking requirements have been reduced. Public access to the waterfront has been dramatically increased by the boardwalk and trails and public places like parks and the market have been equitably distributed. Local food is sold at the public market on the waterfront.

*Green Infrastructure & Building*

Buildings are made from sustainable, locally sourced materials and very resource efficient. Energy is produced by some buildings on site, and others collect all rainwater on water on site. Building facades are oriented toward the south to utilize natural daylighting and passive heating, making the buildings more energy efficient. Historic buildings have been preserved and readapted to suit new uses. Buildings in the community will need to earn a LEED Silver rating or higher old buildings will need to reviewed by the community before being renovated or redeveloped.

The categories *Innovations & Design Process* and *Regional Priorities* will be addressed when the design of the development has been approved.

…

These combinations of objective measures and design methods indicate that Fairhaven Terminal will be a successful TOC with a unique character. This TOC will help accommodate Bellingham's growing population with a sensitive, sustainable neighborhood development. If this plan is carried through to completion, it has vast potential to inspire similar models of growth for other areas of Bellingham.

**Fig. 1.2.48: An example of new industrial buildings that use sustainable building methods, stormwater mitigation and suggest maritime characteristics. Space for marine dependent industries will be preferred on the Port of Bellingham property.**

[12] http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148

**Fig. 1.2.49 and Fig. 1.2.50: Fairhaven Terminal TOC Concept**

**Fig. 1.2.51 and Fig. 1.2.52: Fairhaven Terminal TOC Concept**

*All Figures Courtesy Google Images, or are reproductions of work by the Fairhaven Terminal Project Team*

# CHAPTER 1. TRANSIT ORIENTED COMMUNITIES DISTRICT DESIGN CONCEPT 3

## 1.3 JAMES STREET TRANSIT ORIENTED COMMUNITY

Jessica Conquest, Lester Johnstone, Tim Kennedy, and Matt Schimmel-Bristow

Chapter 1.3 James Street Transit Oriented Community

1. Introduction
    - 1.1 Relationship of Plan to TOC Goals and Policies
    - 1.2 Community Characteristics
    - 1.3 Issues and Opportunities
2. Vision
    - 2.1 Client Profile
3. Characteristics of TOC District Plan
    - 3.1 TOC Plan Design Concept
    - 3.2 Residential
    - 3.3 Commercial
    - 3.4 Metrics
    - 3.5 Circulation
    - 3.6 Parks, Plazas, and Neighborhood Connections
    - 3.7 Capital facilities
4. Relationship of Planning Concept to TOC Goals
    - 4.1 TOC and LEED ND

## 1. Introduction

In 2002 Bellingham's population growth, being consistent with County, State, and National growth trends, was projected to increase 54.1%, to 113,055 citizens, within a 20 year period[1]. The City's visions include promoting infill development that "accommodates growth in existing neighborhoods in a manner that complements neighborhood character…including provisions for developments which allow people to live within walking distance of shopping and employment."[2]

It was proposed in the 2004 Community Growth Forum that the development of urban villages would be the best method for executing said vision while accommodating Bellingham's short-term and long-term forecasted population growth.[3]

As such urban village plans have been developed and approved both along Samish Way and in the Fountain District; focus is now being placed on the node surrounding the gold go-line transit stop on Alabama Street in front of Trader Joe's. The plan aims to redevelop the James Street commercial corridor into an urban village in accordance with the Washington State Growth Management Act (GMA) and comply with the visions of the City in order to create a Transit Oriented Community (TOC) that would promote efficient land use, increase connectivity between nodes, and maintain a livable environment.

### 1.1 Relationship of Plan to Transit Oriented Community (TOC) Goals and Policies

TOC's provide a solution for accommodating Bellingham's projected growth in a sustainable form that would meet GMA standards while integrating the visions set forth by the City.

*Washington State's Growth Management Act (GMA)*

In accordance with Washington State's GMA, Bellingham prepares to accommodate its increasing population while concurrently protecting its resource lands, agricultural lands, and fish and wildlife habitats.

GMA plans and regulations are to be guided by the 14 goals summarized below: [4]

1. Focus urban growth in urban areas
2. Reduce sprawl
3. Provide efficient transportation
4. Encourage affordable housing
5. Encourage sustainable economic development
6. Protect property rights
7. Process permits in a timely and fair manner
8. Maintain and enhance natural resource-based industries
9. Retain open spaces and habitat areas and develop recreational opportunities
10. Protect the environment
11. Encourage citizen participation and regional coordination
12. Ensure adequate public facilities and services
13. Preserve important historic resources
14. Manage shorelines wisely

The infill development proposed for the James Street TOC redevelopment encourages growth that would meet the State's GMA requirements by:

1. Focusing growth in an already developed area and promoting vertical mixed use
   - Reducing sprawl
   - Protecting the environment
   - Lessening the strain on public facilities and services
2. Providing efficient transit and centrally-oriented transit stops
3. Implementing affordable housing
4. Promoting commercial development
5. Creating and retaining open space for recreation

[1] This information was provided by ECONorthwest in its 2002 report *Whatcom County Population and Economic Forecasts.*
[2] Visions for Bellingham (1992) pages 7-9
[3] Bellingham Comprehensive Plan, Introduction Chapter, Intro-14
[4] http://www.commerce.wa.gov/_cted/documents/id_892_publications

*City of Bellingham's Comprehensive Plan*

With Washington State's adoption of the GMA in 1990 came the first legislation mandating comprehensive planning. Urban counties and subsequent cites are each required to create and maintain a comprehensive plan which presents how it intends on managing future growth. State law requires that the City's comprehensive plan be consistent with both the GMA and Whatcom County-wide planning policies.

The City of Bellingham's comprehensive plan was updated during 2004-2005 to take into account the following information:

- The 1995 Bellingham Comprehensive Plan
- The State's Growth Management Act
- The Visions for Bellingham
- The County-wide Planning Policies
- The Whatcom County Comprehensive Plan
- The 2000 Census
- 2002 Population and Economic Forecasts by Econorthwest
- The 2004 Community Forum on Growth Management
- The Waterfront Futures Group plans
- 2004 Draft and Final Environmental Impact Statement

The 2004 Community Growth Forum "identified the development of urban centers as a key strategy to accommodate Bellingham's forecasted population growth, both in the short and long term."[5]

It was proposed that such urban centers, or urban villages, should maintain many of the same underlying qualities, but vary in their design and composition to take into account site-specific characteristics. It was recommended that each urban village be adapted to take into account the character of the surrounding area, the site's location, the available street and utility capacity, and the market demand.

The City's comprehensive plan stipulates that "in the larger centers, the mix of land uses and the design of the street and trail system will create a livable environment that encourages walking, biking, and use of transit. These centers will foster efficient land use through compact, higher density development and by placing residences close to bus stops, basic retail, and supporting services."[6]

The City has designated areas to be converted into urban villages. These sites include the central waterfront, old town, Fairhaven, Barkley Village, Samish Way, and the Fountain District.

*Goals of Bellingham's Urban Village Sites*

An urban village is generally considered an area that:

- Contains a mixture of commercial, residential, and service uses
- Is within walking distance of amenities and daily essentials
- Is primarily designed for pedestrians, bikes, and transit
- Has the neighborhood serve as a focal point
- Incorporates active public places to promote community interaction
- Encourages sustainable and quality design standards

The City's comprehensive plan policy FLU-18 requires that subarea plans be developed for each of the proposed urban villages. Each plan must specify the following elements:[7]

- Land uses and densities
- Street and utility layouts
- Lot arrangements & housing type
- Plaza locations & streetscape amenities
- Relationship of buildings to the street
- Parking structures or lots
- Protection of critical areas
- Pedestrian and bicycle facilities
- Other items deemed necessary to ensure compatibility with surrounding areas

[5] Bellingham Comprehensive Plan, Introduction Chapter, Intro-14

[6] Bellingham Comprehensive Plan, Introduction Chapter, Intro-14

[7] Samish Way Subarea Plan City of Bellingham, Washington. Chapter 3, Page.17

For each proposed urban village site the following neighborhood characteristics are examined:

The natural context
The historic context
The current development trends

Before actual implementation of urban villages, parks, plazas, and neighborhood connections must also be analyzed and a localized plan established. It is essential that the vision of the future urban village site is articulated and portrayed in its respective subarea plan.

Urban village sites may also gain recognition for their sustainability through higher LEED ND ratings which are attained if the following characteristics are present:[8]

1. Smart Location: The project is located on a previously developed site within the City limits and is served by existing utility and street infrastructure.

2. Environmental Sensitivity: Except for a few steep slopes, there are no environmentally sensitive areas (such as wetlands, streams, floodplains, agricultural land, etc.) within the site boundaries.

3. Transportation Network: The project includes the creation of a more compact street grid to facilitate connections within and through the area. More frequent bus service is proposed as density in the area increases. Bike and pedestrian pathways through the area will be added and clearly delineated through a wayfinding system.

4. Compact, Mixed Use Development: The goal of the Subarea Plan is to create a walkable, mixed use neighborhood with a variety of businesses and services. Buildings would be designed to enhance the pedestrian experience, and the impacts from automobiles mitigated through traffic management and design standards.

[8] Fountain District Subarea Plan, City of Bellingham, Washington. Chapter 1, Page. 7

Land use, site design, building design, circulation, transit, and public parking polices are all necessary aspects of urban villages which will need to be examined and properly planned to ensure an urban village's success.

*Transit Oriented Communities (TOCs)*

One of the methods supported by Washington State to promote sustainable growth is the TOC model. The vision behind TOCs is "to foster vibrant and safe mixed-use communities where residents, employees, and visitors can walk, bicycle, or take transit to reach their destinations" and "cities can continue to grow in a manner that is healthy for both people and the planet."[9]

The aim behind TOCs is to provide housing and transportation choices that would allow residents easy access to homes, jobs, stores, community services, and recreational opportunities. It is projected that when residents are no longer reliant on a personal vehicle their quality of life will increase, the cost of living will be reduced, environmental impacts of development will be lessened, and there will be an overall reduction in greenhouse gas emissions.[10]

Seven Main Characteristics of TOCs[11]:

1. Bicycle and Pedestrian Connectivity: A complete network that promotes easy and safe access to transit without the use of an automobile.

2. Housing Affordability: A variety of housing types and prices so to support a diverse community of varying incomes.

3. Residential and Employment Density: Dense infill of both housing and jobs near transit lines.

4. Mix of Uses: Daily necessities easily accessible through proper mixture of housing, jobs, stores, services and recreation.

[9] Transit-Oriented Communities: A Blueprint For Washington State, page 1
[10] Transit-Oriented Communities: A Blueprint For Washington State, page 4
[11] Transit-Oriented Communities: A Blueprint For Washington State, page 4

5. Green Infrastructure and Open Space: Open spaces available which will meet the needs of citizens living in a dense urban environment.

6. Parking: Policies that encourage divergence from automobile dependency and will support affordable housing, safe streets, and good urban design.

7. Urban Design: Well-designed buildings, streetscapes, and public spaces that encourage pedestrian use and enhance neighborhoods.

Such methods of infill development which are oriented around public transportation would allow for Bellingham to successfully accommodate its projected growth while minimizing effects on the environment, maintaining local character, and creating vibrant communities.

*James Street Corridor as a Potential TOC*

Figure 1.3.1. Site Location Map

The site is encompassed by E. Illinois Street to the north, I-5 to the east, Virginia Street to the south, and Ellis Street to the west.

This site was chosen for the creation of a TOC due to the following characteristics:

Is serviced by a Go Line on Alabama Street, and therefore is more conducive to becoming transit oriented.

Has the open space necessary for infill development.

Possesses the necessary client base to support substantial commercial infill due to the fact that the area is predominantly residential.

Contains Trader Joe's which acts as an anchor for the site.

## 1.2 Community Characteristics

The proposed redevelopment site is located within the Sunnyland Neighborhood. The neighborhood is a historic neighborhood with the majority of its housing having been built in the 1920's, and some dating as far back as the 1800's.

Figure 1.3.2.Neighborhood Location Map

Sunnyland Neighborhood is located north of the York Neighborhood, west of the Roosevelt Neighborhood and I-5, south of the Cornwall Park Neighborhood, and east of Lettered Streets Neighborhood and the Central Business District.

In order to create a TOC which would meet the needs of the neighborhood, the proposed James Street plan took into account the Sunnyland neighborhood plan and integrated its goals when feasible.

*Sunnyland Neighborhood Plan*

Neighborhood plans must be consistent with the City's comprehensive plan and should address city wide and neighborhood specific goals and policies. Neighborhood plans are expected to take into consideration the neighborhood's character and infrastructure requirements.

Relevant Neighborhood Goals[12]:

1. Improve utilization of open spaces and recreational opportunities.
2. Promote housing rehabilitation in the northern section of the neighborhood.
3. Implement street trees throughout the neighborhood.
4. Improve access to existing and proposed trails in the vicinity of the neighborhood.
5. Provide more parkland.
6. Develop a new fire department training facility, possibly in conjunction with development of a new station in the northern part of the city.
7. Implement street upgrades to meet design standards.
8. Provide lighting at all intersections.
9. Update safe routes for children walking to and from Sunnyland Elementary.
10. Develop old railroad corridor to provide a connection for bicycles and pedestrians between the south bay trail and the railroad trail.
11. Encourage Ellis Street as a north/south bicycle route through the neighborhood.
12. Designate parking to the rear of buildings.
13. Restrict development to only those uses which serve neighborhood functions in areas zoned for 3A.
14. Convert detached accessory buildings into dwelling units.
15. Restrict horizontal growth of commercial area.

[12] Sunnyland Neighborhood Plan

*Sunnyland Analysis*

Table 1.3.1.2000 Census Information[13]

| Sunnyland Neighborhood | Number of People |
|---|---|
| Population | 2,282 |
| Population Density | 5.7 per acre |

Table 1.3.2.Number of Dwelling Units in 2003[14]

| Sunnyland Neighborhood | Number of Dwelling Units |
|---|---|
| Single-Family | 887 |
| Multi-Family | 55 |
| Total | 942 |
| Average Developed Density | 7.4 per acre |

Table 1.3.3.2008 Housing Information[15]

| Sunnyland Neighborhood | Characteristics |
|---|---|
| Median Household Income | $35,956 |
| Median Rent | $749 |
| Median Age | Male: 31.0<br>Female 31.4 |
| Average Household Size | 2.4 people |
| Average Family Size | 2.9 members |
| Percentage Bellow Poverty Level | 29.1% |
| Population Density | 2,461 people/mile $^2$ |

Table 1.3.4 .2009 Housing Composition[16]

| Housing Type | Percentage of Units in Neighborhood | Average Estimated Value |
|---|---|---|
| Detached Houses | 83.1 | $225,129 |
| Townhouses/ Attached Units | 1.5 | $162,500 |
| Housing Units in 2-unit structure | 3.2 | $112,500 |

The neighborhood consists predominantly of low-density residential dwellings with approximately 5.7 persons per acre and only 7.4 dwelling units per acre.

Ninety-four percent of the dwelling units in the neighborhood are single-family with the majority of houses valued between $200,000 and $300,000.

The community is relatively homogenous with the majority of residents being Caucasian and between the ages of 20 and 35. In addition, very few residents are over the age of 55.

[13] Bellingham Comprehensive Plan , Land Use Chapter, LU-10c – LU-10d
[14] Bellingham Comprehensive Plan, Land Use Chapter, LU-12a
[15] http://www.city-data.com/neighborhood/Sunnyland-Bellingham-WA.html
[16] http://www.city-data.com/neighborhood/Sunnyland-Bellingham-WA.html

A major aspect of the plan is to promote greater diversity in the neighborhood through a variety of housing types and prices.

The average number of cars currently supported by houses and condos is approximately 1.8. The majority of Sunnyland residents drive or carpool as their primary mode of transportation, and their average commute is between 5 and 15 minutes. The plan addresses this issue of automobile dependency and aims to promote and facilitate alternative modes of transportation as a solution.

*TOC Site Analysis*

Figure 1.3.3.Current Land Uses

The site is predominantly single-family residential, but consists of commercial along the James Street corridor and has public uses, such as parks and schools, scattered throughout the site.

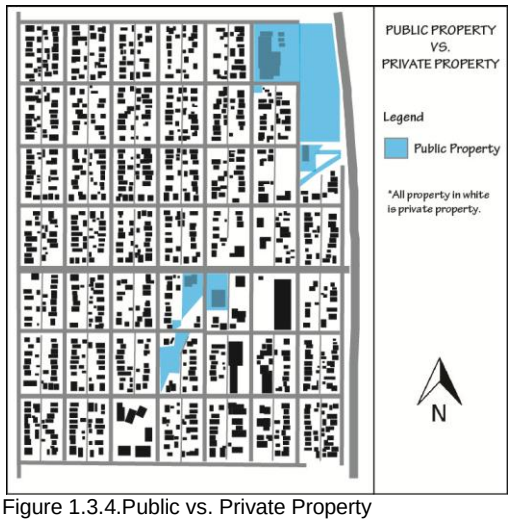


Figure 1.3.4.Public vs. Private Property

The majority of the site is privately owned.

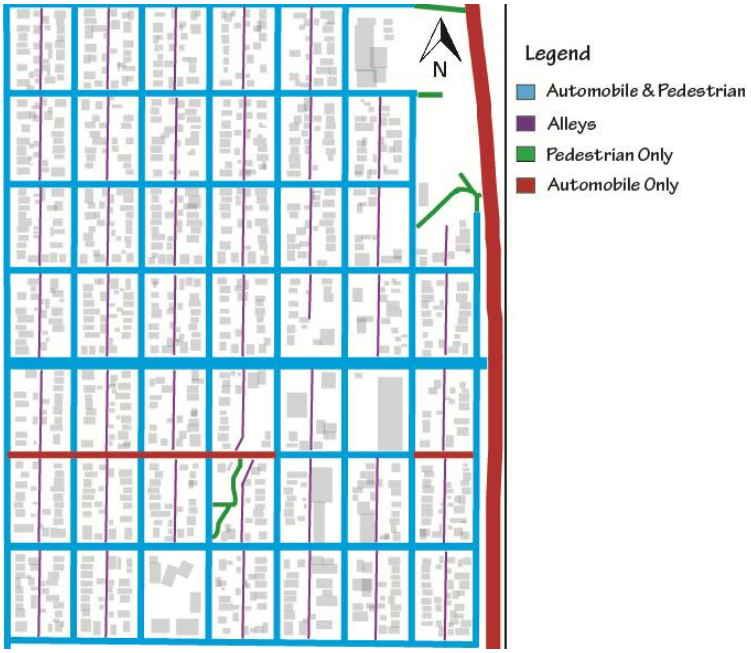


Figure 1.3.5.Current Connectivity

Automobile and Pedestrian Connectivity:

Automobile Only: 720.57 ft. /intersection
Pedestrian Only: 218.82 ft./intersection
Automobile and Pedestrian**:** 656.91 ft./intersection

Streets with areas consisting of only one sidewalk:

E. Illinois Street
Connecticut Street
Maryland Street

Streets with areas without any sidewalks:

Texas Street

The automobile and pedestrian connectivity is good when compared with conventional suburban development, which has automobile connectivity of 1150 ft. / intersection and pedestrian connectivity of 950 ft. / intersection.

Both the automobile and pedestrian connectivity are not as ideal as Kentlands, a model of New Urbanism development, which has 476 ft./intersection for automobiles and 354ft./intersection for pedestrians, or Radburn, which has 603 ft./intersection for automobiles and 342ft./intersection for pedestrians.

Figure 1.3.6.Current Figure-Ground

The site is already highly developed and consists of a well-established grid-like street pattern. The plan aims to work with the street network already present and enhance it through better design and promotion of alternative modes of transportation.

The plan also intends to increase pedestrian connectivity through implementation of more crosswalks and pedestrian paths.

Public Transportation Information:

Table 1.3.5.Transit stops east and westbound on Alabama Street

| Bus # | Bus Route | Frequency on Weekdays | Frequency on Weekends |
|---|---|---|---|
| 331 | Cordata/Downtown | Every 15 minutes | Every hour |

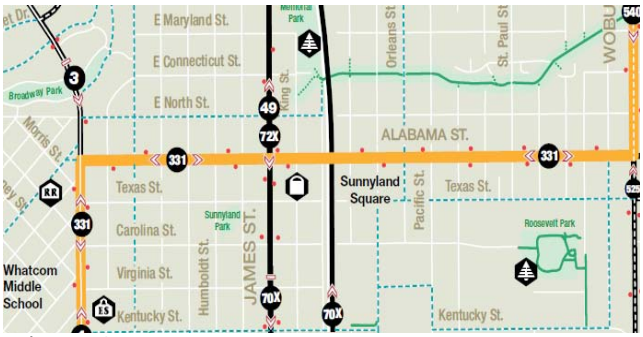

Figure 1.3.7.Bus Routes Map

Table 1.3.6.Transit stops north and southbound on James Street

| Bus # | Bus Route | Frequency on Weekdays | Frequency on Saturdays |
|---|---|---|---|
| 49 - Northbound | Bakerview/ Spur | AM: 7:49, 9:16 PM: 1:16, 6:46 | AM: 11:43 PM: 5:26 |
| 49 - Southbound | Bakerview/ Spur to Downtown | AM: 6:42,10:43 PM: 5:23 | AM: 11:43 PM: 5:26 |
| 72X - Northbound | Kendall | AM: 7:02,11:02 PM: 1:48, 4:17,4:52 | AM: 9:26 PM: 1:56 |
| 72X - Southbound | Kendall to Downtown | AM: 7:25,8:56 PM: 12:56,3:41,6:27 | AM: 9:26 PM: 1:56 |
| 70X - Southbound | Blaine to Downtown | AM: 7:32,8:32 PM: 5:45,6:45 | No Service |

The aim is to increase density within the core area along James and Alabama Street so as to support increased bus service and use.

Table 1.3.7. Pedestrian counts from the corner of Alabama and James Street

| Day | Time | Ratio of Pedestrians to Bus riders | Pedestrians/ Hour |
|---|---|---|---|
| Saturday | 11:45am | 11:4 | 44 |
| Monday | 2:45pm | 9:5 | 36 |
| Holiday (MLK Day) | 2:45pm | 3:1 | 48 |
| Average | N/A | 5:2 | 43 |

Table 1.3.8. Automobile counts on Alabama and James Street for 2010[17]

| Location | Cars/Week |
|---|---|
| Alabama – west of James | 13,100 |
| Alabama – east of James | 18,700 |
| James – south of Alabama | 15,300 |
| James – north of Alabama | 11,600 |

The majority of traffic through the site consists of automobile traffic. A major aspect of the plan would be to create the physical form and social conditions necessary to alleviate the current dependence on automobile ownership.

With regards to street design, on Queen Anne Avenue N, in 2008, there was an average annual daily traffic of 11,600 cars[18].This shows how better streetscapes can accommodate on a daily basis the same capacity of traffic that traverses James Street during an entire week.

