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1. Introduction

Authority

This document is the comprehensive [land use](#) plan for the city of Sumas. A comprehensive plan is a legally recognized document that provides a framework for making land-use and other planning decisions. Development of this plan is authorized by RCW 35A.63 ("Planning and Zoning in Code Cities").

Development of this plan is also required by RCW 36.70A, commonly known as the Growth Management Act (GMA). Enacted by the 1990 Washington state legislature, the GMA requires cities in fast-growing counties to coordinate with neighboring jurisdictions in order to plan for future growth while conserving important natural resources and protecting critical areas. Whatcom county ~~qualifies~~ [qualified](#) as a fast-growing county according to the criteria in the GMA, so Sumas (as well as all other cities in Whatcom county) ~~must~~ [is required to](#) complete the comprehensive planning process.

Scope and Purpose

This plan contains ~~five~~ [seven](#) mandatory elements as specified in the GMA (RCW 36.70A.070):

- [Land-use element](#). This element designates the proposed general distribution, location, and extent of lands for housing, commerce, industry, recreation and open space, and public facilities and utilities.
- [Capital facilities element](#). This element contains an inventory of existing capital facilities owned by public entities. The element also shows the proposed locations and capacities of forecasted improvements and presents a six-year plan demonstrating how those improvements can be financed.
- [Housing element](#). This element contains an inventory and analysis of existing and projected housing needs.
- [Transportation element](#). This element contains an inventory of transportation facilities and services along with an analysis of future transportation needs. The element also presents a six-year financial plan for transportation improvements.
- [Utilities element](#). This element describes the general location and capacity of existing and proposed utilities, including natural gas, electric, and telephone utilities.
- [Economic development element](#). This element describes the local economy and establishes goals, policies and programs to foster future economic growth.
- [Parks and recreation element](#). This element contains and inventory and analysis of existing and proposed parks and recreational facilities. This element is included in chapter 4, [Capital Facilities](#).

Generally, each element first documents existing conditions and then discusses future scenarios that seem both desirable (in light of community preferences) and attainable (in light of community resources and constraints). Aside from these major elements, the plan also includes background information, community survey results, a vision statement, a number of goals and objectives, and ~~various~~ other supporting information.

A plan written in compliance with the GMA must address in general terms the twenty year period following plan adoption, but must also include a detailed financial analysis pertaining to the first six years of that period.

Although adopted by ordinance, the plan is fundamentally a policy document. Implementation of the plan will usually depend upon other regulatory tools such as the zoning and subdivision ordinances. The GMA requires ~~that such tools~~the city's development regulations to be ~~made~~ consistent with the plan ~~within one year following plan adoption~~.

The plan is written for several audiences, including: local decision-makers (i.e., planning commissioners, councilmembers, mayor), residents, developers, and state and county officials. The plan seeks to notify people of the city's future direction and to establish a clear intent that can be used to develop and interpret municipal regulations. The plan should also help the city secure outside funding for development projects; eligibility for most state infrastructure funding programs is dependent upon completion of the plan.

[In addition, the goals and policies established through the City of Sumas Shoreline Management Master Program, as currently adopted or hereafter updated, are included as goals and policies incorporated into this plan and constitute the Shoreline Management element of the comprehensive plan as required by the Growth Management Act. See Chapter 9.](#)

Public Participation Process

The GMA requires that Sumas establish procedures providing for early and continuous public participation in the planning process (RCW 36.70A.140). The following procedures constitute the public-participation process in the city of Sumas. The procedures shall be followed whenever the city proposes to amend or adopt any part of the comprehensive plan or the development regulations implementing the plan.

- Communication programs and information services. At least sixty days prior to formal action on a proposal, the city shall inform the public about the proposal in the following ways: (1) a press release summarizing the proposal will be sent to the city's paper of legal record; (2) a summary of the proposal shall be read at a regular meeting of the city council. In addition, an article concerning the proposal will be included in a timely issue of the city newsletter, if the newsletter is currently in publication.

When a proposal might affect another jurisdiction, a summary of the proposal shall be mailed to the chief executive of that jurisdiction at least sixty days prior to formal action on the proposal.

- Dissemination of proposals. At least sixty days prior to formal action on a proposal, copies of the full text of the proposal shall be made available to the public at city hall and at the Sumas branch of the Whatcom County Library System. Availability of these copies shall be mentioned in the summaries and articles described in the prior paragraphs.