[17] Chris Comeau, Transportation Planner, City of Bellingham, 2/8/11
[18]http://www.cityofseattle.net/transportation/tfdmaps.htm

Table 1.3.9. Facilities within site location

| Facility Category | Facility Type | Actual Facility |
|---|---|---|
| Food Retail | Supermarket | Trader Joe's<br>Cash & Carry |
| | Other food stores with produce | Youngstocks Country Farms<br>Produce Nursery |
| Community-Serving Retail | Clothing store or department store selling clothes | Wee Ones Returns Inc.<br>Wings |
| | Convenience store | Cornwall Corner Store<br>Iowa St. Chevron |
| | Hardware store | Hardware Sales Inc.<br>Fastnit limited |
| | Other retail | Sportsman Chalet<br>Fanatik Bike Co.<br>Shuck's – O'Reily<br>Complete Dance Wear |
| Services | Bank | Bank of America Home Loans<br>Gapac Credit Union |
| | Gym, health club, exercise studio | Butterfly Life Women's Fitness<br>Forever Fit Bellingham |
| | Hair care | Mikols Hair Salon<br>Cuts Plus Hair<br>Sunshine Salon<br>James Street Hair Co.<br>Serendipity Salon |
| | Laundry, dry cleaner | Cascade Laundry Inc. |
| | Restaurant, café, diner (excluding establishments with only drive-throughs) | Lucky Panda Restaurant<br>Coconut Kenny's<br>Papa Murphy's Take 'n' Bake<br>Avenue Bread and Deli<br>Cruisin' Coffee |
| Civic and Community Facilities | Community or recreation center | Boys and Girls Clubs of Whatcom County |
| | Educational facility | Explorations Academy<br>Sunnyland Elementary School<br>Options High School |
| | Government office that serves public on-site | Social Security Administration |
| | Place of worship | Trinity Lutheran Church<br>Bellingham Baptist Church<br>St. Sophia Greek Orthodox Church<br>The Church of Jesus Christ of Latter-day Saints |
| | Medical clinic or office that treats patients | Layton Health Clinic<br>Integrative Physical Therapy Services |
| | Public park | Memorial Park<br>Sunnyland Park |
| | Social services center | American Red Cross |

This table represents the current facilities that service the redevelopment site. The plan addresses implementation of such services that are currently not provided.

1.3 Issues and Opportunities

*Facilities Not Within Site Location and Proposed Solutions:*

<u>Farmer's market</u>
Recommend vegetable exchange program Saturdays at the community garden.

Pharmacy
Recommend that one be placed in commercial core.

Adult or senior care (licensed)
Recommend priority be given to senior citizens for a certain percentage of dwelling units.

Childcare (licensed)
Recommend that one be placed in a live/work unit.

Cultural arts facility (museum, performing arts)
Recommend community theater be implemented along James Street which can be used for community meetings, after school activities and events, and small-scale productions.

Police or fire station
Recommend that the current fire training station on James Street be moved to a more desirable location

Public library
Recommend a bookmobile be placed in the plaza at the intersection of Iron and James Street.

Analysis of the site found that most of the residential portion of the site is well-established, a hard area, with exception to the industrial site to the south, the fire station lot on Alabama Street, and the empty lot north of E. North Street. The majority of the soft areas that are prime sections for redevelopment reside within the commercial core.

Figure 1.3.8. Hard and Soft Area Diagram

*Major issues the plan addresses:*

Balance of Uses
Provide a balance of commercial and residential infill that will be supportable and will justify more frequent bus service.

Parking
Provide adequate parking to ensure use of the site while also promoting alternative modes of transportation

Pedestrian Presence
Implement more nightlife in the area to draw people to the site at all hours of the day

Community Unification
Diversify the community and create more localized sub-communities through implementation of more parks and public spaces.

Figure 1.3.9. Vision Diagram

## 2. Vision

Transform the James Street commercial corridor into a Transit Oriented Community that would accommodate Bellingham's projected growth in a sustainable manner, emphasize alternative modes of transportation, and create a vibrant community. By fostering social interaction, supporting local businesses, and balancing the neighborhood's character with good urban design it is envisioned that such an area would be a pleasant place to live, work, and visit.

Figure 1.3.10. Proposed Zoning Map

The Plan is to promote commercial infill along the James Street corridor from Virginia Street to just north of E. North Street. This would be implemented in the form of office/commercial vertical mixed use within the core, residential/ commercial mixed use north of Alabama and south of Texas Street, and live/work units along the outer boundaries of the commercial core. These live/work units would act as a transitional zone between the higher density commercial buildings and single family dwellings.

Civic uses would be implemented in the form of a community center on the southern portion of James Street and a community pool and garden located on E. Maryland Street, across the street from Sunnyland Elementary.

Public spaces in the form of small community parks would be implemented throughout the site to promote easy access for all residents.

Infill housing would be implemented in the form of vertical mixed use units within the core, multifamily residences on the periphery of the core, townhouses on open lots within the single-family area of the site, and accessory dwelling throughout the residential portion of the site.

### 2.1 Client Profile

The plan aims to promote a diversity of people both visiting and residing in the site in order to create a stronger, more diverse community. This would be instigated through an assortment of public and private spaces, the catering of varying needs, and a wide selection of housing options.

*The Small Business Owner/Entrepreneur*

Figure 1.3.11.Sharon Quast, owner of Etta's Attic in downtown Bellingham

The plan hopes to entice small business owners and entrepreneurs to both work and reside within the site.

A major aspect of the plan is to promote small, local business before larger retail establishments as a means of strengthening the local economy. This would be achieved by

giving priority to such businesses when leasing space in the new commercial infill along Alabama and James Street. The live/work units, located on the southern end of the James Street, would be ideal for those are just starting a new business, or are proprietors of small businesses, and would benefit from having to only pay one rent for both their business and their living space.

Whether it is a young student fresh out of college, a retired worker who has spent their life saving to open their dream business, or a successful business owner from the greater Bellingham area who wishes to relocate to the site in order to expand, there will be the variety of both retail spaces and cliental to support them.

*The Student*

Figure 1.3.12.Western Washington University Students in Red Square

Students living in the site, or merely visiting on the weekend, would enjoy the benefits this thriving community has to offer. The TOC would provide students without a car more options for housing, work, shopping, and recreational enjoyment.

There would be an abundance of smaller apartments and accessory dwelling units within the site which, located in close proximity to transit stops, bike sharrows, retail and other services, would allow for students to live cheaply without relying on an automobile.

The integration of housing within the commercial core would allow for students to be within walking distance to daily necessities and numerous job opportunities. The close proximity of bus stops would also allow students easy access to both campus and downtown.

Students who live on campus, or otherwise outside of the site, would also be drawn to the site due to the abundance of recreational opportunities. While many undergraduate students do not possess a car, they would still be able to utilize public transit to enter the site and partake in numerous shopping, retail, and restaurant options.

*The Moderate/Low Income Residents*

In order to truly integrate a diverse variety of residents within the site it will be required that affordable housing be dispersed throughout the residential mixed use units, the walk up buildings and slab apartments. These requirements, coupled with the transit oriented nature of the site making all units more affordable, would ensure that there will be adequate provision of housing for moderate and low income residents.

*The Single-Family*

Figure 1.3.13.Bellingham family uses trailbikes

The site is already highly conducive to single-family residences. The proposed improvements will act to further increase the site's desirability and make it an even more ideal place to raise a family.

Improvements to the site would result in an area that: has safe paths for children to walk to and from school; has numerous parks within walking distance; provides pedestrian trails within the residential area; and includes community facilities such as a community garden, pool, and center, which are ideal for families to have in close proximity.

The transit oriented nature of the development is also ideal for families. Children and pre-teens would be able to have the independence associated with being able to walk, ride a bike,

or take public transit as a means of transportation, and parents would no longer be burdened with always needing to transport their children.

*The Elderly*

Figure.1.3.14.Senior citizens touring retirement homes

The plan seeks to make the site accessible to the elderly that would be able to enjoy the autonomy of living on their own without dependence on an automobile. In order to ensure adequate provision of housing it is proposed that a certain number of units should be set aside for elderly residents.

**3. Characteristics of TOC District Plan**

3.1 TOC Plan Design Concept

Implement Infill: Encourage vertical rather than horizontal growth so as to accommodate Bellingham's increasing population without infringing on surrounding agricultural lands and green space.

Action Step 1: Integrate denser forms of infill closer to the commercial core and concentrate less dense forms of infill at the periphery of the site.

Action Step 2: Increase density of the commercial district within the core in order to provide more opportunities for employment.

Action Step 3: Transition the site's residential area from primarily low-density, single-family dwelling units to a more diverse range of higher density housing types.

Action Step 4: Promote a diversity of residents through provision of a variety of housing types and prices. It is proposed that a certain percentage of infill housing consist of affordable housing and units reserved for the elderly. This would support a wider demographic of Bellingham's population and create a stronger community.

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Promote Mixed Use: Promote development that maximizes both vertical and horizontal mixed use. Encourage a variety of building types and uses in order to provide better connectivity, a more interesting streetscape, and increase both the density and diversity of people within the site throughout the day.

Action Step 1: Encourage the integration of more commercial, office, and civic development within the site to ensure the daily needs of surrounding citizens, and visitors, are met without reliance on a personal vehicle.

Action Step 2: Implement said mixture of uses to avoid "dead zones" by having uses of differing hours of operation in close proximity.

Action Step 3: Promote non-residential vertical mixed use within the core so that offices and commercial business might share the cost of utilities and make errands of citizens faster and more efficient.

Action Step 4: Promote residential vertical mixed use bordering the core area in order to increase citizen presence at all hours.

Action Step 5: Implement live/work units on the southern portion of James Street in order to act as a transitional zone between residential areas and vertical mixed use.

Improve Pedestrian Connectivity: Create an environment where daily necessities are ideally within a 5 minute walk, and no more than a 10 minute walk, from home and work. Integrate additional pedestrian paths that will encourage walking as a mode of transportation while concurrently providing recreational benefits. Construct a pedestrian-centric streetscape that instigates increased use through its thoughtful design and the pleasurable experience it provides its occupants.

Action Step 1: Provide more crosswalks to make traveling across Alabama and James Street safer and easier.

Figure 1.3.15. Conceptual Diagram

Action Step 2: Make improvements to sidewalks in order to encourage pedestrian usage. This would include implementing sidewalks along roadways where they currently do not exist; such as along E. Illinois, Connecticut, Maryland and Texas Street, emphasizing pedestrian crossings with bulb-out sidewalks, and increasing sidewalk widths to 9ft along Alabama and James Street and 7ft along all residential streets leading away from the core.

Action Step 3: Entice sidewalk use by creating a more pedestrian-scaled environment that includes reduced store setbacks, increased lighting, and at least a 2:1 building height to street width ratio. In addition, it is suggested that buffering techniques, such as tree-lining, grass and flower buffers, and on-street parking, should be employed to further remove pedestrians from traffic.

Action Step 4: Create pedestrian pathways and trails within the residential area to connect neighborhoods and public spaces. These pedestrian walkways would be indicated through proper signage and on-street markings and designed to provide a sense of safety and entice usage. It is envisioned that these pathways would promote intercommunity interaction and encourage walking as a form of recreation.

Alternative Modes of Transportation: Decrease automobile trips by 20% through the promotion of other modes of transportation in order to

reduce traffic congestion and create a better urban environment.

Action Step 1: Encourage the provision of additional and more frequent bus service to accommodate the site's higher density of population and services.

Action Step 2: Promote bus ridership by providing bus shelters that are covered, well-light, and provide bus schedules and route information via updated transit kiosks. It is also encouraged that businesses comp the bus transfers of those who make purchases at their respective establishment.

Action Step 3: Narrow James Street down to a one-lane road that includes a buffered median between lanes. This median would terminate at intersections to allow for a left-turn lane.

Action Step 4: Make Iron and King Street one-way streets and expand them in order to utilize on-street parking on both sides.

Action Step 5: Redesign Virginia, Texas, and E. North, and Carolina Street to have parallel parking on each side from Ellis to Lincoln Street.

Action Step 6: Reduce surface parking within the site by consolidating it and promoting non-surface parking alternatives wherever possible. The plan is to discourage future placement of surface parking for newly developed sites in order to achieve the long-term goal of less than 20% surface parking.

Action Step 7: Provide increased bike infrastructure by implementing bike lanes on James Street in order to increase bike connectivity along the commercial corridor, and designating "sharrows" (bike share lanes) on E. North, Texas, and Lincoln Street.

Action Step 8: Encourage bike ridership by providing bike stalls within 200 yards of non-residential and multi-family buildings and establishing a community bike project which emphasizes community activities that promote bicycle use.

Create Community: Foster social interaction both on a large and small-scale. On a large-scale the aim is to draw people from other neighborhoods into the James Street commercial core. On a smaller-scale the intention is to create sub-communities within the neighborhood.

Action Step 1: Create smaller communities within the site's greater residential area. These sub-communities would be encouraged by providing each with their own respective public space consisting of one or more of the following features: community center, park, plaza, playground, and or a community garden. Such neighborhood public spaces would be connected by a pedestrian path.

Action Step 2: Create a variety of community spaces to service the neighborhood. Implement a community garden and pool on E. Maryland Street and south of Sunnyland Elementary. Incorporate a community center on James Street. Promote placement of a bookmobile in the civic plaza located in front of the social security building.

Action Step 3: Place small parks with varying themes, such as a basketball court for one and a tennis court for another, to draw residents from throughout the neighborhood to interact through a shared interest or hobby.

Action Step 4: Utilize and improve upon current parks within the site. It is suggested that Memorial Park be used for off-site educational purposes and that Sunnyland Park be expanded south to Carolina Street.

Action Step 5: Create plazas within the Trader Joe's and social security building complexes that will entice visitors and encouraged prolonged stays.

Action Step 6: Foster nightlife activities on James Street through numerous restaurant, bars, and music venues.

Support Local Business: Create a commercial core that promotes small, local business before larger retail establishments in order to strengthen the local economy.

Action Step 1: During development hire local businesses to provide materials and native vegetation for site and landscape design.

Action Step 2: Promote a vegetable exchange program in that residents who grow produce at the community garden can share, donate, and or sell their produce on specified weekends.

Action Step 3: Give priority to small local establishments, in addition to current business within the site, when leasing space in the new commercial infill along Alabama and James Street.

Encourage Green Development and Practice: Meet LEED ND requirements, as is feasible, when developing all cleared sites. Instill continued environmental stewardship and practices within the community after the development's completion.

Action Step 1: Encourage development that uses reused construction materials or those that have been obtained from local providers.

Action Step 2: Promote water conservation through implementation of efficient utilities within new buildings.

Action Step 3: Give incentives to developers whose projects meet the plan's aim of acquiring a solar reflexive index of 29 or greater.

Action Step 4: Encourage proper clean-up methods to ensure removal of all toxins and chemicals associated with development.

Action Step 5: Construct buildings that are longer in length on streets running east to west than those on streets running north to south in order to ensure proper orientation to the sun.

Action Step 6: Give tax incentives for commercial recycling.

Action Step 7: Encourage green roof implementation wherever it is feasible.

Utilize Good Urban Design: Utilize good architecture and urban design that balances New Urbanism standards with community character to provide a sense of place, encourage human comfort and safety, and add to the quality of life of those who inhabit or frequent the Sunnyland Neighborhood.

Action Step 1: Require that when streetscapes and building typology are redesigned that they meet New Urbanism standards and create a human-scale environment. This would include requiring that all commercial business have a façade that consists of at least 30% windows when facing the street.

Action Step 2: Move surface parking to be behind buildings, or in the case of Trader Joe's to a specified lot in close proximity to the building, so that it is hidden from the pedestrian realm.

Action Step 3: Require that buildings implemented, with exception to live/work units, are at least 3 stories tall and are built to accommodate the highest density that can feasibly be supported by the area.

Action Step 4: Implement design standards that preserve the local character of 1920's,craftsman style design and encourage local art in design.

Action Step 5: Implement a vegetative noise buffer wall along I-5; especially along Memorial Park in order to promote usage.

Action Step 6: Incorporate 90% native vegetation into the landscape design of the site and remove, and restrict future use of, all invasive species.

3.2 Residential

The plan is to transition the site's residential area from primarily low-density single-family dwelling units to a more diverse range of higher density housing types, based on Bellingham's infill housing guidelines, in order to promote more diversity within the neighborhood.

It would be required that affordable housing be dispersed throughout the residential mixed use units, the walk up buildings and slab apartments. There would be a certain amount of dwellings designated for those who have an income 50% of the median income and another block of units designated for those whose income is 80% of the median income. The ratio of affordable housing units would be determined based off of the perceived need by the City and prices would be established with the size of the unit and the income of the respective renter being taken into account.

It would also be encouraged that a certain percentage of the residential mixed use units and apartments be set aside for the elderly.

*Vertical Mixed Use*

Figure 1.3.16.Vertical mixed use building located on 12th and Harris

The vertical mixed use buildings, concentrated along the commercial corridor, would have their highest density near the transportation stops along James and Alabama. These units would not provide parking for all units, but would be more affordable as a result. Surrounded by a variety of uses, and near transit stops, ownership of an automobile would not be necessary.

Figure 1.3.17. Perspective of vertical mixed use buildings on James Street

Ranging in size from 1000-1200ft ², such units would be ideal for those that work in the City and do not rely heavily on the use of an automobile. Students would also enjoy sharing these units due to the easy access to transit for commuting to campus and the availability of numerous shopping and work opportunities. Vertical mixed units would also be ideal for the elderly that wish to enjoy the freedom of living on their own without dependence on an automobile.

*Live/Work Units*

The live/work units would be located on the southern end of the James Street commercial corridor. These units would provide a transitional zone between vertical mixed use and the residential area surrounding the core.

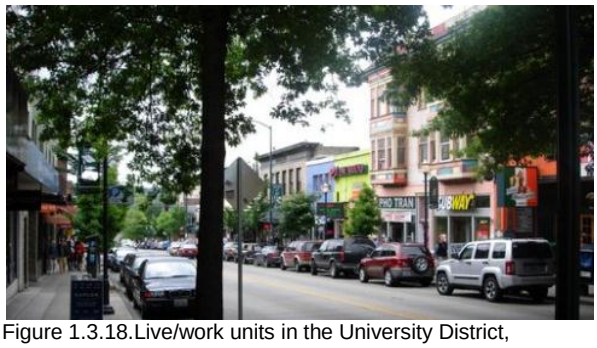

Figure 1.3.18.Live/work units in the University District, Seattle

Figure 1.3.19.Perspective of live/work units on Texas Street

Ranging from 900-1100ft ² in size, these units would be ideal for entrepreneurs who are just starting a new business and wish to enjoy the benefits of paying only one rent for both their business and living space. There would be enough parking for one car to make the necessary business trips required outside of the transit line, but not enough to support multiple drivers.

*Slab Apartment Complex*

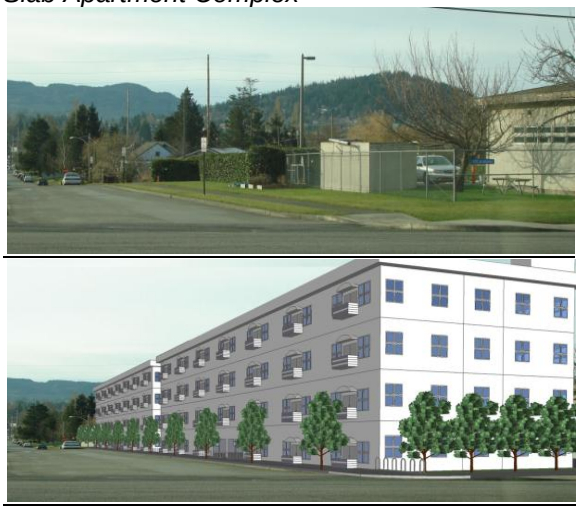

Figure 1.3.20. Before and after slab apartment perspective

The four-story apartment complexes would provide a variety of dwelling types including studio, one bedroom, and two bedroom units, and range from 450 – 845ft$^2$ per unit. Located in a less desirable location, placed on the lot currently supporting the fire-training station, it is envisioned that these units would be more affordably priced. Purely residential, these apartments would be secluded from the busy commercial hub and within an easy walking distance from numerous parks and pedestrian paths.

Figure 1.3.21.Baker Creek Apartments, 3900 Deemer Rd.

These units would be ideal for the elderly, students, singles, and low to moderate income families. Such cliental would be more likely to purchase a less expensive, smaller unit that is in close proximity to all of life's daily necessities.

*Walk Up Apartment Complex*

Figure 1.3.22.Walkup apartment complex in Brooklyn, New York

These lower-density apartments, 1,384 per unit, would be located in desirable locations, within the commercial core and just north of Alabama Street, and look out onto a plaza. These units are envisioned for those who want the convenience of a transit oriented location, are in need of a larger apartment, and are looking for a unit that would be offered at a reduced cost due to lack of provided parking.

*Townhouses*

Figure 1.3.23.Townhouses located on 21$^{st}$ and Mill Street

The townhouses would be located on the previously industrial lot bordered by Grant, Humbolt, Carolina and Virginia Street, and on the open lot south of Memorial Park.

Figure 1.3.24 Proposed open lots for town house infill

Townhouses were chosen in order to provide residential infill that would blend with the previously established low-density, single-family residences. The lots would be comprised of 1,493 ft. $^2$ homes, which would provide the benefits of homeownership, such as private backyards and front porches, while also allowing for the implementation of higher density housing forms. Parking would be provided for these residents because they are more isolated form transit routes, but would remain hidden from the street to maintain a lively, pedestrian-friendly streetscape.

Figure 1.3.25.Humbolt industrial lot townhouse perspective

These units would be suitable for families who can afford a townhouse and work either within the City or a commuting distance away. Such homes would be ideal for raising families due to their close proximity to numerous parks, pedestrian paths, and open spaces. There is an enclosed communal space on the previously industrial lot site, which would be conducive for residential interaction. The site across from Memorial Park would also be ideal for families in that it is in close proximity to Sunnyland Elementary and the proposed community pool and garden.

*Accessory Dwelling Units (ADUs)*

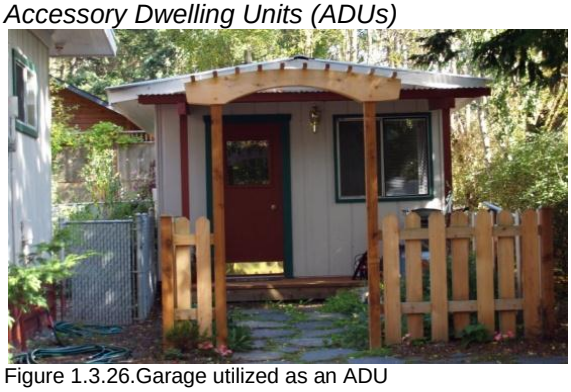

Figure 1.3.26.Garage utilized as an ADU

The entire site would be zoned for accessory dwelling units (ADUs). The site consists of numerous ideal locations for ADUs due to the abundance of the detached garages, common with older homes, which are present in the Sunnyland neighborhood.

These dwellings would be ideal for singles and students who are looking for a short-term living space that is affordable. Such an arrangement would also benefit families who wish to subsidize the cost of living in Sunnyland by renting out their accessory dwelling unit.

## 3.3 Commercial

Figure 1.3.27.Interesection of James and Alabama Street perspective

The plan is to increase commercial density along Alabama and James Street to provide more opportunities for employment, accommodate the needs of the predicted residential growth, and warrant additional, as well as more frequent, public transportation service to the site.

Figure 1.3.28.Live/Work units in University District, Seattle

It is proposed that the intended increased density of commercial businesses coupled with the suggested increase in diversity of commercial uses would provide a respectively higher density and diversity of people frequenting the site throughout the day. It is envisioned that this new commercial infill would

also provide nightlife and weekend activities currently lacking within the site.

The plan intends to foster nighttime activities on James Street through numerous restaurant options, bars, and music clubs. It is proposed that the southern end of the commercial development, especially the live/work units, emphasize small-scale restaurants serving a variety of foods such as Ethiopian, Thai, Moroccan, and Sushi. These restaurants would be small and provide fast service, making them ideal for those that want to pick up a quick dinner, have a weekday lunch, or grab a snack while enjoying the nightlife James Street has to offer.

Table 1.3.10. Proposed Land Uses

| Buildings | Feet ² |
|---|---|
| Retail | 302,772 |
| Office | 210,378 |
| Institutional | 28,548 |

| Residential | # Units | Feet ² |
|---|---|---|
| Slab Buildings ( 2 buildings, 4-stories)<br>Studio<br>1 bedroom<br>2 bedroom | 150 (2 buildings, 75 per building)<br>52<br>72<br>26 | 94,240 total<br>450 per unit<br>650 per unit<br>845 per unit |
| Walk Up Buildings | 36 (3 buildings, 12 per building) | 1,384 per unit |
| Townhouses | 52 | 1,493 per unit |
| Live/Work units | 44 (ranging from 900-1100ft ²) | 44,227 total |
| Vertical Mixed Use Apartments | 178 (ranging from 1000-1200ft ²) | 196,107 total |
| Total | 460 | 337,451 total |

| Open Space | Feet ² |
|---|---|
| Parks | 100,820 |
| Plazas | 52,723 |

| Parking Location | Quantity | Current/ Zoning | Samish Way Code |
|---|---|---|---|
| Behind Trader Joes | Perpendicular = 128 | 142 (current) | 77 |
| Around Social Security Building – to be shared with walkup apartments | 45 degree = 20<br>Perpendicular = 63 | 95 (current) | 57 |
| Slab Building Parking | Perpendicular = 105 | 199 | 150 |
| Residential Vertical Mixed Use & Live/Work Units | Perpendicular = 280 | Retail = 1056<br>Office = 601<br>Residential = 480 | Commercial = 528<br>Office = 420<br>Residential = 222 |
| Townhouses | Perpendicular = 92 | 104 | 104 |
| Carolina Street | 45 degree = 17<br>Parallel = 164 | n/a | n/a |
| Iron Street<br>(Alabama to Virginia) | 45 degree = 55<br>Parallel = 100 | n/a | n/a |
| King Street<br>(Texas to Virginia) | 45 degree = 36<br>Parallel = 67 | n/a | n/a |
| Virginia Street | Parallel = 182 | n/a | n/a |
| Texas Street | Parallel = 186 | n/a | n/a |
| East North Street | Parallel = 186 | n/a | n/a |
| Community Pool and Garden | 20 –share with school parking during no school hours. | 75 | n/a |
| Total | 1701 | 2515 | 1559 |

## 3.4 Metrics

There will be substantially less parking than is required by the City's zoning code requirements. However, the James Street TOC would meet, and exceed the parking requirements of an already accepted Urban Village project: Samish Way.

Through better provision of alternative modes of transportation and dense infill of a mixture of uses the TOC would allow for the automobile to be accommodated, but discouraged.

## 3.5 Circulation

*Pedestrian & Bike Paths*

Figure 1.3.29.Proposed Circulation Diagram

To promote bike riding as a mode of transportation, the plan is to designate “sharrows” (bike share lanes) on E. North, Texas, and Lincoln Street to provide access to both the commercial core and recreational bike trails.

These sharrows could also be utilized for commuting through the neighborhood. The plan also includes implementing bike lanes on James Street in order to increase bike connectivity along the commercial corridor.

To foster a sense of community and promote walking as not only a mode of transportation, but also a form of recreation, the plan aims to implement pedestrian pathways to connect neighborhoods and public spaces.
The proposed pathway would be designated along E. Maryland Street, between Grant and Franklin Street through the alley, along E. Connecticut Street, and between Franklin and Ellis Street.

The path would connect Broadway Park, Bellingham High School, Sunnyland Elementary School, The Railroad Trail connection to the Roosevelt Neighborhood, proposed new parks, the community garden and pool, residential development, and the core area.

Figure 1.3.30. Pedestrian pathway in Massachusetts

*Street Changes*

Figure 1.3.31.Iron Street perspective looking north

One of the street changes proposed in the plan is to make Iron Street and King Street one-way streets. Iron Street would be made into a one-way going north between Alabama and Virginia Street. King Street would be made into a one-way street going south between Texas and Virginia Street.

Both Streets would be expanded to accommodate 45 degree parking on one side and parallel parking on the other.

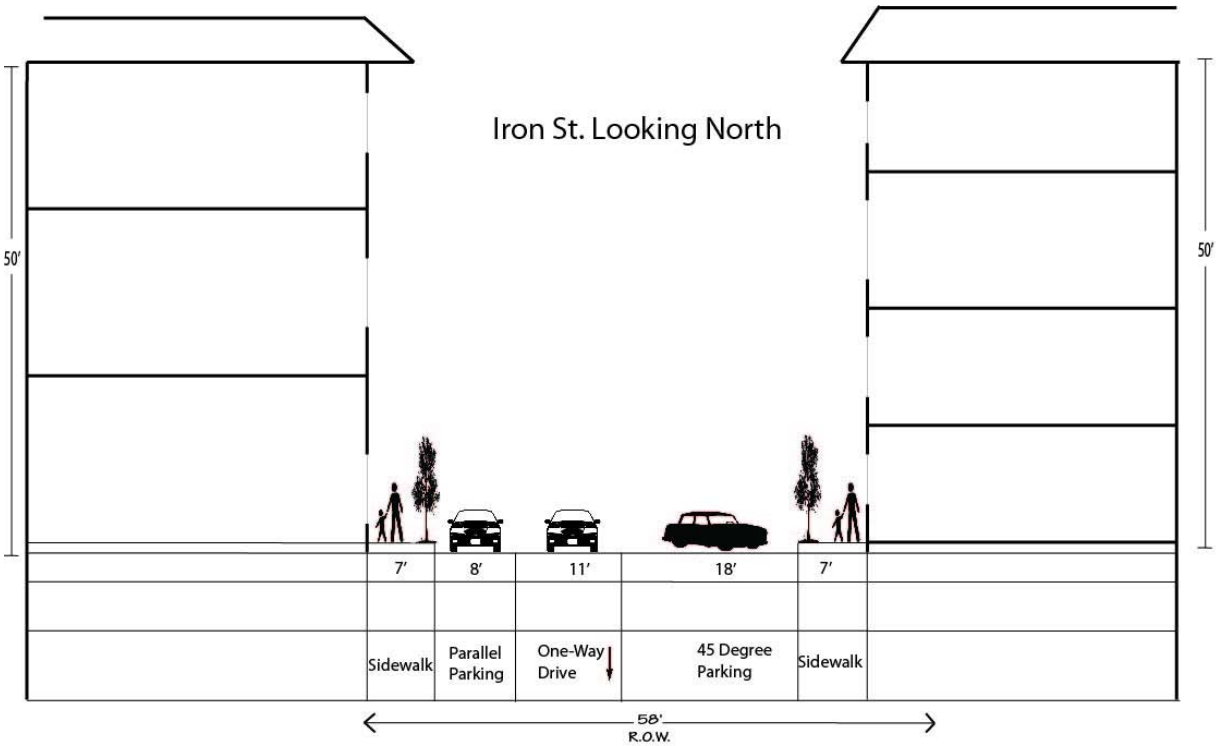


Figure 1.3.32.Iron Street cross section looking north

Figure 1.3.33.James Street perspective looking south

Another street change would be to narrow James Street down to a one-lane road.

There would be a buffered median which would disconnect at intersections to allow for creation of a left-turn lane.

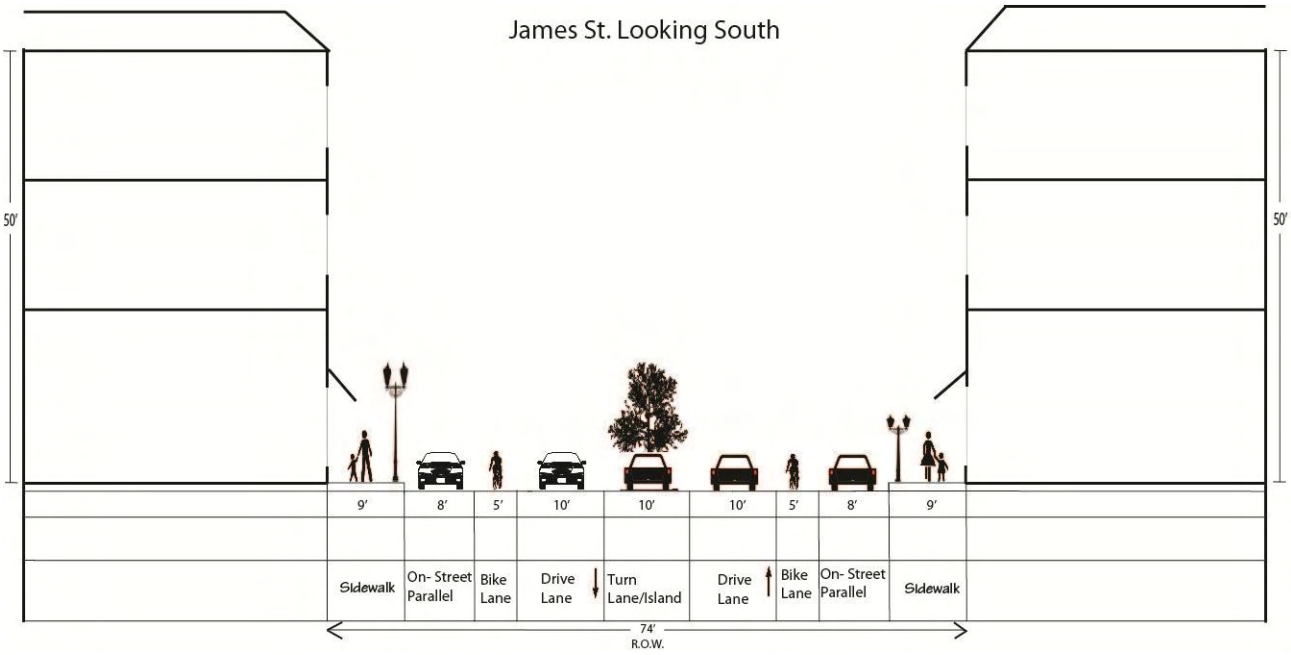


Figure 1.3.34.James Street cross section looking south

Figure 1.3.35.Texas Street perspective looking west

The plan includes redesigning Virginia, Texas, and E. North Street so that they have parallel parking on each side from Ellis to Lincoln Street.

Carolina Street would also be redesigned to have parallel parking on each side from Ellis to Lincoln Street. However, the forty-five degree parking currently in front of Youngstock's would be maintained.

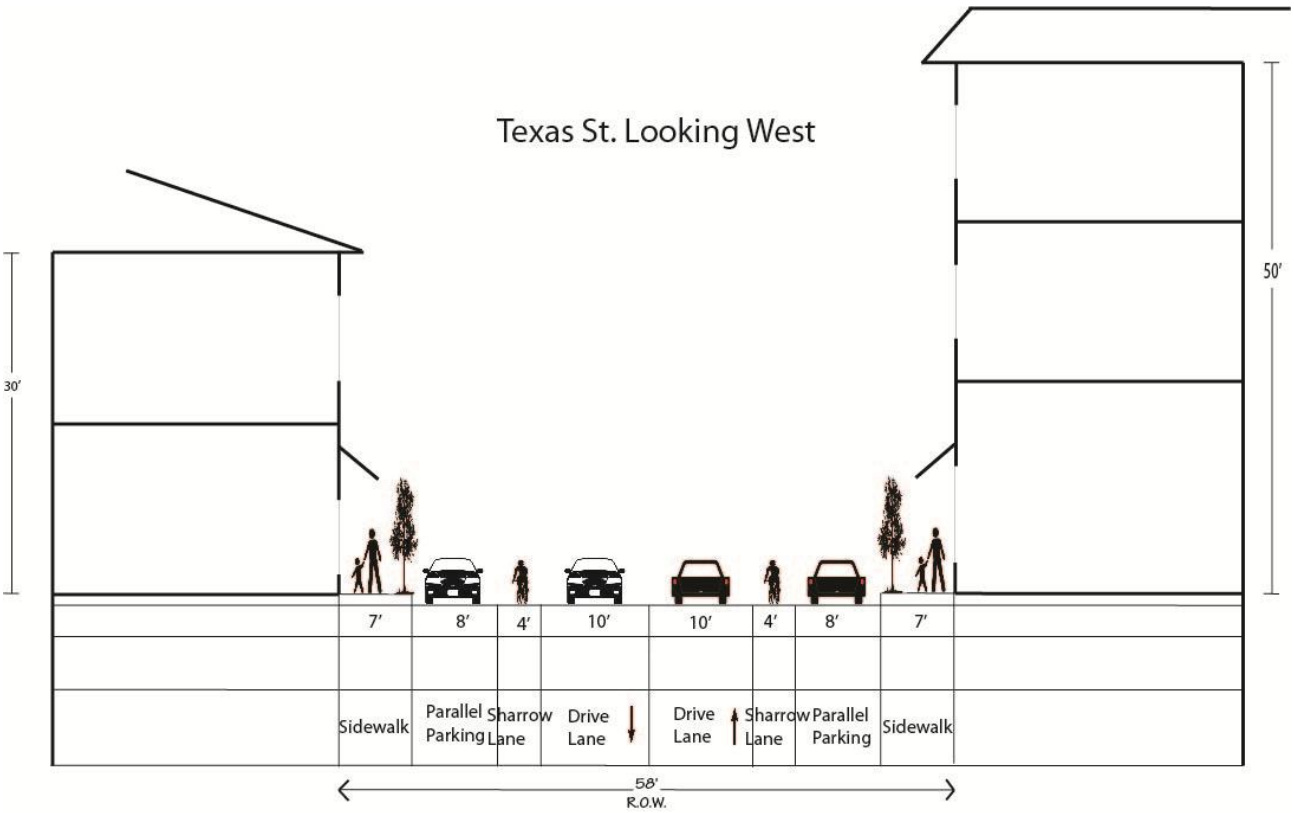


Figure 1.3.35.Texas Street cross section looking west

*Transit Changes*

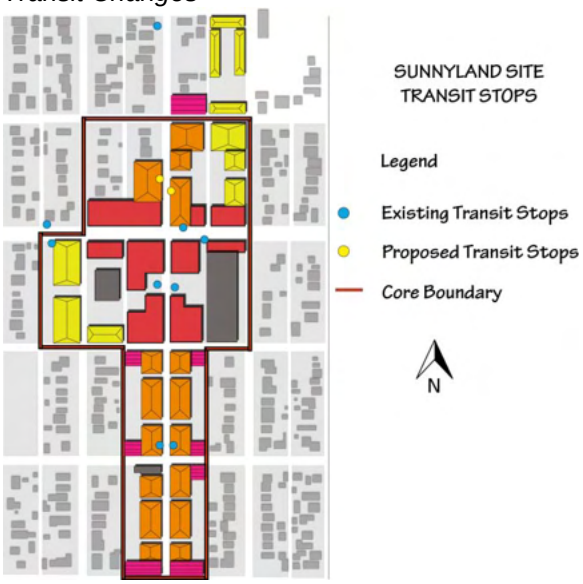


Figure 1.3.36.Proposed Transit Stop Diagram

The plan implements a transit route that would service James Street, St. Joseph's hospital and Bellingham Technical College on half-hour intervals.

It is proposed that two transit stops be relocated closer to the core. One ideal location would be on James Street, just north of Alabama Street, with stops being placed for buses routes running north and south.

Figure 1.3.37.Perspective of the proposed WTA bus stop

## 3.6 Parks, Plazas, and Neighborhood Connections

One major aspect of the plan is to foster social interaction both on a large and small-scale. The plan is to subdivide the neighborhood into smaller communities each with their own respective public space consisting of one or more of the following features: community center, park, plaza, playground, and or a community garden.

Such neighborhood public spaces would be connected by a pedestrian path allowing for residents to meet and interact. This would increase unification between different sub-communities.

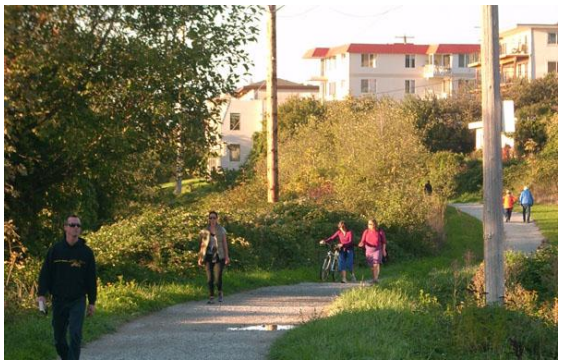

Figure 1.3.38.Pedestrian path connecting to Boulevard Park

Smaller parks would vary in theme, such as a basketball court for one and a tennis court for another, to draw residents from throughout the neighborhood to interact through a shared interest or hobby. Proposed locations would be part the southwest block of Maryland and Grant Street, part of the northwest block of Humbolt and Connecticut Street, and part of the southeast corner of E. North and Ellis Street.

In order to foster both environmental stewardship and education, while also providing a forum for community interaction, it is proposed that there should be a community garden located on E. Maryland Street south of Sunnyland Elementary.

Figure 1.3.39.Open lot south of Sunnyland Elementary

It is envisioned that the lot would also be developed to include a community pool so that both facilities might be utilized by the public and the school for educational, as well as recreational, purposes.

Figure 1.3.40.Community garden on 32nd Street in Happy Valley

Figure 1.3.41.Current Trader Joe's plaza looking southeast

Through proper physical form, good urban design, and a mixture of uses with variable hours of operation, it is envisioned that the plaza would draw a high density and diverse range of visitors who would frequent the site throughout the day. This would make the commercial core a pleasant and safe setting for social interaction.

Figure 1.3.42. Plaza perspective looking southeast

Another proposed community facility to implement is a community theater on James Street. This would consist of a stage and could be used for small theatrical and dance productions, public meetings and events, and for adult organizations as well as after school programs.

In addition to providing ample public community spaces, it is the aim of the plan to create a plaza which would foster larger-scale community interaction within the site.

*Design Elements*

Good design would be essential to creating an overall sense of place within the site. It is proposed that design standards should be implemented to allow for consistency throughout the neighborhood while also taking into account the natural features of the site.

These standards should emphasize craftsman style design, which is already present in the area, discourage modular or stick-frame design, encourage integration of native vegetation, and support local art and design.

Figure 1.3.43.Craftsman style home on Ellis Street

The plan has also proposed various LEED ND standards that may also be applied within the site through such means as green roofs or solar-oriented buildings.

3.7 Capital facilities

*Proposed Grants*

Capital Improvement and Maintenance grants are available in accordance with the Recovery and Reinvestment Act of 2009. Projects eligible for grants include the improvement and maintenance of different trails, bridges and roads. It is proposed that capital improvement grants may be applied when integrating the pedestrian pathway through the neighborhood.

Under the Department of Transportation and the Federal Transit Administration, federal transit-capital grant programs are available to provide assistance to different public transit services. These grants may be utilized in order to fund transportation improvements such as the added James Street transit route.

In addition, Washington State offers grant programs for building and renovating outdoor parks and for buying land for future parks. Examples of these grants include:

Buying land for a neighborhood park
Building tennis and basketball courts
Building a skateboard park

It is proposed that such grants might be used when developing the small parks throughout the neighborhood.

**4. Relationship of Planning Concept to TOC Goals**

4.1 TOC and the Leadership in Energy and Environmental Design Neighborhood Development (LEED ND)

TOC's due to their emphasis on decreasing auto-dependency, promotion of alternative modes of transportation, and integration of development density vertically as infill, rather than traditional horizontal development, already uphold many of the same goals as those supported by LEED ND. The plan for the James Street TOC further builds off of the cross-over between TOCs and LEED ND through integration of some of LEED's green construction and building standards while also emphasizing green design, such as green roofs, and environmental stewardship through community programs such as the vegetable exchange and commercial recycling program.

*Smart Location & Linkage*
The intent behind LEED ND is to promote development near and/or within existing communities so as to discourage sprawl and the financial and environmental burdens associated with horizontal development. [19]

The proposed James Street TOC plan aims to accommodate the City's projected growth in a sustainable manner through vertical mixed use development that allows for an increase in both jobs and residences without infringing on surrounding agricultural lands and open space.

Another goal of LEED ND is to discourage automobile usage. The proposed plan would foster this through its:

Emphasis on public transportation
- Increased bus frequency and service
- More prominent stop locations
- Reduction of surface parking

Encouragement of bike ridership:
- Sharrow and bike lane implementation
- More bike parking

Promotion of walking as a mode of transportation
- Density and mixture of uses providing "quick trips"
- Pedestrian-friendly paths and streetscapes

In addition all alternative modes of transportation the plan takes into account connections outside of the site boundaries to promote accessibility to

[19] Pilot Version, LEED for Neighborhood Development Rating System pg.6

the surrounding neighborhoods and their services.

*Neighborhood Pattern & Design*

Neighborhood Pattern:
The intent behind LEED ND is to promote communities that are "physically connected to each other," through a variety of denser forms of housing, and "foster community connectedness beyond the development" in that the community consists of a diverse set of individuals of various ages, income levels, and backgrounds.[20]

Large-scale community interaction would be achieved through implementation of:

- A community garden
- A community pool
- A community theater
- An international food district
- Bars and music clubs

Small-scale community interaction would be achieved through implementation of:

- Small public parks with varying themes and facilities
- A pedestrian pathway which connects public places and residences

With regards to the community structure, the proposed plan aims to provide a wide variety of housing types and prices. Such diversity would be achieved through:

- Implementation of townhouses, slab apartments, walk up apartments, and residential vertical mixed use units
- Requirement of affordable housing
- Requirement of a certain percentage of housing being reserved primarily for the elderly

Neighborhood Design:
The intent behind LEED ND is to utilize design in order to promote alternative modes of transportation. The plan would accommodate this requirement through:

- Well-designed transit stops
- Pedestrian-scale streetscapes and features
- Easy access to public spaces

*Green Construction & Technology*

The intent behind LEED ND is to promote development that reduces the environmental impacts of development through energy efficient buildings, reduced water use, adaptive reuse, and consideration of solar orientation.[21] The plan aims to meet LEED ND requirements, as is feasible, when developing all cleared sites and to instill continued environmental stewardship and practices within the community after the development's completion.

Such practices the plan incorporates include:

- Implementation of green roofs
- Use of reused construction materials or those that have been obtained from local providers
- Implementation of waste water filters
- Utilization of utilities that promote water conservation
- Use of proper clean-up methods
- Consideration of solar orientation
- Use of tax incentives to promote commercial recycling

When implemented the proposed plan would successfully provide the James Street corridor with a TOC that: fulfills requirements set by the GMA and the City's comprehensive plan; incorporates LEED ND guidelines for sustainable development; builds off of the current character of the Sunnyland Neighborhood; and takes into consideration the current residents' wants for improvement to the area.

The City's projected growth would be accommodated in a sustainable manner. The plan would promote an increased provision of jobs, services, and dwellings, without infringing on open space; therefore lessening the financial and social burdens associated with traditional horizontal development. The plan would decrease automobile dependency and promote alternative modes of transportation, increase diversity of housing types and prices and would create a thriving community through a variety of public and private spaces.

[20] Pilot Version, LEED for Neighborhood Development Rating System pg.48

[21] Pilot Version, LEED for Neighborhood Development Rating System pg.92

# CHAPTER 1. TRANSIT ORIENT COMMUNITIES DISTRICT DESIGN CONCEPT 4

## 1.4 STATE STREET HUB

JAMES YORK
HEATHER AYERS
CAMERON ZAPATA

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## Introduction

### 1.1 Purpose of the Transit Oriented Community (TOC)

This document provides a policy framework for the creation of a transit oriented community along State Street, extending north of downtown to Iowa Street. Located between the Lettered, York and Sunnyland Neighborhoods, this area is an ideal location for a transit-oriented community with the downtown transit station being just a short walk away.

Fig. 1.4.1 Site map

The goal of a transit oriented community is to provide housing and transportation choices that provide residents access to homes, jobs, recreation opportunities, shopping, and services to meet their daily needs without having to rely on a personal motorized vehicle. Integrating land use, transportation, and housing policies to foster a vibrant and safe mixed use community where residents, employees, and visitors are free to walk, bike, or take public transit to reach their destinations.

Infill brings definition to the streets. Buildings help create interesting spaces for pedestrian activity and strive to reduce construction impacts by incorporating green roofs, mixed use design, and sustainable ideologies. Inviting bus stops, placed at key locations gives pedestrians access to the city and inspires use of high frequency transit over private automobile use. The streets, lined with vegetation buffering pedestrians from auto traffic, are lively connections to the areas amenities. The core of State Street Hub gives pedestrians a jump off point for accessing the retail opportunities and the increased foot traffic gives existing light industry unprecedented commercial exposure.

### 1.2 Community characteristics

Today, the State Street Hub serves as the communities light industrial and commercial area and is comprised of many locally owned businesses ranging from warehouses for print making services and manufacturing facilities, to equipment rentals, auto rentals, and auto dealerships. Service professional offices and buildings for the liquor control board, physicians, and consulting services, as well as a fitness center contribute to the areas unique commercial uses as well. The retail amenities of the area consist of a bicycle mechanics and sales shop, and craft and quilt shops.

Fig. 1.4.2 Retail amenities
stampadoodle.com
http://www.bellinghamfitness.com/

Currently, State Street functions as the main arterial road for the area, leading motorized vehicles in and out of downtown Bellingham, as well as to and from interstate I-5.

### 1.4 Issues and opportunities

State Street Hub is within a ¼ mile distance from downtown Bellingham, and the downtown transit station.

Fig. 4.1.3 ¼ mile

Currently this area lacks any residential density, but it is estimated that there could be 1,084 housing units and an additional 237,266 square feet of commercial space available. This level of development would result in a large increase in residential and commercial density, as well as a demand for a walk able, mixed use neighborhood.

The addition of apartment units atop commercial space along State Street between Ellis and Iowa Street would place residents within a quarter mile of downtown and overlooking the busy commercial street.

Fig. 1.4.4 Mixed use buildings
http://oregonon.org/newsletters/oregon-on-the-beat-january-13-2011/

## 2. Vision

The corridor hub along State Street shall become a diverse village offering a variety of housing, commercial and transportation options to its residents. Not only will residents of the State Street Hub have the opportunity to work and live in the same area, but will have entertainment options nearby as well.

Fig . 4.1.5 Prosed Land Use map and Legend

State Street, the “main street” of the area, is the focus of the community, offering with a wide variety of choices and mix of uses. New development will occupy high quality design and building materials. New multi-story development lines the street as to boost foot traffic and provide windows facing the sidewalks for pedestrians to look into and window shop. Tree lined streets and landscaping encourages pedestrian use and allows commercial activity to spill out onto the sidewalks. Commercial and mixed use buildings include an eclectic mix of industrial business types, characteristics adapted for residential urban living, as well as refined new multi-story commercial and mix used buildings that combine to create a lively, mixed use neighborhood.

The ideal occupants of the State Street Hub transit-oriented community are College students and young professionals, small families, and retirees as they can take the bus, walk, or ride their bikes to downtown, the University, or to the surrounding neighborhoods, as well as meet up with friends for lunch or dinner, go shopping, or go for a walk or bicycle ride, all without having to rely on the use of a car, as they can walk or bike to any of the numerous parks in the area.

Fig. 4.1.6 College student

Sarah Jennings is a junior attending Western Washington University studying Business. She moved to the State Street Hub just a few months ago. Since she is a

struggling college student, like many of the students in Bellingham she enjoys the low rent apartments above Bellingham Fitness and other mixed-use buildings. The close proximity too many amenities such as a laundry mat, Deli, and bookstore, make getting around convenient because she does not own a car; she is able to walk or use her bike. When she attends class, she takes the frequently running bus up to campus, and then stops at the near-by Downtown Bellingham to grab a beer with some friends. Sarah and her friends the walk back to her friend's apartment just a block away from away from hers where are able to enjoy each other's company and have a relaxing night.

Fig. 1.4.7 Young married couple

Pam and Jim is a younger, married couple, in their early 30's who recently moved back to Bellingham to raise their son Elijah and be near family and friends. Not wanting to live in a large home away from town, they have settled into a nice townhouse along Whatcom creek. Pam enjoys taking Elijah to the park where she can socialize with the other young mothers. Jim loves the close proximity to his work and Bellingham Fitness. On Saturdays he meets up with friends for a game of basketball. Not needing to drive everywhere, Pam and Jim are appreciative of the extra time they can spend together as a family.

Fig.1.4.8 Retiree

Mary Livingston, a 65 year-old retiree just moved into the condos above the cultural center to downsize from her family home in the Sunnyland Neighborhood. On Wednesday's she is able to enjoy crafting classes at Stampadoodle just a block away, and then cooking classes on Thursday's at the Cultural center. When she needs to get groceries for Sunday night dinner with the family, she can take the public transit to Trader Joes. When her family comes to visit, they also get to reap the conveniences of taking the bus to Grandma's house where they all can enjoy the park just few minutes' walk away.

**3. Characteristics of TOC District Plan**

*TOC Design Concept*

*Fig. 1.4.9 Site illustration*

Using practices and ideas structured by the Transit Oriented Community metrics, the proposed plan for the State Street Hub will bring a substantial amount of change to the area while maintaining a certain level of existing use. The plan will help define a core that will serve as a cultural landmark and will bring pedestrian activity to this otherwise industry oriented district. To support this core, the concept will increase the commercial and retail usage in the area through the use of infill methods.

Considerations for development Whatcom Creek are critical to the viability of the design, and utilizing the important recreational resource that the creek represents is paramount to the concept. To bring realistic use to the creek area, extensive infill of residential specific structures will be constructed in close proximity to it. The creek exists as a natural boundary between the residential York neighborhood and the industrial oriented section of Sunnyland and the Lettered District. Due to this fact, the concept for State Street attempts to bridge the gap between these distinct areas by gradually mixing uses.

*The Core- A Cultural Attraction*

*Fig. 1.4.10 the core area*

The core is the focus of pedestrian activity. Located on State Street it is physically in the center of the redevelopment. This area will be the center for retail opportunities and cultural amenities. Businesses designed for social interaction and leisurely operation will be implemented around the core to make it an inviting place for extended periods of time. Building faces will be constructed in a way that clearly defines the core as space for social interaction.

The State Street Community Center is located within the core. Intended to provide the surrounding areas residents with social opportunities, the cultural center will be a venue for neighborhood activities and events. Increasing upon the community aspect of the TOC concept, the cultural center will also provide accommodations for visiting guests and give tourist an alternative to the motels of Samish Way and Meridian St. Designed to be a lively area, the cultural center will provide activities customary for all hours of the day.

A lounge/restaurant as well as space for activities and performances will occupy the lower levels and will encourage pedestrian usage throughout the day. Space for performing arts will also reside on the lower level and provide a community attraction for special events. The second level will serve as office space for the surrounding businesses. Third and fourth levels will be constructed as short term stay accommodations for guests to the area. The remaining levels will be residential usage and give individuals opportunity to be at the center of happenings for the area.

*Fig.1.4.11 Community Center*

Bellingham Fitness also exists in close proximity to the core. As one of the areas only current cultural attractions, the fitness center already receives a fair amount of usage. It is the concepts attempt to bolster this use and supply additional foot traffic for the business and promote a healthy lifestyle for the community.

The core area currently lacks retail opportunities that would bring an increase of usage. Additional retail infrastructure will be constructed to accentuate the core boundaries and invite more pedestrian use.

The remaining areas of the core will incorporate existing businesses and infill inefficiently used land to provide for the construction of mixed used buildings. Consequential redevelopment will have to take place in order to promote the growth of the core.

*Fig.1.4.12 mixed use buildings in the core*

*The Character- Maintaining Existing Attributes*

Incorporating existing uses is a prime objective of the project. As one of the municipalities only

light industry areas, the State Street Hub will reflect the surrounding building styles to build a distinct identity.

Drawing heavily from the unique "Coleman" building just south of the core, the newly developed Walton Place low income apartments further south on N. State St., and the Creekside building located on Ellis St., the proposed development will incorporate design aspects of the communities past and current design vernacular. It is important to ensure aspects of past use and history are equally treated in the aesthetic design of future development to continue to build upon the historic value of this area.

Since the plan proposes to maintain the current usage of light industry, it is important to provide a link to the past through these designs.

*Fig.1.4.13 the Coleman building provides design cues for redevelopment*

*Fig.1.4.14 live-work units on Ellis*

*Pedestrian Use and Safety-Bringing Reason to Walk and Use Public Transit*

Current land use of this area does little to promote pedestrian walkability or transit use. As leading goals of Transit Oriented Development, this shortcoming must be addressed. The N. State Street Hub proposal intends to accomplish this in a variety of ways.

Bike lanes will be implemented throughout the area to clearly indicate where the safest rights of ways for bikes are. Connecting the Interurban Trail to the North and the Whatcom Creek trail will provide bicyclist with adequate routes to their destinations across the city.

*A New GO-line- Access to the City*

The plan aims to increase transit usage by providing thoughtfully placed bus stops and creating a new GO line to better connect community to the rest of the city. With the number 3 and 4 routes proposed to be dropped in the near future, a new GO line serving those neighborhoods and connecting some of the cities amenities such as the Sunset Mall, St. Joseph's Hospital, and Bellingham Technical College would be a useful tool for Bellingham residents to utilize.

*Fig. 1.4.15 bus stop design*

*Sidewalks- the Places we Walk*

The current sidewalk system is fragmented and does not provide adequate protection from fast paced orientation of automobiles or thorough connections throughout the district. Construction of further sidewalks, increasing the continuity of the system will provide pedestrians with defined and safe spaces to travel. A vegetation buffer will provide increased protection from the busy street and will serve as an aesthetic utility.

Fig.1.4.16 crosswalks

*Crosswalks- Safe Pedestrian Intersections*

The current configuration of the N. State Street Hub only has two defined crosswalk intersections. Constructing further crosswalks will aid the walkability of the district and help keep pedestrians safe.

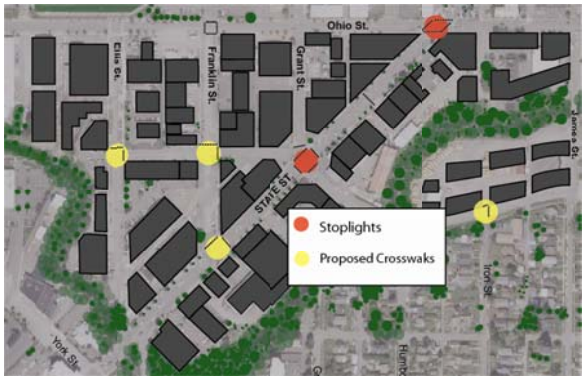


Fig. 1.4.17 Map of crosswalk locations

*Increasing Pedestrian Usage- Bringing Life to a Community*

The project relies on the implementation of retail, providing a safer feeling environment, and increasing residential use in the area to increasing pedestrian usage. With the increase in commercial retail space constructed at the human scale, a variety of stores will line the street and draw in consumers from around the city. Unique places like the Agora Community Center and Meador Park will give this area a distinct attraction to encourage further pedestrian usage.

*Activities at all Hours- Life of the Hub*

Lively action will occur at all hours of the day. The park will be used by early morning exercisers, business members taking afternoon breaks, as well as the everyday family and individual for recreation. The park activity will occur from dawn to dusk.

During the day, the streets will be filled with local business owners promoting their goods and citizens as well seeking a unique shopping experience. During lunch a variety of eateries will provide the area with options for brunch, lunch, supper, and dinner.

Bellingham Fitness will attract activity at all hours of the day; from the early morning business person, to the late night student.

*Blending Boundaries- Integrating Light Industry and Traditional Residential*

To provide a smooth integration into the area, residential accommodations will be centralized along Whatcom Creek, and will provide a gradual transition from the traditional neighborhood structure of the York neighborhood, to the light industry and commercial uses of the Hub. Further residential in the form of mixed use construction will blur the strict line of uses separation and integrate the Hub into the characteristic of the Sunnyland neighborhood. It will be a seamless transition of uses and will give the area distinct character.

*Fig. 1.4.18 efficient apartments and townhouses raise the density of the area and utilize Whatcom Creek for open space*

Fig. 1.4.19 townhouse design

*Infill- Increasing Density and Bringing in Mixed Uses*

Increased density is a desire of the businesses owners of this area. Infill will bring life to the area by bringing in a diverse set of businesses and uses that will attract pedestrian use from all over the city. By filling in the abundant amount of space with commercial and residential uses the light industry stands to benefit from constant use. More people will become aware of the opportunities as pedestrian-ship increases.

Fig. 1.4.20 mixed use development

*Fronting Buildings- Defining Spaces*

Current construction code has allowed many businesses to build their store with a setback allowing for parking. Construction of the Hub will place and emphasis on defining the space through fronting buildings. With appealing store fronts not hindered by private parking the area will develop an attractive atmosphere that will promote people to get out of their car, catch a ride on the public transit, and walk the streets to enjoy the area.

*Bringing in Diversity- Augmenting Downtown*

The invigoration of this area will have positive impacts on downtown Bellingham. With an attractive creek side trail better connecting residential areas with

*Residential*

Live work units are buildings that accommodate for both living and working needs within the same building.

Fig.1.4.21 Live work units on Ellis

A townhouse is a row of homes sharing common walls, each with its own front and rear access to the outside

Fig.1.4.22Townhouses
http://arslocii.files.wordpress.com/2010/12/brownstone-townhouses.jpeg

Fig.1.4.23 Mixed use development cualum.org

Mixed Use development is the practice of allowing more than one type of use in a building incorporating a combination of residential, commercial, industrial, or other land uses.

*Metrics*

| | Current | Proposed | Difference |
|---|---|---|---|
| **Parking** | | | |
| Onstreet | ~275 (7% makeshift) | ~400 | **+125** |
| Offstreet<br>(private businesses) | ~745 | ~600 | **-145** |
| **Connectivity** | | | |
| Pedestrian Paths | 8655ft | 9455ft | **+800ft** |
| Intersections | 17 | 26 | **+9** |
| Crosswalks | 9 | 20 | **11** |

| | ***Current*** | ***Proposed*** | ***Difference*** |
|---|---|---|---|
| **Land use** | ***Area (Sq ft.)*** | | |
| Commercial | *446,766* | *684,032* | ***+237,266*** |
| Residential | *0* | *1,259,160*<br>*(1,084 units)* | ***+1,259,160***<br>***(1,084 units)*** |
| Office | *55,878* | *167,448* | ***+111,610*** |
| Short Stay Accommodations | *0* | *48,682*<br>*(121 units)* | ***+48,682***<br>***(121 units)*** |
| Total | *502,644* | *2,159,322* | ***1,656,718*** |

Fig.1.4.24 Parking metrics table

Fig.1.4.25 Land Use table

*Circulation: streetscape, pedestrian transit, and parking design*

The State Street Hub currently is auto centric and offers tremendous opportunity for infill development to reconstitute this district as a sustainable, transit-oriented community. The existing street grid is laid out in small blocks. The area is well connected to the surrounding neighborhoods and provides many opportunities for multi modal circulation. The close proximity to downtown, the waterfront, the university, parks, and trails create alternative modes of transportation other than cars. The downtown WTA bus terminal is located within ¼ mile of the State Street Hub.

Fig. 1.4.26 Road connectivity

North State Street serves as the main arterial road for the area, filled mostly with people traveling by car, which defines this area. The existing street layout of the area can be overwhelming to pedestrians as it is comprised of wide traffic lanes, a shortage of pedestrian cross walks and signals, curb-cuts for parking lot access which separate the fronts of businesses from the sidewalk, and an absence of trees and vegetation. This creates an uninviting atmosphere and makes the pedestrian feel unwelcome and ultimately discourages pedestrian use.

Running east to West Meador Street, which spills onto North State, is another arterial road in the area. Heading East, Meador connects with James Street, which runs North towards I-5 and the Sunnyland neighborhood, and South through the York neighborhood. Meador turns into Lincoln and continues through the York neighborhood connecting to Lakeway and Fred Meyer.

Running North to South off State St; Grant St, Ellis, and Franklin St all head north towards the Sunnyland neighborhood and connect with Ohio street, running west to Bellingham High School and east towards I-5.

Heading west, Meador Street connects to Grant Street, which runs North through the Sunnyland neighborhood and ends at E. Illinois St. by the Sunnyland pedestrian overpass. The southern end of Grant Street within the State Street Hub is currently lined with light industrial type buildings which continue for four blocks until transitioning into a residential street lined with houses. Sidewalks and on street parking, located on either side of the street, makes it relatively accommodating to bicyclists and pedestrians. While most areas are pedestrian-friendly, there are several arterial crossings that are challenging for pedestrians.

Fig.1.4.27 crosswalks Fig.1.4.28 cross sign Fig.1.4.29 street parking

1.westseattleblog.com

2. spovangelist.com

3. dckaleidoscope.wordpress.com

*Circulation*

Off-street parking needs to be provided in such a way that does not take away from the pedestrian oriented streetscape. Shared parking facilities should be highly encouraged and on street parking added wherever possible as to support the areas commercial activity.

- Enhance pedestrian safety by adding a vegetation buffer along the sidewalks of N. State St.

Fig.1.4.30 Tree lined streets
http://www.mrsc.org/mc/edmonds/images/Edmond 22.19.3.02.jpg

- Improve pedestrian crosswalk at intersection by adding bulb-out sidewalks at the corners of State and Meador, State and Kansas, and State and Grant.

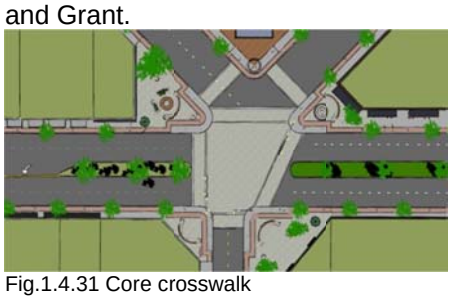

Fig.1.4.31 Core crosswalk

- Improve pedestrian crossings and safety along school walking routes by adding crosswalks at Ellis and Ohio St, franklin and Ohio St, and Grant and Ohio St.

- Add enhanced flashing light crossing at State and Franklin St. as to encourage pedestrian use and improve safety for pedestrians by altering cars.

- Promote alternative transportation options by coordinating with business owners to provide bike racks and bike shelters wherever possible.

Fig.1.4.31 Bike storage Fig1.4.32 Bike storage Fig.1.4.33 Bike storage

http://www.greenlaunches.com/transport/bike-arcs-designs-green-bike-racks.php
streetsblog.org
bostonbiker.org

*Transit*

- Look into the feasibility of a frequent transit route (every 30 min) that would leave from the downtown bus terminal heading along State Street and continue along to James Street towards Sunset, the Hospital, and Bellingham Technical College. As new residential development is constructed an increase in ridership demand may follow and encourage a GO Line.

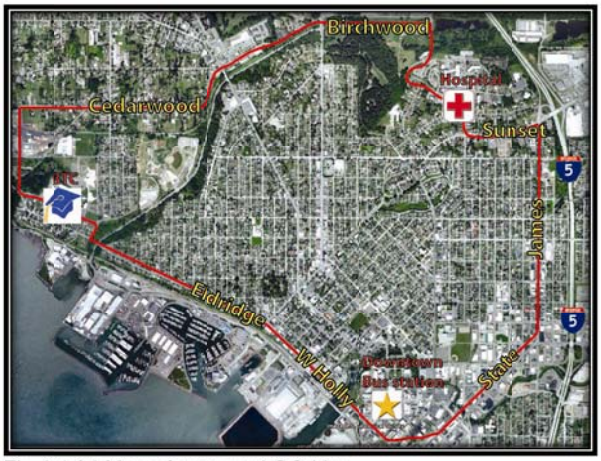


Fig.1.4.34 Map of proposed GO Line

*Streetscape*

Infill brings definition to the streets. Buildings help create interesting spaces for pedestrian activity and strive to reduce construction impacts by incorporating green roofs, mixed use design, and sustainable ideologies. Inviting bus stops, placed at key locations gives pedestrians access to the city and inspires use of high frequency transit over private automobile use. The streets, lined with vegetation buffering pedestrians from auto traffic, are lively connections to the areas amenities. The core of State Street Hub gives pedestrians a jump off point for accessing the retail opportunities and the increased foot traffic gives existing light industry unprecedented commercial exposure.

State Street Before

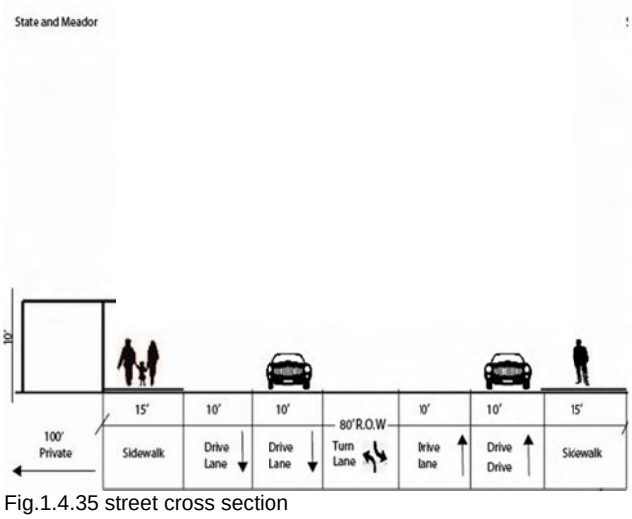


Fig.1.4.35 street cross section

State Street After

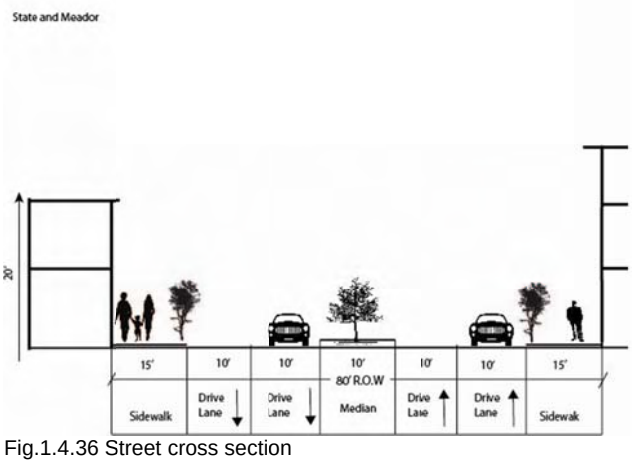


Fig.1.4.36 Street cross section

*Parks, Plazas, and Neighborhood Connections*

Current use of the creek is very limited. The plan is to increase public access by creating the Meador park system that will continue the development of the Whatcom Creek trail and will be in close proximity to the York neighborhood and also the future resident of the State Street Hub.

To accomplish this, the current 100ft setback along the creek will have to be converted into a mix of open space and vegetation. Skirting this setback will be high-density and relative high-rise residential specific development. This development will gain utility from being in extreme proximity to the park system. Along N. State Street, the commercial usage will also benefit from the potential of increase foot traffic along their store fronts that a community park would promote.

The creation of a park system will further the connectivity of the Whatcom Creek trail, and encourage surrounding residents to use the trail to travel to the important locations of Whatcom Falls Park, and downtown.

The park will also constitute a cultural amenity that this area is lacking. In conjunction with the N. State Community Center, the increase in community green space and the further implementation of the Whatcom Creek trail will provide a strong motivator for residential use.

*Plaza-the Center of activity*

Fig.1.4.37 Illustration of plaza

Surrounded by diverse uses, the plaza provides pedestrians with a place to interact that is central to all members of the community. Within a short walk from all amenities, the plaza will serve as a meeting place, a destination arrival point, and a departure point after individuals conduct their business in the area. The open space that will result in its construction will help define the core of the district. Decorated with seating and providing information of the area via kiosks, people will utilize the area as a reference point and will interact within in throughout their visit. It truly will be the “hub” of the N. State Street Hub community.

*Neighborhood Connections- Meaningful Access*

The Sunnyland and York neighborhoods will be well supplied with amenities from the Hub. They will be connected with Interurban trail leading from the north, and bridges across Whatcom Creek at key locations that will ensure easy access to and from the district.

The new GO-line transit route will provide access from the rest of the city. Ridership will constitute a large percentage of the areas use and having a frequent bus schedule will make access feasible throughout the day.

*Relationship of Planning Concept to TOC Goals*

This plan is designed with both the community and environment in mind. The main goal that this plan focuses on is increasing the density. For this area to support a high density, housing, transportation, jobs, connectivity, design, and the environment must be taken into consideration. Increased density will be achieved through the use of mixed-use buildings and infill development by means of townhomes. The mixed-use buildings will contain commercial space on the first floor and residential on the floors above. The housing will range in affordability from pent houses in the Cultural center, to apartments for college students. Live-work units are also proposed in this plan to cut down on commute times as well as having affordable options for small business owners. In the mixed-use buildings, commercial space on the lower floors reduces the need to go drive to commonly desired destinations such as the grocery store and the mall. Other measures to reduce the need to drive in this area are to bring businesses that are on the Guide Meridian to State Street such as cell phone service stores, a bookstore, and short stay accommodations. Office are also implemented some of the mixed-use buildings to accommodate those that had to commute to offices near the Guide Meridian or out in the county. These close conveniences help to reduce the reliance on the automobile because of their close proximity to both housing and employment. Reducing the use of the automobile will cut down on pollution and saves money on gas and other auto necessities. Increased density also encourages walking and biking, which promotes a healthy lifestyle, and creates safer, quieter streets that make for a friendlier and open community.

*Help meet demand for walkable communities*

The Hub has provisions for better-connected, safe sidewalks that promote pedestrian usage over auto-centric development. With local businesses lining these sidewalks, pedestrian usage is encouraged.

Medians bisecting N. State Street will calm traffic and provide a safe harbor for pedestrians trying to cross the street during busy hours of the day. In addition, medians will add the aesthetic characteristic of the street by providing green scenery.

The current lack of pedestrian intersections will be remedied with the construction of additional crosswalks throughout the development site. Providing clearly marked, and some signaled crosswalks will ensure that pedestrians can safely access all of the area attractions and provide them with fear free movement from one side of the district to the other.

Bicycle usage will be designated to slower streets that provide a calmer environment than N. State Street. Bike lanes will clearly indicate where bikes have the preferred right of way throughout the area. Several bike lockup sites will be incorporated into the site to encourage people to use bikes to travel to the Hub and then conduct their business by foot while feeling secure that their mode of transportation isn't at risk of being vandalized or stolen.

*Increase transit ridership to alleviate congestion*

The creation of a new GO line bus route will provide the areas residents with an alternative to using an automobile for primary transportation. By designing a community that has superior access to public transportation and pedestrian trails, the necessity of owning a car may even be eliminated for some. This reduction in the

dependence on the automobile will manifest itself as lower congestion in the district and surrounding areas.

*Provide affordable housing to a broad range of incomes*

This area will accommodate a vast spectrum of individuals from all economic levels. With townhouses providing ideal accommodations for the young family or philanthropic entrepreneur, low income apartments for the young adult or student, to live-work units to provide for the business owner, this area is all about bringing in a diverse community and encouraging a tight-knitted atmosphere with the construction of social amenities.

*Provide open spaces for recreation and community interaction*

The Meador Park and Hub Plaza are prime attractions for a variety of individuals. The park will bring use to an underutilized section of Whatcom Creek and give the opportunity for natural utility within the middle of a lively city. The Hub Plaza will be the cultural jump off for the community with a central location in amidst a majority of the area's most social attractions. With development bringing attention to the sidewalk and away from the parking lot, community interaction will prosper in all areas of the district.

*Promote neighborhood character and values*

Special attention will be given to utilizing existing infrastructure and design vernacular. Characteristics from historically relevant buildings will be mimicked in the design of new buildings. The historical use of the area is also considered an important characteristic that is necessarily promoted. The intent of future development will be to augment the current uses and bring additional pedestrian use that will benefit the atmosphere of the district.

*Strengthen Neighborhood Patterns*

The proposal for this site relies heavily on maintaining existing usage and buildings while incorporating the surrounding areas residential atmosphere. Mixed use buildings will provide a balance of residential and commercial that will benefit the light industry currently locate in this district. Ensuring that proper land use management will be implemented will bridge the boundaries and integrate this area into the downtown and surrounding residential neighborhoods.

*Provide for high-capacity transit investments*

The creation of a new GO line requires a large demand from the public. The proposed bus line will give access to a variety of uses around the city all while doing so in a timely manner that will increase ridership. The area will have an abundance of residential usage that will bring the bodies necessary to demand this high-capacity system. Meador Park will likely draw people from around the area. Being so close to a high-capacity bus line will be an attractive characteristic for people seeking a opportunity to quickly access a breath of fresh air within the city limits. Bringing in increased commercial use will give the area a different amenity for what is currently provided and will bolster the need for increased public transit.

*Reduce Urban Sprawl*

Infill is the antidote for the increase demand for housing in the area. The Hub brings a unique take on this notion by bringing in designs and style historically and currently found in the area. With substantial amount of the proposed development dedicated to residential, the attraction of the area will appeal to socialites seeking housing that provides entertainment, employment, education, and social opportunities all within a walk or quick bus ride away.

# CHAPTER 1. TRANSIT ORIENT COMMUNITIES DISTRICT DESIGN CONCEPT 5

## 1.5 CORDATA TRANSIT ORIENTED COMMUNITY

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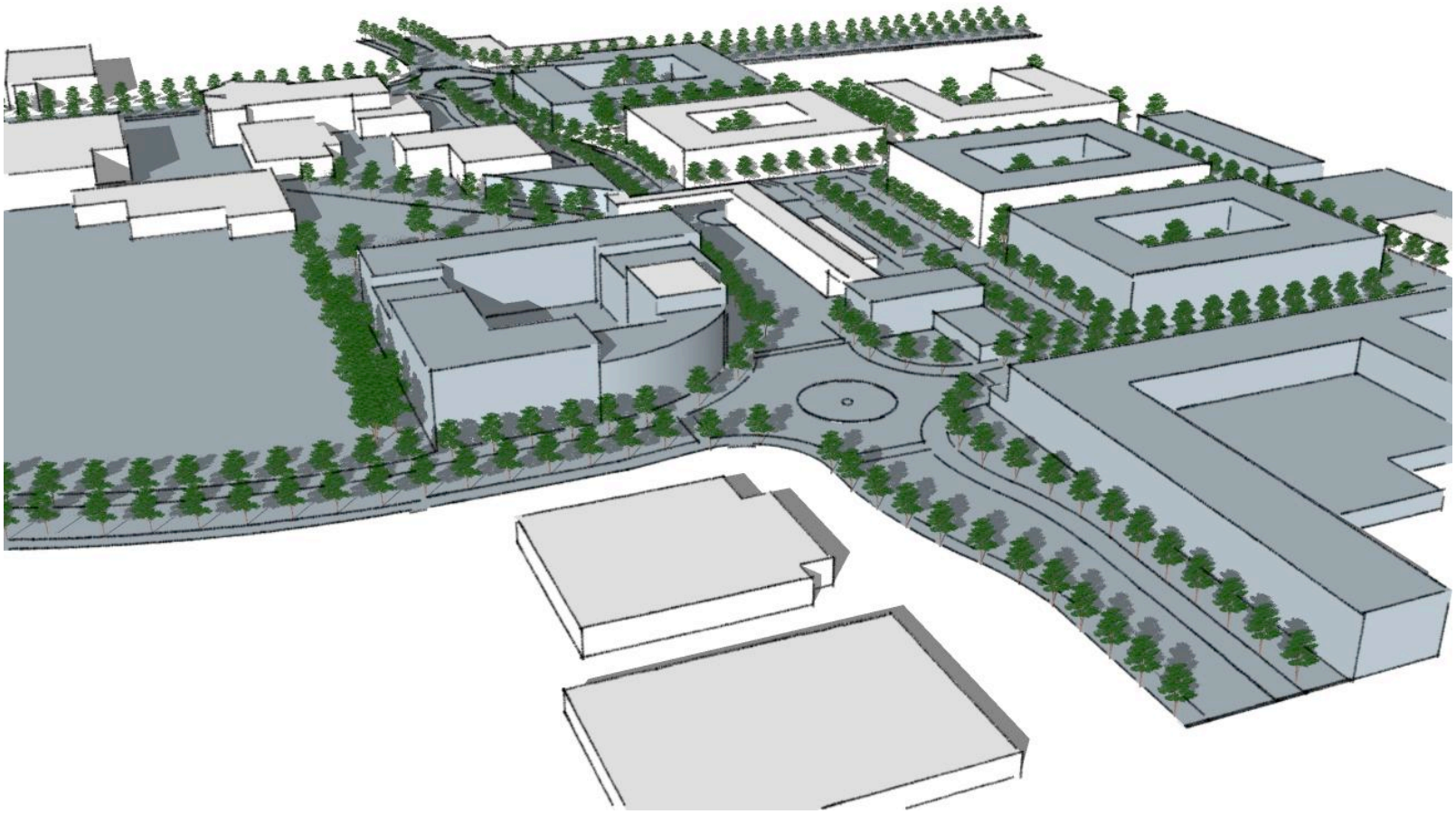

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## 1. Introduction

### 1.1 Purpose of the Transit Oriented Community (TOC)

Transit Oriented Communities (TOC) aim to provide housing and transportation choices that give residents access to homes, jobs, recreation opportunities, shopping, and services to meet their daily needs, without having to rely on a motorized personal vehicle. This has the long-term result of increasing the quality of life in urban residential areas, reducing the cost of development, lessening the environmental impacts of development, and reducing transportation and energy-related greenhouse gas emissions. There is an extensive and growing body of published research providing evidence that a well-designed TOC can lead to substantial social and environmental benefits. In brief, TOCs have the potential to:

- Promote health by encouraging walking and biking, cutting air pollution, and reducing motor vehicle accidents
- Lower household expenses for both transportation and housing
- Reduce municipal infrastructure costs
- Provide a high return on public investment in transit infrastructure
- Help meet the growing demand for walkable neighborhoods
- Curb land consumption and greenhouse gas emissions associated with both transportation and the built environment.

### 1.2 Community Characteristics

The City of Bellingham is located in the northwestern corner of Washington State roughly 20 miles south of the Canadian border and 90 miles north of Seattle on the I-5 corridor. Bellingham is well known for its interest in creating sustainable communities. Several Bellingham neighborhoods have adopted plans that incorporate more sustainable practices and transit oriented development.

The proposed Cordata TOC site is located between the Cordata and Meridian neighborhoods in northern Bellingham. It is bordered between Eliza Avenue to the west, W Kellogg Road to the north, Meridian Street to the east, and W Bakerview Road to the south. Located within the site are the Whatcom Community College (WCC) and the Whatcom Transit Authority (WTA) Cordata Station. This area has changed dramatically in the past 20 years. What used to be a rural residential area is now a commercial and industrial zone. With the Bellis Fair Mall in close vicinity, it is considered a retail destination, consisting of heavy arterial roads and traffic congestion.

Figure 1.5.1—The proposed site focused around Whatcom Community College and The WTA Cordata Transit Station

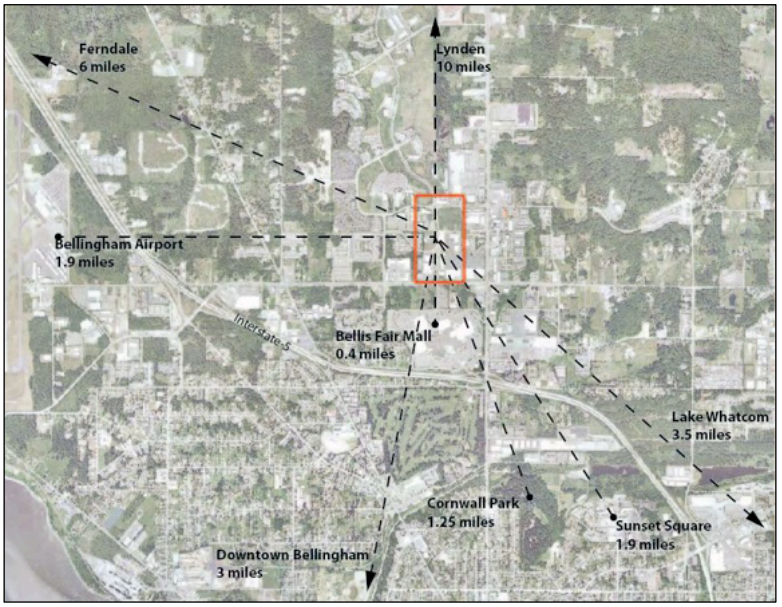


Figure 1.5.2—Vicinity map, showing the location in northern Bellingham

1.3 Issues and Opportunities

*Issues*

An automobile congestion issue occurs on Cordata Parkway between the two roundabouts. This area is surrounded by the WTA transit station and the WCC campus; resulting in a large number of pedestrians crossing Cordata Parkway throughout the day. Cordata Parkway carries roughly 14,000 vehicles per day. A crosswalk is present, but it is not the safest area for pedestrians. The city does not approve of pedestrian-activated cross signals because traffic would become backed up and defeat the purpose of the roundabouts. To overcome this problem, the plan incorporates a new sky bridge connected to the existing WTA station, which will be explained in a later section.

*Opportunities*

Whatcom Community College serves a large population of Whatcom County. By providing affordable housing within walking proximity to campus, it makes it convenient for students to be close to educational resources without having to commute a long distance. This area is mostly car dependent, to counter this the redevelopment plan envisions an area with a vast variety of businesses and amenities so that residents and students alike do not have to travel great distances to run errands and can walk to neighborhood services.

## 2. Vision

The Cordata Neighborhood was created only a year ago in 2010 when the borders of the Meridian and Guide Meridian Neighborhoods were redrawn to recognize the area's changing character, environment, and demographics. This plan has the capability to be a hub for pedestrian activities and destinations. The streets will be lined with trees and pedestrian sidewalks, and a mix of restaurants, retail, office, and professional services will have their front entrances open to the sidewalks and street.

In the morning, restaurants, cafes, and coffee shops will be filled with customers. The transit station will be active with work commuters and students arriving for their classes. At lunch hours, the restaurants will have customers consisting of local workers, residents, and students. Stores lined on the sidewalk will generate window shoppers and a vibrant area. The open space will be a popular destination to those on their lunch break and families. At dinner, the area generates families spending time together and friends catching up. To achieve this vision, the area is to be designed incorporating aspects to become a transit oriented community. Residents will be conveniently located next to resources and housing within walking distance. With this increase in retail/commercial services, a higher demand for transit will appear due to the fact that the area will be designed for the bikers and pedestrians.

The Cordata district will create a vibrant community in which private cars will be less dominant in the residential landscape, lowering accidents, noise levels, and air pollution. As a result the community will be safer and more enjoyable.

2.1 Client Profile

*Whatcom Community College*

Whatcom Community College is located just west of the transit station and serves over 7,000 students quarterly with more than 12,000 annually. 42% of that population is enrolled full-time with at least 12 credits and the majority is between the ages of 16-24. WCC provides degrees and programs for Whatcom County residents as well as international students from at least 30 different countries.

Figure 1.5.3—Whatcom Community College campus

With the transit station in close proximity to the campus, students arrive to school via public transportation and often stay on campus for multiple hours. Because these students do not have a private vehicle on campus, it is important

for this redevelopment plan to be appealing to the college population and be pedestrian friendly. By adding features such as public space, residences, and retail/office space, students can easily walk around the area and have access to an array of amenities.

*Public Transportation Users*

There are a number buses that serve the Cordata area as well as the greater Bellingham region. WTA provides 31 bus lines with 12 of those serving the Cordata Station. Two lines, the 331 and the 232 are GO Lines, meaning they run every 15 minutes, providing the most frequent service. With a large supply of public transportation to this site, the redevelopment plan should include resources that would be used by a large range of people and that would influence people to take the bus to this area rather than drive. Buses that come to the Cordata Station carry passengers to the downtown Bellingham station, Saint Joseph Hospital, Bellis Fair Mall, the Cordata area, Lynden, Ferndale, Blaine, Nooksack, Sumas, and Everson. Statistics show that buses were on time 93% of the time, providing a reliable form of transportation.

Figure 1.5.4—Buses serving the WTA Cordata Station

Figure 1.5.5— Riders waiting for the bus at the Cordata Station

| Bus Number | Frequency | Destination |
|---|---|---|
| 3 | Once an hour | Maplewood, Downtown Station |
| 4 | Once an hour | Hospital |
| 15 | Twice an hour | Bellis Fair, Downtown Station |
| 24 | Once an hour | Cordata Area |
| 25X | Two times daily | Lynden, WWU |
| 26 | Every hour and a half | Lynden |
| 27 | Once an hour | Ferndale |
| 48 | Four times daily | Bakerview Spur |
| 55 | Two times daily | Blaine, Birch Bay |
| 71X | Four times daily | Everson, Nooksack, Sumas, Downtown Station |
| 232 (GO Line) | Four times hourly | Downtown Station |
| 331 (GO Line) | Four times hourly | Bellis Fair, Sunset/Alabama, Downtown Station |

Figure 1.5.6—Table of bus numbers with their frequency and destinations

*Community/Neighborhood Members*

The Cordata transit station district provides for a distinct pedestrian oriented enclave within the Cordata/Meridian neighborhood. The redevelopment plan for the district should be appealing and provide service for the community as a whole. Sidewalks and bike paths are also a part of this plan so pedestrians and bikers have a safe area to walk or bike around.

Businesses need to have a strong customer base in order to succeed. This development plan seeks to promote new business opportunities to support new and existing residents. By providing housing units above commercial stores, customers will be conveniently located near several businesses and will not have to travel to other locations to run errands. With more people coming to this area, there will be an increase in customers, supporting area businesses.

## 3. Characteristics of TOC District Plan

3.1 TOC Plan Design Concept

The purpose of the redesign of Cordata Parkway is to create a TOC. The plan creates a compact, walkable community centered on high quality transportation systems. This makes it possible to live a higher quality life without complete dependence on a car for mobility and approach to combat traffic congestion and protect the environment. The plan of this area also supports the predicted growth of the Cordata/Meridian neighborhoods.

The plan hopes to create a strong connection between WCC and WTA and increase transit ridership as well as bicycle and pedestrian connectivity. The connection between neighborhood residences and WCC campus will be greatly increased by three features, (1) pedestrian paths (2) bike paths (3) transit improvements. All of these features will be included in the redevelopment plan. The purpose of this TOC plan is to serve as a guide for the continuing improvement and encouragement of walking, biking, and bus transit and to reinforce that these are significant modes of transportation.

3.2 Residential/Commercial

In order for this site to be a TOC, the redevelopment plan will focus on adding residential housing in the form of compact mixed use buildings. Mixed use buildings have small retail/commercial businesses on the ground floor and residential units/offices on the higher levels. High density housing will be built for students as well as other community members. The purpose of having apartment units above retail stores will

Figure 1.5.7—Figure ground map indicating what structures are currently in site area

Existing

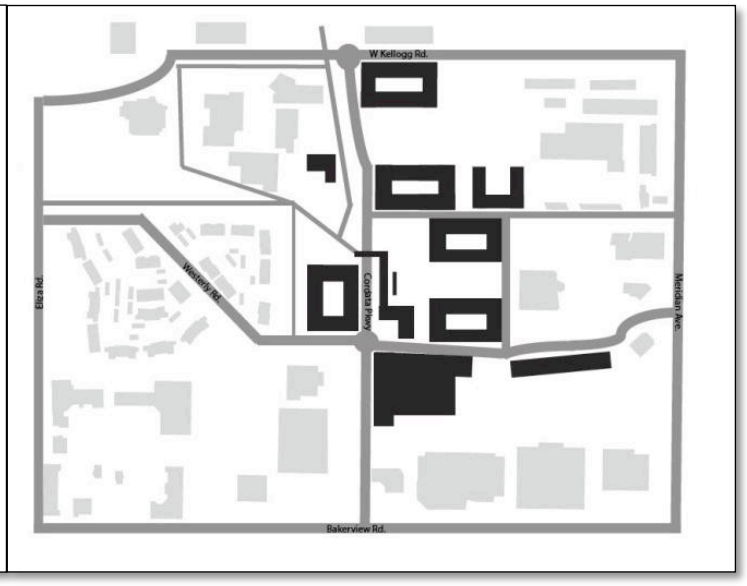


Figure 1.5.8—Figure ground map indicating the proposed layout in the site area.

Redevelopment

Existing structure

be to have people in the area at all times. This provides safety for people on the streets by having “eyes on the street” and ensures areas of neighborhoods do not become “dead” at night and become dangerous areas. Inspiration for the design of these buildings came from the newly built Kennedy Apartments located in Spokane, Washington. Their apartment structures have commercial use on the bottom floor and the parking garage is located in the center of the building so it is not visible from the street.

Figure 1.5.9—The Kennedy Apartments located in Spokane, where inspiration was drawn from

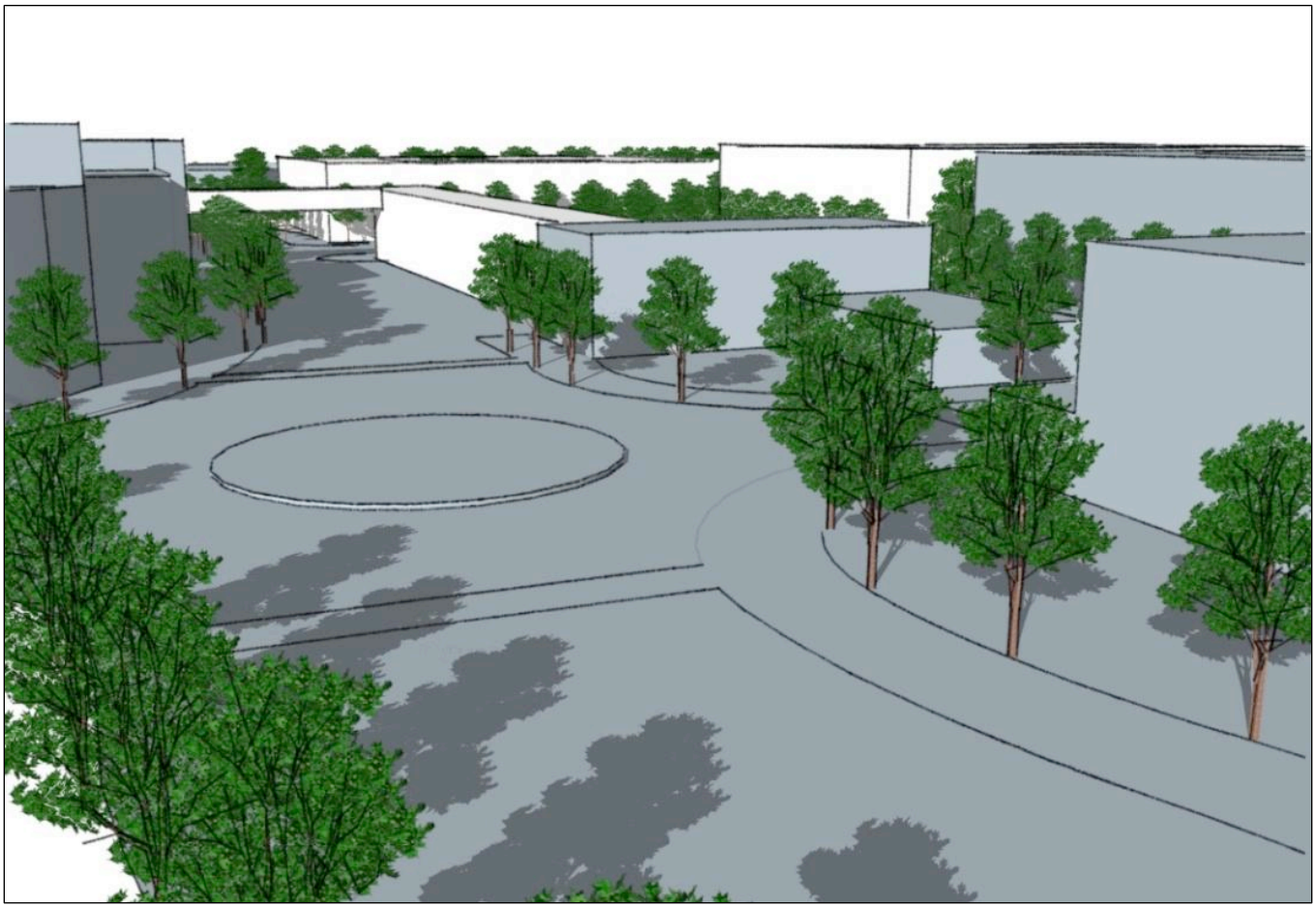

Figure 1.5.10—A pedestrian scale view looking north on Cordata Parkway

This location is ideal for college students as they will be close to their educational resources. Specifically, this is an ideal location for the roughly 140 foreign exchange students attending WCC. In most instances, these students do not own their own vehicles while living here. Thus, being in a transit oriented community, these students would have access to popular destinations and not be constrained due to lack of transportation resources.

Whatcom Community College has a growing population and with more residents coming to the area, the college will eventually need to expand. This proposal adds on to the existing library. Currently, the library resources are mostly utilized by the students; however community members have access to these resources as well. Because there is not another library in close proximity, new residents might want to use this resource. The addition to the library would be able to hold the increase demand for the increasing residents. Also in the plan, a new building will be built, which could be used for additional classrooms.

In addition to an increase in businesses, the Cost Cutter will be moved to the north side of the parking lot, closer to the Cordata Station. This will also put this grocery store adjacent to the co-op, providing people with better access to the two grocery stores serving the community.

The drive-thru Cruisin Coffee stand will also be relocated. The plan proposes a new mixed use building for that location due to its large lot size and close proximity to transit. The coffee stand can be relocated across the street to the former Dairy Queen site and be made into a café, allowing more customers and the ability to build a larger business. With the expansion into a café, not only will this establishment attract customers in their cars, but also pedestrians strolling the area and public transit users waiting for their buses.

3.3 Metrics

| **Use** | **Square Footage** |
|---|---|
| Residential | 968,000 |
| Commercial | 229,000 |
| Institutional | 32,600 |

Figure 1.5.11—Metrics table of land uses and square footage as a result of the redevelopment

This redevelopment adds substantial density to the growing area. Residential units increase by 968 if the square footage is 1,000 square feet per individual unit and increase by 1,210 units if each unit is 800 square feet. This creates 28-35 units per acre within this site. Redevelopment allows for 229,000 square feet in commercial space that can be used for restaurants, offices, and retail. Whatcom Community College continues to grow and this plan addresses that issue. An additional 32,600 square feet will be added to the campus in the form of an expansion to the library along with a new building that could be used for classrooms.

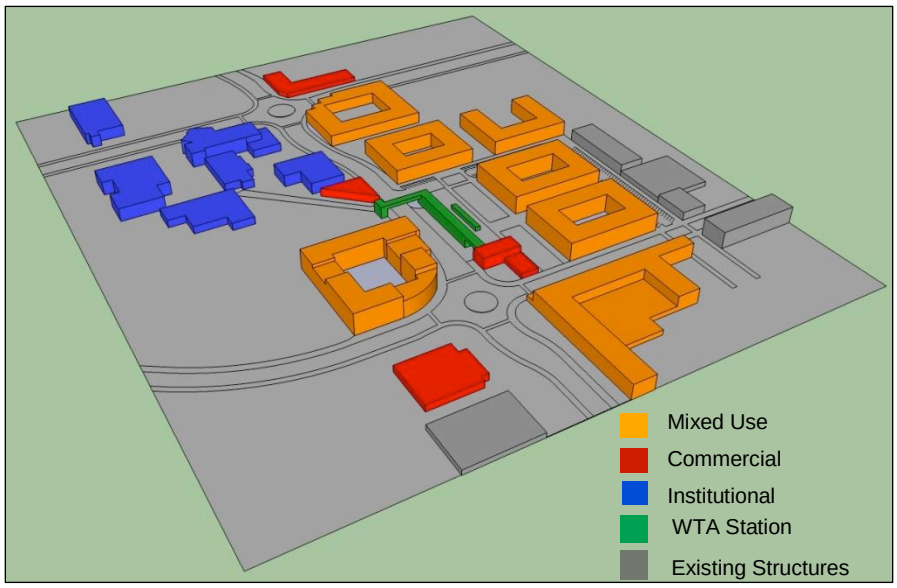


Figure 1.5.12—Land uses of proposed redevelopment

3.4 Transit Station

When WTA decided to build an second transit station, the location was selected due to the Cordata neighborhoods fast-growing population. Although the Cordata Transit Center was completed only a few years ago, this redevelopment plan seeks to improve upon the existing establishment. Currently the station is a covered structure, yet remains open to other weather elements such as wind. The seating is relatively open and not very well enclosed, especially in winter weather. The addition of a second story would help address this problem. It could be a place for passengers waiting for

Figure 1.5.13—The proposed addition to the Cordata Station

their buses to sit and provide services such as public restrooms, food, and newspapers. Some of the bus lines that serve the Cordata station only run a few times a day, so those passengers who have to wait for long periods of time would benefit most from this addition. Currently, students comprise of the main population for transit users. New development will create an increase in other riders as well, as it will be a more popular destination with more uses.

Not only would the second level provide a place to wait, it would also address the problem of pedestrians crossing Cordata Parkway, a congested arterial road. This roadway is constantly being used by pedestrians in crosswalks and automobiles. In particular, WCC students use the crosswalks to get across the street to campus from the bus. This is a dangerous, especially because if cars get backed up in the roundabout, it creates traffic problems. WCC sits on a slight hill, so when students cross the street to go to campus, they usually cut through a parking lot, which leads to a set of stairs. This is not an official pedestrian path so to create convenience to transit riders, the second story of the proposed sky bridge would connect to a paved entrance leading to campus. This way, there is no hassle

Figure 1.5.14—The proposed addition of the Cordata Station and the pedestrian walkway

with cars and there is a direct route to campus provided. This area would be vibrant and would serve as a place to meet friends, catch the bus, eat, and always full of people.

## 3.5 Circulation

Transportation systems in the City of Bellingham have continued to grow and the Cordata node will embrace transit development as well as pedestrian and bicycle facilities. This will make residences connect with living, working and recreational areas throughout the city. The site will become pedestrian and bicycle friendly by adding defined paths, tree-lined walkways, and signage to encourage safe pedestrian and bicycle activity. The WTA Cordata Station will be established as the center of the site encouraging residents to use alternative forms of transportation other than the individual automobile.

### *Streetscape*

The main roadway in the proposed redevelopment area is Cordata Parkway. Between the two roundabouts, this road provides one lane of traffic in each direction. The center lane has two functions. It is a median which acts as a buffer between the two lanes while at entrances to parking lots, the median stops and becomes a turning lane. Sidewalks are present and are located on each side raised on a curb against the main road. Currently, the total right of way amounts to 45 feet. There are 3 cross walks in this section—one at each roundabout and one at the transit station.

Roundabouts are becoming increasingly popular in high volume areas. Not only do they make traffic flow smoother, they reduce injury accidents by 75% and fatal accidents by 90%. Previous to the roundabouts on Cordata Parkway, traffic would be backed up at 4-way stops. The roundabouts make it possible for a large number of vehicles to pass through the area with minimal congestion and traffic. This plan does not seek to change the lanes or roundabouts on Cordata Parkway.

### *Bicycles*

Currently there are no bike lanes on Cordata Parkway. Due to the two roundabouts and heavy automobile congestion, a bike lane would be dangerous on this road. Instead, the plan incorporates a bike path that leads to residential areas further north. Bellingham has a growing bicyclist population and this plan encourages this as a form of alternative transportation. There is an existing bike path surrounding the residential units located on Westerly Road. This plan incorporates an addition to this path. The additional bike path loops around the college's campus and connects to the pedestrian walkway to campus, the existing bike path, and leads further north through other residential neighborhoods. Students, residents, or other community members could conveniently use this path as it connects them to destinations such as public transportation, residences, businesses, and WCC. Bicycle racks will also be incorporated into this plan. Bike riders will be able to use their bikes to quickly get from place to place and will have access to the proper infrastructure to lock their bike when needed.

### *Parking Design*

Because this plan is redesigning the area to be transit and pedestrian oriented, surface parking will not be the main focus of the project. With the relocation of the Cost Cutter, the current location of the grocery store can be used as a parking lot. With this rearrangement, the Cost Cutter will be facing the street, creating a more inviting location and better access to pedestrians and the transit station, and will also hide the main parking lot. Parking lots are uninviting, especially to pedestrians and bikers, and should not be the main focus of retail blocks. With the ground level parking out of main sight, it will not deter away from the community character and pedestrian oriented area. Other small parking lots are located behind the transit center and in the middle of the mixed use buildings. These parking lots are also hidden from main view as to not to take away from the community character.

## 3.6 Parks, Plazas, and Neighborhood Connections

The plan also incorporates a public park. This park is located adjacent to the college and north of the transit center. Surrounding the open space are more mixed use structures. With businesses and residents working and living in the area, the park should be well used and well-populated. In Bellingham's comprehensive plan, it discusses its goal for parks and recreation as aiming to provide high quality, diversified parks, recreation, and an open space system that provides for all ages and interest groups. Three

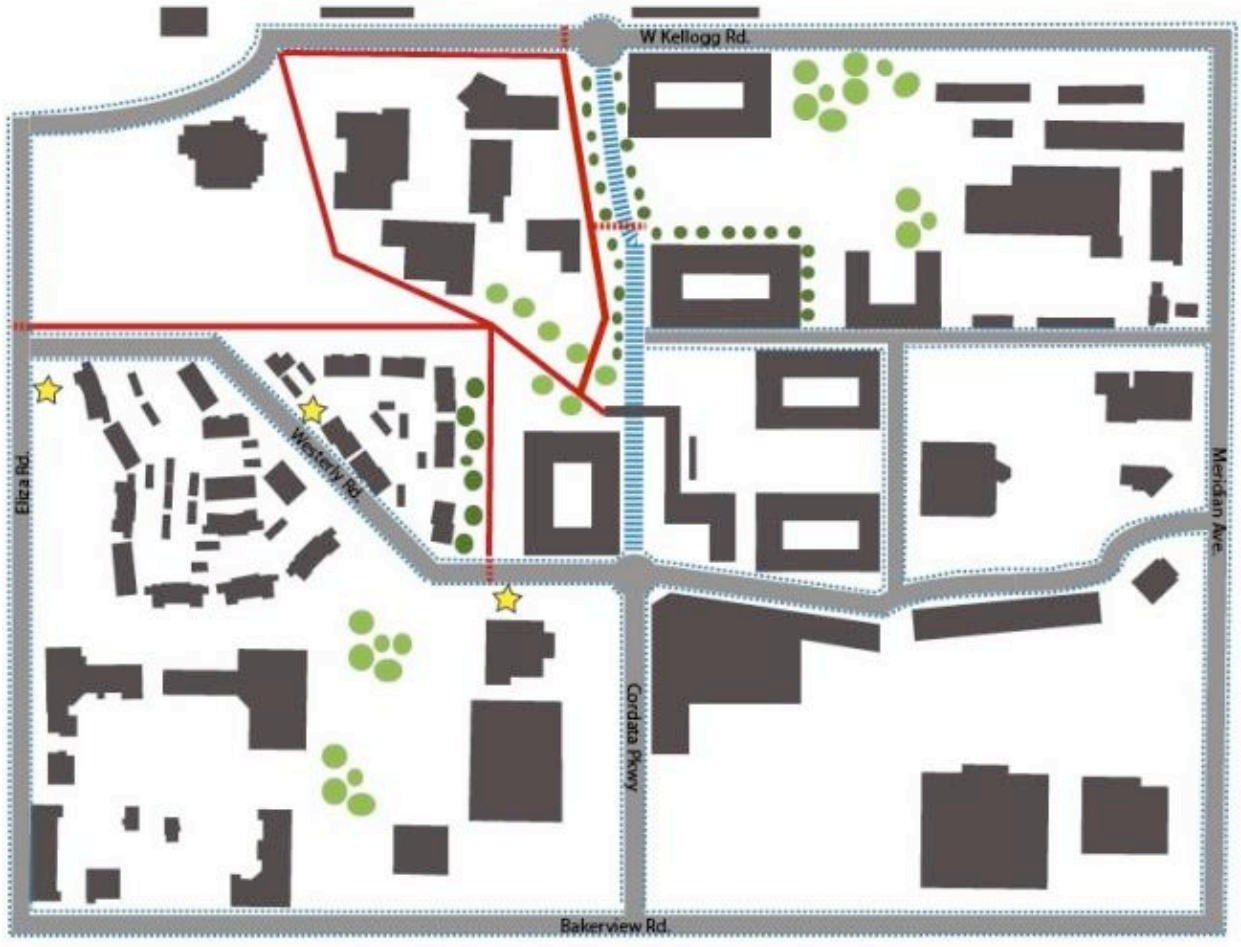


Figure 1.5.15—A connectivity map indication the routes through the area

of the objectives that are outlined in the plan are (1) to incorporate art/furniture into the park such as railings or benches, (2) provide a park system that is within walking distance for community residents, and (3) provide a mixture of activities to attract a large number of people. This proposed park will meet the three criteria in an area where residents, students, and visitors feel welcome, safe, and have fun.

## 4. Relationship of Planning Concept to TOC Goals

### 4.1 LEED ND Criteria and the Site

The Cordata node redevelopment will not focus solely on building criteria, but also on the location of those buildings and how they relate to each other, as well as the qualities of the public realm that knit them together.

### 4.2 Smart growth

Smart growth can be defined as a well-planned development that protects open space and farmland, revitalizes communities, keeps housing affordable, and provides transportation choices. The development of the Cordata Node will emphasis smart neighborhood growth by implementing these strategies.

1) The site plan will preserve environmentally sensitive areas, such as the wetlands located in the northeast corner of the site, and overall the development plans for high density housing which will reduce suburban sprawl and protect farmlands.

2) Residential mixed-use buildings will be providing a substantial stock of housing for the student population and other residents. This will also help to revitalize the community by having locations off campus, that students can congregate at.
3) The site will offer pedestrian and bicycle paths to ensure that moving around the site is safe and also not reliant on a car. As a result the community will have various choices for transportation.

4.3 New Urbanism

The site will follow principles that are the foundation for the New Urbanism movement. Some principles that structure the site are:

1) Dense housing, that is a minimum of three stories, and offers mixed use on the street level.
2) Walkable streets that are enjoyable and safe for pedestrians and bicyclists.
3) Connectivity will be emphasized in the site allowing the residents to be able to navigate easily through the site.
4) There will be affordable housing available to serve diverse populations.

4.4 Green Buildings

The site will incorporate environmentally-responsible building techniques for both individual buildings and neighborhood infrastructure. The goal in doing this is to reduce energy use, water use and storm water runoff; additionally producing other benefits, such as improving indoor air quality and supporting locally-sourced materials.

# CHAPTER 1. TRANSIT ORIENTED COMMUNITIES DISTRICT DESIGN CONCEPT 6

## Chapter 1.6 Northeast Downtown Transit Oriented Community

Parker Worthington, David Burgesser, Connor Mack, Ezra Salsky

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# CHAPTER ONE

## INTRODUCTION

### *1.1. PURPOSE OF THE TOC*

This document provides a policy framework for the redevelopment of the Northeast area of Bellingham's urban core. Ellis Street to the east, Magnolia Street to the west, Railroad Avenue to the north, and Garden Street to the south border this area. This site is considered to be part of the historic York neighborhood, but is also located on the edge of the core area of downtown Bellingham. It is a crucial zone of transition that must be mindfully designed to blend the York neighborhood and the core area. The goal of the redevelopment is to weave elements of both areas into a transit-oriented community. Connectivity and compatibility with surrounding areas of the city are crucial for the redevelopment of this site. This transit-oriented community strives to capitalize on sustainable transportation options such as walking, bicycling, and public transit. A retrofitting of the infrastructure will create a demand for these preferred transportation options. This area will treat the car as a "second class citizen," and tailor to life at the human scale. The redevelopment plan opts to create a healthy community that has all the daily necessities within a five-minute walk. The central location of the WTA transit station will be capitalized upon to create a hub for the walkable community. An elevated quality of life will be achieved by creating a convenient and interconnected district that relies on sustainable transportation options.

### *1.2. RELATIONSHIP OF PLAN TO TOC GOALS AND POLICIES*

The redevelopment of the Northeast Downtown district adheres to transit-oriented goals and policies.* This area will serve to give the public greater access to housing, jobs, shopping, and recreation without the need for a personal automobile. By not relying on the cars, residents will reduce their cost of living by taking advantage of sustainable modes of transportation. The automobile is a large personal expense that will no longer be necessary within the district. Residents will experience a better quality of life and a healthier lifestyle. Sustainable modes of transportation also result in greater amounts of leisure time and increased health. Car sharing programs will be orchestrated for travel to destinations without transit such as Mt. Baker. This will make a car-free district realistic, feasible, and convenient. Walking and bicycling reduces stress and increases health benefits. The plan encourages the use of personal energy for transportation as as opposed to natural resources like petroleum. These transit-oriented policies can only become feasible when residents are living in a relatively dense area. The plan will also concentrate amenities and make walking and riding a bicycle more convenient than driving a car. In addition, this will create a demand for an improvement in sustainable transit infrastructure. This mixed-use redevelopment will give the community greater access to housing, employment, shopping, and civic amenities, while reducing household costs and sprawl in Whatcom County. These goals will concentrate growth and conserve open and green space as a result.

*Mixed-Use Development*

* http://www.reconnectingamerica.org/public/show/bestpractice014

### RELATIONSHIP TO BELLINGHAM'S COMPREHENSIVE PLAN

The 2006 *City of Bellingham Comprehensive Plan* states the need for accommodation of population

growth through urban centers.** The downtown Neighborhood and pocket urban villages provide a focal point for com area is one of eight identified urban centers suitable for growth. The Northeast downtown transit-oriented community adheres to all of these goals and principles outlined in the comprehensive plan. An urban center is one that:

•Contains a mix of commercial, residential, and service uses.
•Provides amenities and necessities within walking distance.
•Reduces the dependency on the automobile through design for pedestrians, bicycles, and transit users.
•Facilitates strong community connections and interaction by serving as a focal point and providing public space.
•Promotes sustainability and quality design

*Walkable Street*

principles. Other guiding design principles have been identified for the redevelopment area:

**-CDG-17** Neighborhood and pocket urban villages are copatible with the scale and and character of the surrounding neighbor hood.

**-CDG-18** Neighborhood and pocket urban villages provide a focal point for commer cial, civic, and recreational activities within a neighborhood.

**-CDG-20** Neighborhood and pocket uban villages are accessed by pedestrian scale streets that may include narrow pavement widths, on-street parking, landscaping

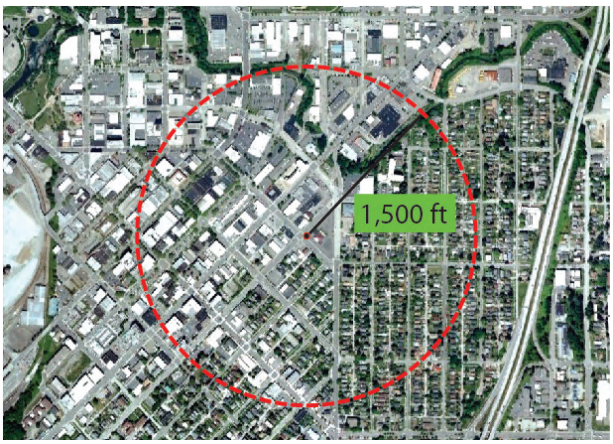
** http://www.cob.org/services/neighborhoods/community-planning/comprehensive-plan.aspx

*Redevelopment Site*

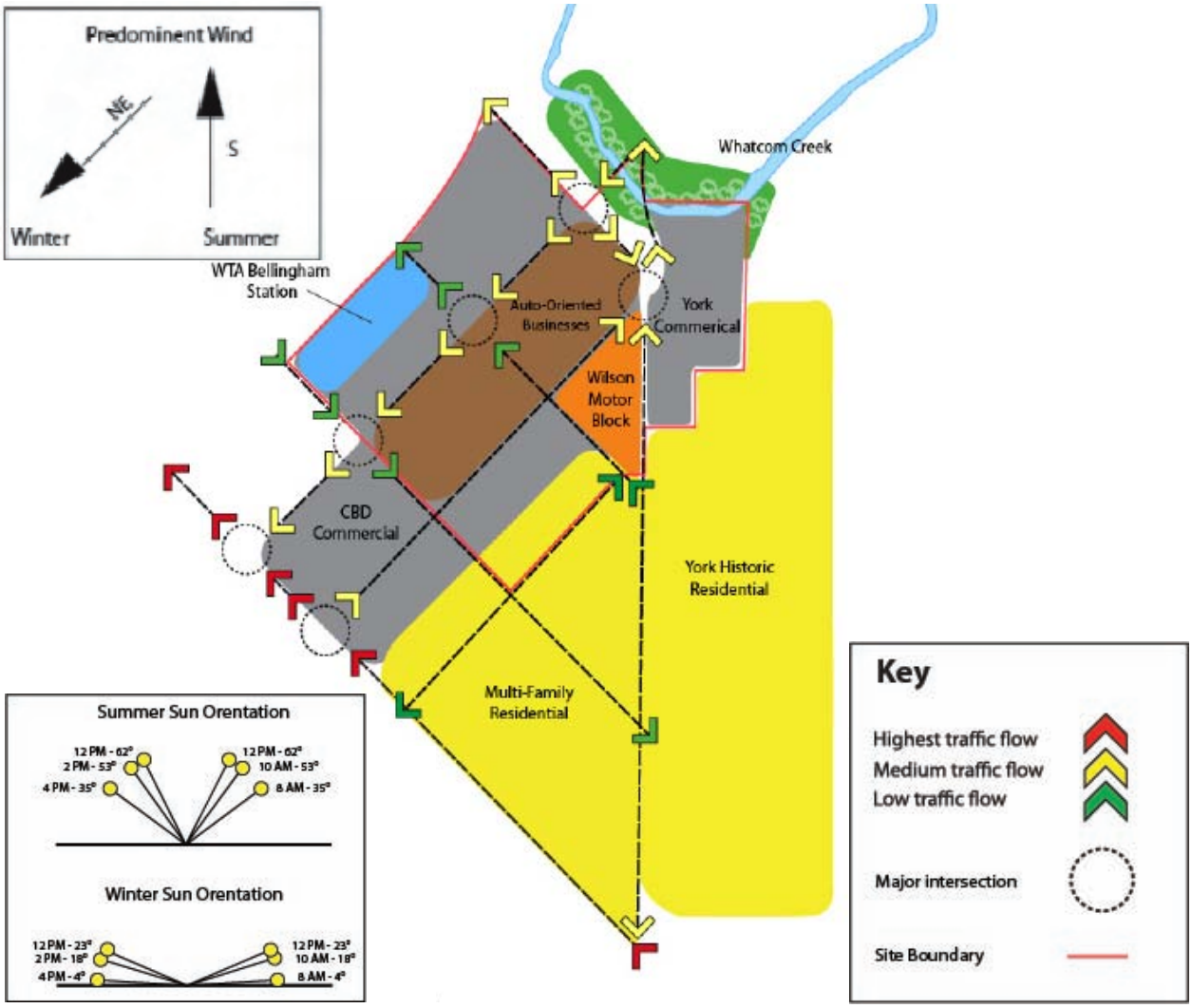
strips, setback sidewalks, buildings close the street, and parking in side and/or rear yards.

### *1.3. COMMUNITY CHARACTERISTICS*

The Northeast area of downtown Bellingham is located between the historic York neighborhood and the central business district. The York neighborhood is one of the oldest neighborhoods in Bellingham and is relatively compact and tight-knit. The Victorian influences are a product of its age. Most of its homes were built in the 1890s and the early twentieth century. Most of the businesses in the neighborhood are located on the perimeter, but generally serve the immediate community. There are vacant lots East of Ellis Street towards the historic center of the York neighborhood. Planned Parenthood owns the vacant lot next to their building and has plans to create a three-story, mixed-use facility containing an education center and office space above for administration. Area 4




*Walkability*

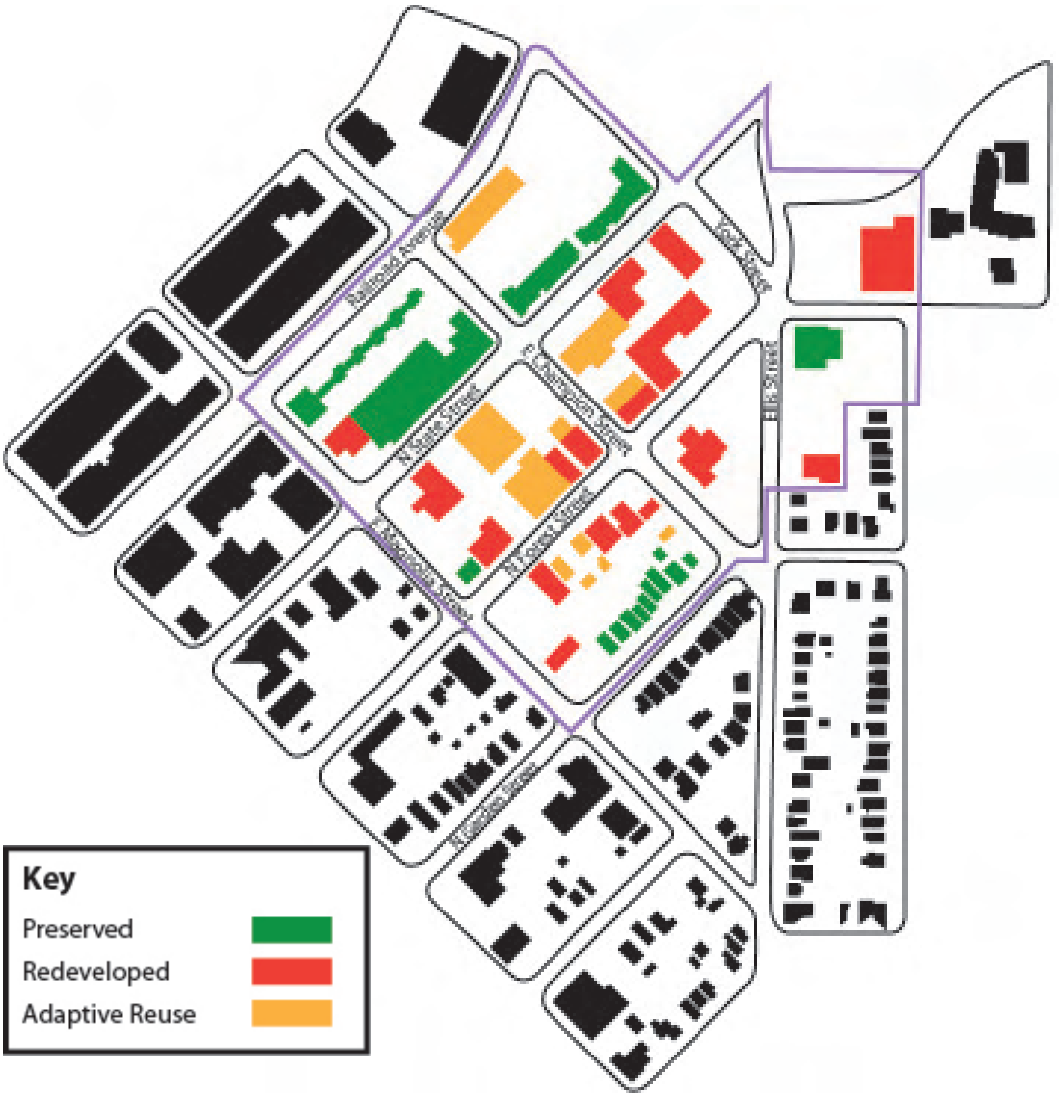



*Sectors of Surrounding Area*

of the York neighborhood contains historic housing, comprised of compact, single-family homes. These units are suitable for adaptive reuse by converting them to live/work units. Located near downtown and near the Western Washington University campus, the residents of the area are a mix of students, young professionals, and families. This historic and diverse neighborhood is an important part of Bellingham's character. The core area nearest the redevelopment site is dominated by auto-oriented businesses. Most auto-oriented businesses, including Wilson Motors, have relocated to Iowa Street, known as the new "Auto Row." This area of the central business district, therefore, is no longer an ideal location for these auto-oriented businesses. However, many of these businesses still remain in the site. In addition, civic buildings such as Norway Hall are scattered in this area.

## *1.4. ISSUES AND OPPORTUNITIES*

The Northeast area of downtown has great potential for redevelopment. Its location allows for aseamless transition to a transit-oriented community. The greatest issue of the area is the lack of residential units and density. There simply are not enough people living in the Northeast downtown area. With the addition of residents and businesses in a mixed-use setting, there is an opportunity for a symbiotic relationship. A meaningful mix of uses will result in a thriving community with the ability to generate capital improvements. The area does not serve pedestrians and bicyclists to its fullest potential. Currently, it is very difficult and dangerous for pedestrians to cross Ellis Street and Champion Street. These large crossing distances and limited visibility to drivers is not acceptable or inviting to

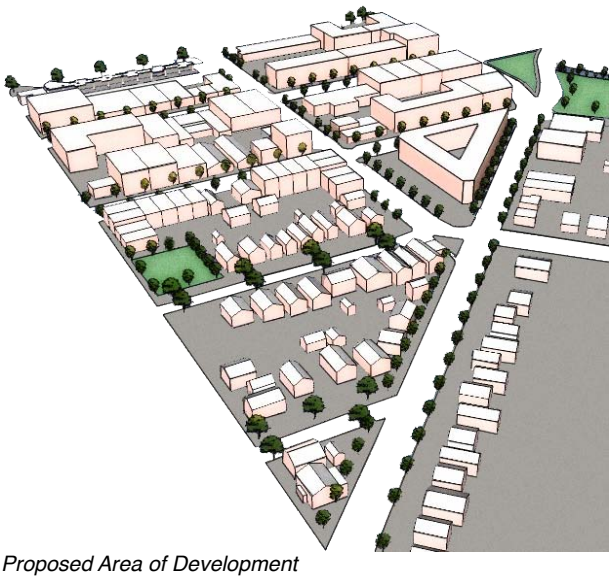



*Redevelopment Plan*

pedestrians. In addition, the only bicycle infrastructure exists on State Street and Forest Street. The downtown core does not adequately serve the needs of bicyclists. Also, many residents of the area state the desire for a park and play space for children. It is difficult for families living downtown to meet the needs of their children without the use of an automobile. There is an opportunity to meet these demands and transform this area. The loca tion of the WTA Bellingham Station must be capitalized upon. It serves as the transit focal point and reduces the demand for automobile use. Each parcel within the Northeast district was evaluated for its redevelopment potential based upon physical location, building type, condition of structure, and interests of the community. Many of the historic buildings were zoned for adaptive reuse, which allows for flexibility of use and longevity of structural use. Live/work and studio space opportunities will also be created to meet the demand of young professionals, entrepreneurs, and artists. It has the potential to be one of the most attractive areas in Bellingham for residents and businesses.

## 2. VISION

Located in the Northeast area of the urban core, the redevelopment will take advantage of the unique positioning between neighborhoods and its proximity to Bellingham's urban core. This area of the city is currently dominated by auto-oriented industry. With the relocation of car dealerships to other areas of the city, the NE redevelopment area must expedite change. There is no longer a need for auto body shops in such a central and crucial location. This area will be transformed into



*Proposed Area of Development*

a mixed-use, pedestrian-scaled area. Located between the historic York neighborhood and downtown Bellingham, this site has potential to capitalize on the assets of both areas. Commercial uses will draw patrons from the York neighborhood, the core area, and other parts of Bellingham. Downtown offers a wide variety of amenities to residents while the York neighborhood offers a historic sense of beauty, peace, and quiet.

The greatest density and concentration of the redevelopment will be located along State Street. This is a main street in the downtown core and is suitable for more intensive development. These mix-use buildings will be situated between historic buildings adapted for multiple uses. This will preserve the character of the district while improving the quality for residents and businesses. Density is reduced approaching the York neighborhood to create a positive transition. Located only two blocks from the downtown WTA station, the site will maximize transit-oriented development principles. This redevelopment project will be pedestrian and bicycle-friendly, and serve to bridge the gap between residential areas and the urban core. The redevelopment will create an attractive and distinct area of downtown, while protecting environmentally sensitive areas and preserving open and green spaces. The plan is based on LEED-ND standards, New Urbanist objectives, Smart Growth principles, and appropriate architectural vernacular. Using environmentally conscious design principles, the redevelopment project will incorporate the latest techniques and technologies in sustainability. There is a long-term vision of growth and sustainability in this proposed transit-oriented community.

*Proposed State Street Development*

*2.1. CLIENT PROFILES*

The Northeast downtown redevelopment site will contain a variety of demographics. This district of downtown will become the central location and will draw and rich diversity of residents and businesses. This site will attract young entrepreneurs who need to cut overhead costs by living and working in the same location. These young professionals will work to give the district a vibrant feel. Artists are also drawn to the area due to studio space and the option of live/work units. The clustering of artists will turn the area into a creative and unique district. The affordability of housing will allow students and low-income families to occupy the area. This rich diversity will serve the district well by attracting a wide variety of businesses and residents. It will become an area suitable for all.

Young Entrepreneur: Jason is a 25 year-old recent college graduate. He graduated from Western Washington University with a degree in Environmental Economics. Jason has gained enough experience in the green energy field to start his own small business. His focus is renewable energy, particularly photovoltaic solar cells. He has learned to build his own solar panels and wishes to find the space to produce and sell them. Jason currently earns an income of $18,000 by waiting tables in a restaurant downtown. He owns a car, but walks or rides his bike 90% of the time. He is capable of living without a car downtown. He wants a unique living space combined with a suitable work area for fabricating solar panels, sales space, and office space. A live-work space is ideal for Jason.

Artist: Mia is a 29 year-old artist based out of Bellingham. She attended college at Brown University and moved to Bellingham to be a fine wood worker. She specializes in Native American sculptures using driftwood. She makes an average income of $45,000 annually and currently lives in the South Hill neighborhood in a single-family home. Mia needs a workspace as well as a gallery space to showcase her art. She desires an artist space downtown where she can work in the back area and showcase in a separate area. A divided artist space in the downtown area is ideal for Mia.

Student: Ryan is a 21 year-old college student at Western Washington University. He currently works at Boundary Bay Brewery as a busboy. He has a combined income of approximately $14,000 a year working at his restaurant and receiving financial aid. Ryan is looking to move out of the substandard housing close to campus, but is concerned about the cost of rent downtown. He wants to live closer to work and be near the nightlife in the downtown area. He does not own a car and relies on his bicycle as his primary mode of transportation. An affordable studio or two-bedroom apartment downtown is ideal for Ryan.

Low-income Family: The Smiths are a family of four. The husband works at a machine shop on State Street and his wife is a checker at a local grocery store. They have a combined income of $40,000 and share one car. Both husband and wife work in the downtown area. The children are 5 and 7 years old. The Smiths currently live near Meridian Street and have to commute daily. This is difficult with one car and often causes complications for the family. They wish to move downtown, but worry about affordability. A three-bedroom affordable housing unit in the downtown core would be ideal for the family.

## 3. CHARACTERISTICS OF TOC DISTRICT PLAN

*3.1. TOC PLAN DESIGN CONCEPTS*

The redevelopment of the Northeast Downtown area is based largely upon transit-oriented design concepts. The following are the concepts and measures of implementation for the transformation of the district.

Transit Oriented Network

The transit-oriented community serves to give people greater access to housing, jobs, shopping, and recreation without heavy reliance on the automobile.* The TOC reduces the cost of living by providing alternative and efficient transportation options. The automobile creates huge costs to the consumer as well as society, which is why the TOC opts for pedestrian, bicycle, and public transit

*Ccnnectivity*

* http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-tod.html

mobility. The TOC increases the quality of life to its residents. With a decreased cost of living and efficient and diverse transit, residents are given more freedom and taken from the stressful atmosphere of the automobile. The TOC promotes public health. Residents are more inclined to walk and ride a bicycle in these areas. Instead of getting into the car, residents are encouraged to use their own energy for mobility. This leads to healthier lifestyles within the community. The TOC reduces household costs, infrastructural costs, and allows for a greater degree of investment into public transit. Increased public transit results in decreased carbon emis-

*Example of Increased Bicycle Use*

sions and pollution. The TOC reduces land and energy consumption. By focusing on compact development, open space is conserved and energy is used more efficiently. Energy is conserved in both the built environment and through sustainable transportation.

Measures:

•Bicycle and pedestrian connectivity through sharrow lanes, bicycle lanes, and an improved streetscape.

•Affordable housing options within a compact, diverse, and mixed-use area.

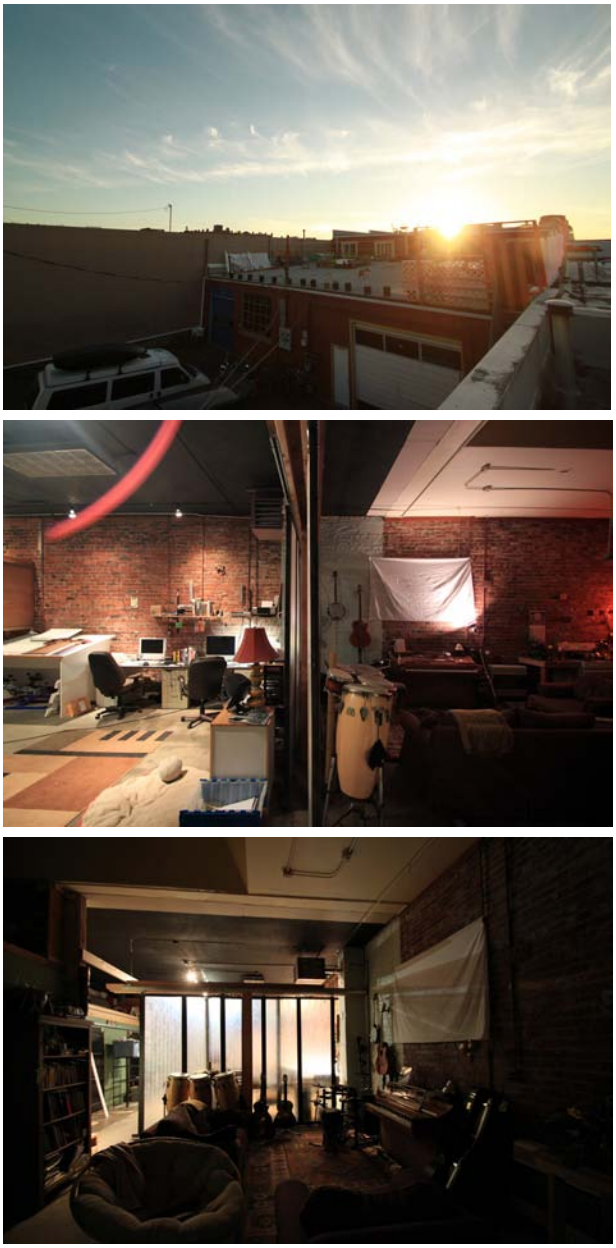
•Residential and commercial density to create a walkable community and promote transit ridership.

•Mixed-use: housing, employment, stores, and community services in a compact area.

•Open and Green Space: include public space as well as green spaces to provide recreational and social environments.

•Parking: minimize automobile parking, while maximizing bicycle parking.

•Urban design space: buildings and streetscapes will serve to promote pedestrian activity. This will also spur commercial vi ability in the area.



*Live/Work Units: Innate*

New Urbanist Principles

The plan adheres to New Urbanist principles**. Walkability is crucial to the area; a five-minute walking radius along with a pedestrian friendly design allows people to rely on walking as opposed to cars. To make this possible, the district must have a high degree of pedestrian connectivity. There must be an established infrastructural network

** http://www.newurbanism.org/newurbanism/principles.

*Champion Street After Redevelopment*

*Champion Street Before Redevelopment*

for pedestrians, bicyclists, and public transit. The district must also have a diverse mix of uses. Residential, commercial, and civic buildings must be intertwined in a meaningful way. In addition, the plan opts to mix diverse demographics (age, race, income, etc.). A variety of housing should be provided in this district. Mixtures of housing types, prices, rental units, and for sale units should be offered. Quality architecture and design should be implemented to respect the history of the area and create long-term structures. Density must be increased to bring residents closer to the amenities that they use on a regular basis. Finally, the redevelopment must also have sustainability in mind. The use of renewable materials, employment of renewable energy sources, and mindful construction techniques will work towards longevity. The district has an overall goal to increase the quality of life of its residents and employees. A well thought out combination of these principles will help to improve the community at a human scale.

Historic Preservation

The majority of the York neighborhood is on the National Register for Historic Places. This housing stock is valuable due to its historic character and neighborhood feel.*** The redevelopment plan opts to zone several of these historic houses for adaptive reuse, which will increase the likelihood of the structure staying intact and promote economic viability. Flexibility in use, such as live/work units, art galleries, Montessori schools, etc. will contribute the character of Zone 4 of the York neighborhood and aid the transition to the urban core. The redevelopment must transition well with the historic housing characters (Queen Anne, Vernacular, Colonial, Arts & Crafts, etc.). The core area of Subarea 2 contains many historic commercial buildings worthy for preservation and adaptive reuse. It is crucial to save these buildings to preserve the character of the district. The history of the site should not be erased; it should be emphasized.

Environmental Sensitivity

-Minimize airborne and water pollution.
-Whatcom Creek is located downhill from the Northeast redevelopment area.
-The auto-oriented businesses are a key concern for pollution runoff into Whatcom Creek.

*** http://www.cob.org/services/neighborhoods/historic/historic-resource-survey-inventory/york.aspx

*State Street After Redevelopment*

*State Street Before Redevelopment*

Land-Use Policies

-Encourage a healthy balance of commercial and residential space to create a positive place to live and work.
-Require ground floor commercial space on most buildings.
-Encourage development of community centers, parks, and playgrounds.

Site Design Policies

-Develop sites at a pedestrian and human scale.
-Build areas suitable for plazas, outdoor dining, and enhanced landscaping.
-Locate eateries and cafes on the South side of buildings to maximize sun exposure.
-Encourage structured parking to reduce impact on the ground level commercial uses that cater to pedestrians.
-Encourage low-impact storm water management to reduce environmental impacts on Whatcom Creek.

Building Design Policies

-Employ a building design review process.
-Establish building heights that do not infringe upon surrounding buildings, while still maximizing infill.
-Maximize floor area ratio to efficiently use land in the core area.
-Green technology and LEED certification
    •All new buildings will be at least LEED Silver certified.

*F.A.R. Map*

*Proposed Townhouses on Magnolia and N. Forest*

•Solar photovoltaic systems should be included ithe design as part of an effort to create and rely on renewable energy sources.
•Combined heat and power systems will be employed where suitable.
•Intensive green roof gardens will be created to improve insulation efficiency and produce local food.
•Renewable and recycled material will be incorporated into the redevelopment projects.

*3.2. RESIDENTIAL*

The Northeast downtown redevelopment focuses on increasing density through infill techniques. The missing link in this area is residential space. By increasing residential density, the district will become revitalized. The plan calls for an addition of townhouses and apartments. Studios, one bedroom, two bedroom, three bedroom, and four bedroom units will be made available. In addition, live/work units will be created to tailor to the specific needs of the area. The housing offered will vary in price, resulting in a mix of demographics. There will be units for rent as well as and for sale. This variety in housing will result in a diverse area that tailors to a wide variety of residents.

*3.3. COMMERCIAL*

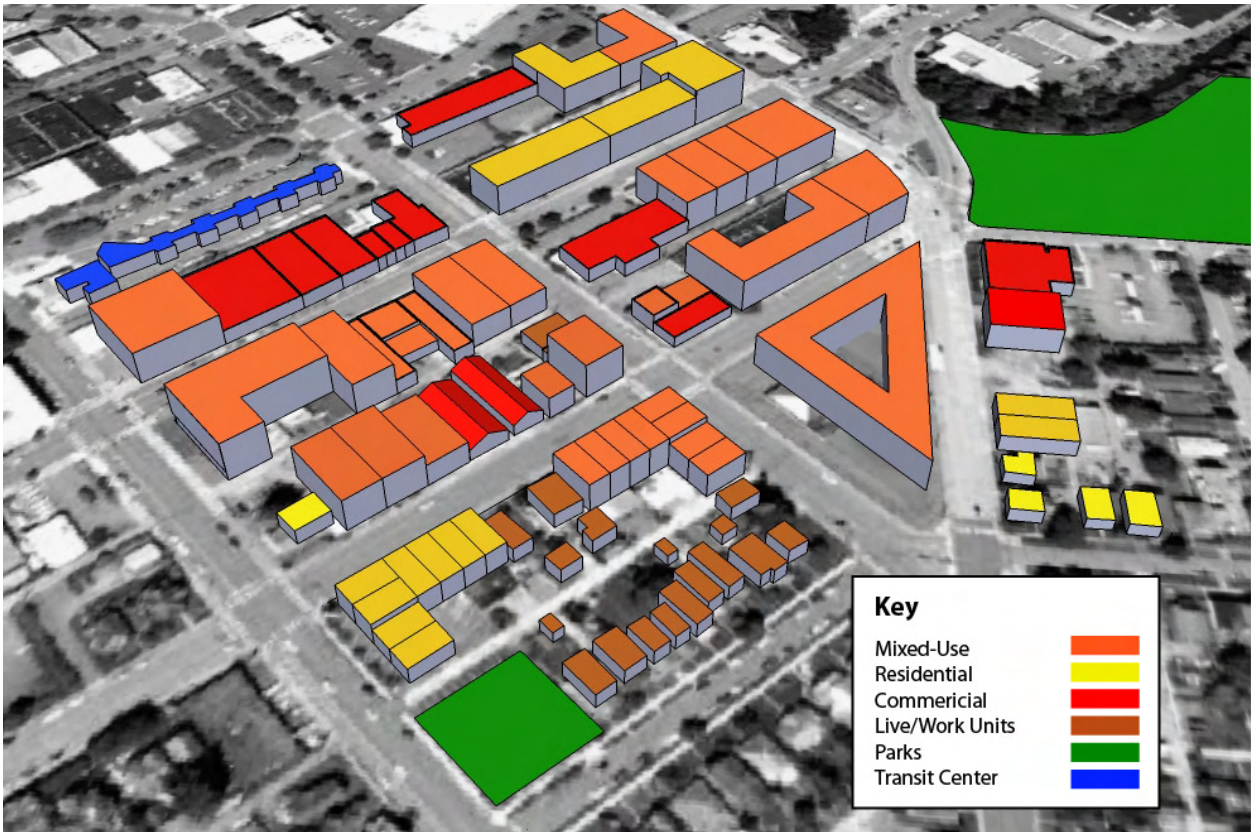
The Northeast downtown redevelopment area will increase the amount of commercial space in the core area. A diverse mix of commercial uses will replace the large, auto-oriented businesses. Everything from cafes to retail spaces will be created. The addition of commercial spaces will improve the tax base in the central business district, serving to revitalize the area. In combination with great increases of residential space, the district will become a mixed-use area tailoring to the pedestrian customer.

*3.4. METRICS*

The table of land uses (Table 3.1) demonstrates the redevelopment potential of the Northeast downtown area. As shown, there are are approximately 784 residential units the in redevelopment plan. This will house approximately 1,700 people within a 25-acre space and result in a density of 31.4 dwelling units per acre in this district of downtown. This calculation does not account for ground floor commercial space and is, therefore, a relatively

*Wilson Motor Block Proposed Mixed-Use Development*

high density. The redevelopment plan also calls for a variety of housing options. There are a variety of residential housing sizes offered. Everything from studio to four bedroom units are offered within this area. This allows students, young professionals, and families to live in close proximity, resulting in a diverse area. In addition, over 300,000 square feet of commercial space is offered in this plan. With an average of 1,250 square feet per unit, there will be approximately 187 commercial units available. In addition, there are 13 live/work units, which offer spacious living areas and large workspaces. Also, the plan provides over 10,000 square feet of artist/ professional space to meet the needs of young entrepreneurs and artists in the area.




*Proposed Land Use*

*3.5) CIRCULATION*

Transportation Study

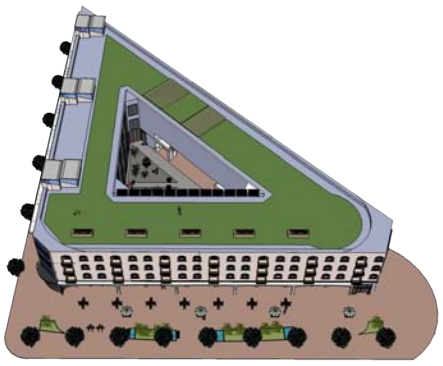
A transportation study of the Northeast downtown area has worked towards a greater understanding of its connectivity and transit choices made. Currently, 9,698 trips are generated daily within this area. Over eight thousand of these trips are in the automobile, while only 194 are transit, 291 are bicycle, and 776 are pedestrian modes. After redevelopment of the Northeast downtown area, it is estimated that the number of daily trips will increase from 9,698 to 11,755. The same number of automobile trips will occur, but 529 transit trips, 764 bicycle trips, and 1,998 pedestrian trips are estimated to occur. These are huge increases in sustainable modes of transportation. There is a 270% increase in transit trips, a 262% increase in bicycle trips, and a 257% increase in pedestrian trips. The data shows that the post-redevelopment increase in trips generated occur in a sustainable fashion. Virtually all the increases in trips generated were on the transit system, on a bicycle, or on foot. This demonstrates the power and efficiency of transit-oriented design.

Streetscapes

Ellis Street defines the character for most people travelling through the redevelopment site by car. Four traffic lanes, unprotected and exposed sidewalks, and no bicycle lanes create a threatening environment for people, and discourages pedestrian activity. In contrast, Garden Street provides a welcoming atmosphere for pedestrians. It has wide sidewalks, a vegetative buffer, and two travel lanes that are more bicycle-friendly. As the Northeast district gets redeveloped, the immediate streetscapes must be modified to cater to the pedestrian and from the Whatcom Transit Station, which encourages ridership. This proximity will increase ridership once residential units have been established in the area. The addition of a bus stop on Champion Street will also be added as part of the transit improvements.
cyclist. Additional parking must not interfere with the pedestrian scaled environment or the concepts of transit-oriented development. Shared parking, on-street parking, and parking structures are encouraged to reduce impact.

Measures:

- •Each sidewalk will include a vegetative buffer. Street trees will be included on all streets for aesthetics and pedestrian safety.
- •Ellis Street will be narrowed into a three-lane street. It will have one lane Northbound and two South bound. The North bound lane will become a 14' wide sharrow lane. The sidewalk width on the East side of the street will be increased from 5' to 8'. The far right southbound lane will include a 5' wide bicycle lane. The sidewalk width on the West side of the street will be increased from 7.5' to 12'. In addition, the plan will reduce the speed limit on Ellise to 25 miles per hour to improve safety for pedestrians and bicyclists.
- •Forest Street recently underwent streetscape improvements. There is a 5' wide bicycle lane and two lanes of travel. The plan opts to remove the 8' buffer to increase the sidewalk width from 6' to 14'.
- •The right lane on Champion Street will be widened from 12' to 14' to accommodate the addition of a sharrow lane.

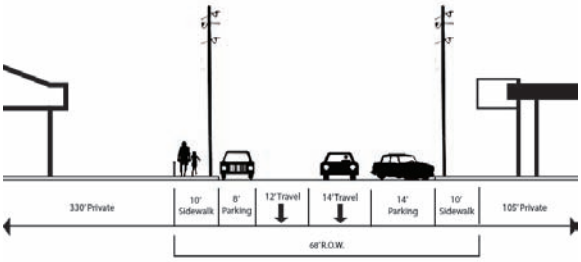


*Wilson Motor Block Proposal*

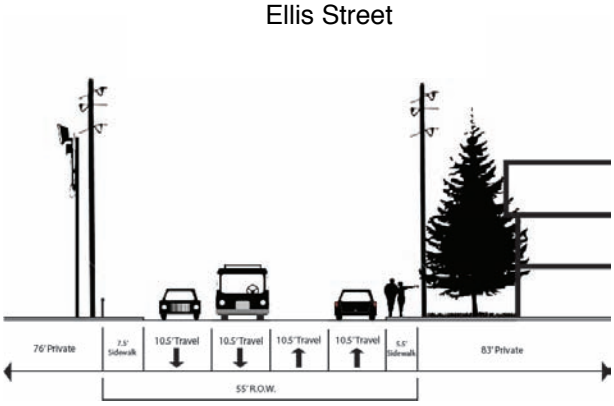
*Bike Storage/Internal Courtyard*

Existing

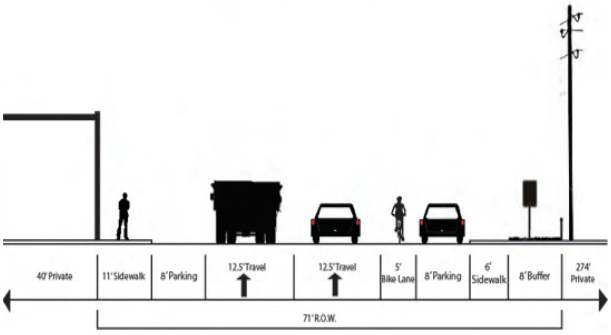
E Champion Street



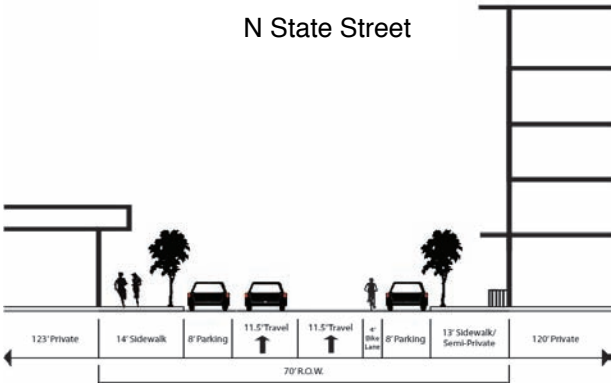

Ellis Street




N Forest Street

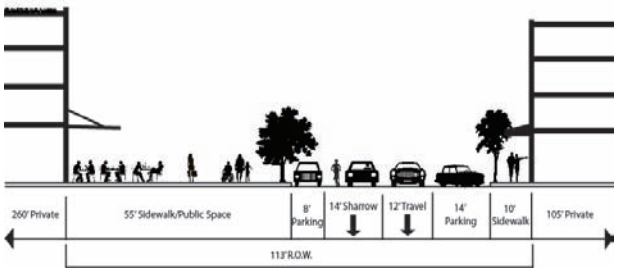



N State Street

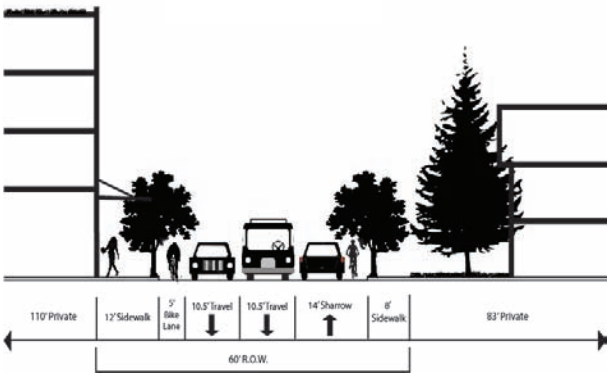



Proposed

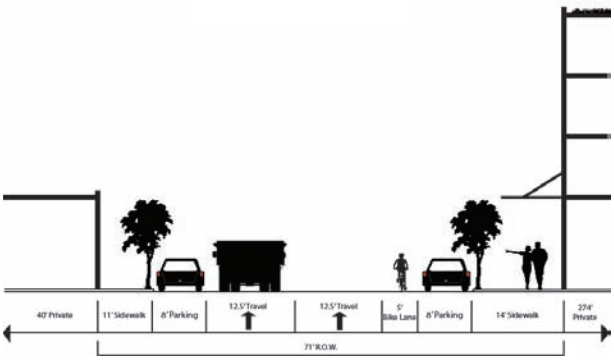
E Champion Street



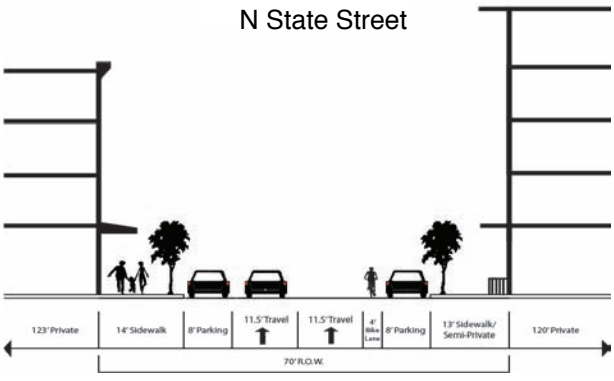

Ellis Street




N Forest Street




N State Street



*Wilson Block Internal Courtyard*

Pedestrian, Bike, and Transit

Pedestrian, bicycle, and transit modes of transportation are the most important in the district. Streetscapes will be modified to accommodate these three modes of transportation. Sidewalk intersections will become bulged to decrease the crossing distances. Sidewalks will be widened on many streets for safety and atmosphere. Street trees are also included on all streets for character and safety. On-street parking will help to create a safety buffer between the street and pedestrian space. Bicycle lanes will be included on Ellis, Champion, Forest, and State Street. In addition, these streets will include bicycle signals to increase safety. Proper markings in the bicycle lanes and sharrow lanes will increase knowledge of bicycle presence to automobiles. This bicycle infrastructure will promote ridership and increase safety. The Northeast area of downtown is located two blocks

Parking

The plan opts to add on street parking wherever possible within the district and utilize parking structures to minimize their impact on the pedestrian scale. Creating an underground parking facility below the former Wilson Motor site and below the corner of State and York Street will work to reduce impact on the pedestrian space. Parking requirements will be minimized due to access to on street parking as well as the close proximity to the WTA station downtown. Parking metrics are shown in table 3.2. The underground parking facility will offer spaces by choice. Residents may choose not to purchase parking and rely solely on transit or on-street parking. Bicycle parking will be provided within the area both in the underground garage and on the street level. Bicycle parking will be maximized in the area to promote ridership.

On-street parking uses parallel parking and angle parking spaces with easy access to residences and businesses. Off-street parking makes use of alley space with enough room and setback for maneuverability. Parking is available for shoppers and visitors, but does not exceed the parking requirement, which promotes transit ridership and bicycle trips. Private underground spaces and alley spaces are available to residents who wish to purchase them. This creates another economic incentive for residents to not own or operate a personal vehicle.

*Wilson Motor Block Development: Champion Street Side*

### *3.6. PARKS, PLAZAS, and NEIGHBORHOOD CONNECTIONS*

Currently, there is limited open space within walking distance of the Northeast downtown redevelopment site. The redevelopment plan opts to maximize public access to green space and open space. A public space is designated on the Southwest side (facing Champion Street) of the Wilson Motor Block. This space has optimal solar orientation and is intended for outdoor restaurant seating, as well as a public space for socialization. It will act as a plaza area with outdoor furniture and café seating space. A childrens' playground will be constructed on the corner of Garden Street and Magnolia Street. This will meet the current demand for childrens' space in the downtown area. Families need this amenity for daily needs. In addition, the City of Bellingham has planned for a green space north of the site along Whatcom Creek as part of the Greenway Strategic Plan.[****] This is known as the Wayside Park, which will create a large green space on either side of the creek and serve to connect the creek trail all the way to Maritime Heritage Park.

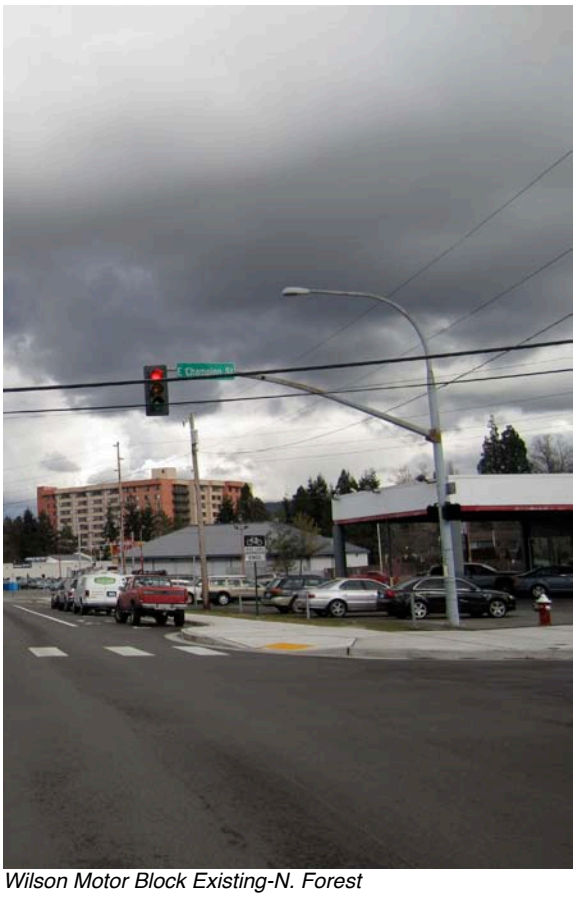
With the addition of the public space on the South side of the Motor Block, the creation of a children's park, and the addition of a park along the creek, this area of downtown will serve to meet the needs of the area. These recreational uses are pivotal for a community to thrive.

## 4. RELATIONSHIP OF PLANNING CONCEPT TO TOC GOALS

### *4.1. TOC AND LEED ND OBJECTIVES*

The Northeast downtown redevelopment adheres to transit-oriented goals. The entire district will be focused on the idea of life without the need of an automobile. By retrofitting the street network to cater to the pedestrian, bicycle, and transit, the car will seem like a hassle in comparison. With the addition of residents and businesses in a mixed-use setting, a community can function within a five-minute walking radius. The Northeast downtown district also adheres to LEED-ND principles. LEED-ND stands for the Leadership in Energy and Environmental Design for Neighborhood

**** http://www.cob.org/documents/mayor/boards-commissions/greenway/greenway-strategic-plan.pdf



*Wilson Motor Block Existing-N. Forest*

*Wilson Motor Block Proposal-N. Forest*

Development.***** It is a rating system designed by the U.S. Green Building Council. This system uses third-party verification to determine whether a development will achieve a greater degree of sustainability. There are three important categories of LEED-ND. The first is “smart location” and linkage. This category encourages communities to evaluate the location of sites, alternative modes of transportation, and environmental impacts. This includes proximity to infrastructure, reduced automobile dependence, housing, job, and school proximity, and bicycle networks. In addition, the increased density concentrates people in a way that encourages living near the amenities and locations one would frequent most. The second category is neighborhood design and pattern. This concept promotes walkable neighborhoods, transit networks, and healthy communities. This includes compact and mixed-use development, diversity, and equal access. The third category is green infrastructure and buildings, which promotes efficiency in design and construction, reduction of energy consumption, use of sustainable materials, and historic preservation and adaptive reuse of buildings.The Northeast downtown site adheres to each of these principles. The site is located in a core area of the city, making it prime for redevelopment in terms of location. The site is within two blocks of a transit station and has the capability to cater to bicycles and pedestrians in a much more comprehensive way. The mixed-use plan reduces the need for a car and increases density of dwelling units. It is one of the smartest locations for growth in Bellingham. With high density and a mixture of uses, this area will become walkable and pleasant. A diversity of housing options is offered at varying prices to cater to a wide variety of demographical groups. Finally, each new building will achieve at least a LEED Silver rating and the redevelopment will also emphasize historic preservation and adaptive reuse. The “greenest” method of redevelopment is retrofitting and preserving what already exists. This combination of design principles will create a unique district that will draw residents and businesses and become a model for future growth in the rest of Bellingham.

***** http://www.usgbc.org/ShowFile.aspx?DocumentID=6423

| Table of Land Uses | | |
|---|---|---|
| **Residential Total** | **673,545 ft²** | **784 units** |
| **Density** | | **31.4 Dwelling Units/ Acre** |
| Townhouse | 37,824 ft² | 32 Units, ~1,500 ft²/unit |
| Studio | 69,104 ft² | 154 Units, ~450 ft²/unit |
| 1 Bedroom Apartments | 164,587 ft² | 253 Units, ~650 ft²/unit |
| 2 Bedroom Apartments | 141,602 ft² | 149 Units, ~950 ft²/unit |
| 3 Bedroom Apartments | 141,251 ft² | 118 Units, ~1,200 ft²/unit |
| 4 Bedroom Apartments | 96,592 ft² | 64 Units, ~1,500 ft²/unit |
| Housing area in Live/Work Units | 19,465 ft² | 13 Units, ~1,497 ft²/unit |
| Single-family Houses | 3,120 ft² | 1 Unit, 3,120 ft²/unit |
| **Commercial Total** | **300,129 ft²** | |
| Artist Studio/Professional Spaces | 10,738 ft² | 13 Units, ~825 ft²/unit |
| Retail | 233,903 ft² | 187 Units, ~1,250 ft²/unit |
| Work space in Live/Work Units | 16,737 ft² | 13 Units, ~1,287 ft²/unit |
| Medical Clinic | 38,751 ft² | |
| **Open Space/Parks** | **28,421 ft²** | |

*Table 3.1*

| Parking Table | On-Street | Off-Street | Underground |
|---|---|---|---|
| E Champion St. | 66 | 0 | 0 |
| N Forest St. | 73 | 50 | 0 |
| N State St. | 80 | 101 | 120 |
| Ellis St. | 0 | 21 | 110 |
| Railroad | 0 | 105 | 0 |
| Totals | 219 | 277 | 230 |
| **Total Spaces** | | | **736** |

*Table 3.2*