As required by RCW 36.70A.106, the city shall mail copies of the full text of the proposal to appropriate state agencies at least sixty days prior to formal action on the proposal.

- Written comments. The city shall accept written comments concerning a proposal during a sixty-day period ending on a specified date, and formal action on the proposal shall not occur before the close of the comment period. The process for submission of written comment (i.e., the address for submission and the ending date) shall be described in the summaries, articles, and mailings described in the prior paragraphs.

Written comments shall be considered by the city at open public meetings. Each comment shall be distributed to every member of the governing body convening the meeting. Discussion and disposition of the comments shall then take place. Although discussion at a public meeting shall be the only required response to a written comment, the city may additionally acknowledge or respond to a comment by another means.

- Public meetings. Governing bodies shall consider and take action upon proposals only at meetings convened in compliance with the Open Public Meetings Act of 1971.

During the sixty-day period for acceptance of written comments, the governing body shall hold at least one meeting at which the public is encouraged to provide verbal comments upon the proposal. If many people intend to comment, the governing body may limit the length of each person's comments. The time and place of this meeting, along with an invitation to make comments, shall be included in the summaries, articles, and mailings described in prior paragraphs. Subsequent discussion (if any) in reaction to a verbal comment shall be the only required response to that comment.

The foregoing is a minimum set of procedures that shall be followed for every eligible proposal. As described in the following section, the city will occasionally undertake major re-examinations of the comprehensive plan. During such events, a more extensive process for solicitation of the public's viewpoints will be used. The process might make use of: a special-purpose citizen's advisory committee; a survey; well-advertised workshops at which alternative proposals are developed or discussed; other outreach tools. Chapter 2 contains a record of the participation process used during the original creation of this plan from 1990 through 1995.

Plan Amendment Process

The GMA requires that Sumas establish procedures regulating the frequency of amendments to the comprehensive plan (RCW 36.70A.130). The following procedures constitute the plan-amendment process in the city of Sumas.

- Minor amendments. The comprehensive plan shall be amended no more than once within a calendar year, except that additional amendments shall be allowed whenever an emergency exists. During At the beginning of the amendment process, the city council shall review all pending amendment proposals and make a determination as to which proposals shall be docketed for inclusion in the amendment process. all pendingAll formally docketed amendment proposals shall be considered concurrently so that the cumulative effect of the various proposals can be ascertained.
- Major amendments. The city shall occasionally undertake a major scrutiny-review and update of the comprehensive plan, including a reexamination of each element and a reconsideration of the adequacy of the land supply within the UGA. This process will involve coordination with Whatcom County and may lead to adoption of a revised UGA. Such a process shall take place consistent with the timing requirements established in the GMA and no later than ten years after the previous major amendment process.

Process to Avoid Unconstitutional Taking of Private Property

All proposed actions potentially impacting the use of land within the city are reviewed to ensure that such actions do not result in an unconstitutional taking of private property. Proposed actions, such as changes to comprehensive plan goals and policies,, changes to current and future zoning designations, and changes to development regulations (including changes to allowed uses in specific zoning districts), are subject to review at a number of levels. City staff have training and experience in how to review proposed actions to identify those that might result in an unconstitutional taking of private property. This training includes becoming familiar with the state Attorney General’s guidance on how to avoid unconstitutional takings. In addition, all major land use decisions are reviewed by the City Attorney to ensure consistency with state and federal law. Finally, all proposed actions made by the City Council potentially impacting land use and development within the city are subject to review and comment by the public, and opportunities to provide public testimony regarding the potential taking of private property are made available by the City Council during the required public hearing process.

2. Background

History

The name Sumas is derived from a Native-American phrase "sm-mess" which means "land without trees." The original word comes from the Cowichan Tribe and refers to a natural prairie at the approximate site of the modern city of Sumas.

Settlers of European extraction arrived in the Sumas River basin in the 1870s. Records show a homestead by R. A. Johnson in 1872. Early settlers were drawn by the timber resources in the area, and a mill was soon constructed. During the 1880s gold rush, Sumas became a major outfitting center for prospectors seeking gold in the Fraser River basin. The city boomed to over 2,500 people. A weekly newspaper, *The Sumas Advocate-News*, was first published in 1889. Growth was further encouraged by the arrival in 1889 of the Northern Pacific Railroad and the Chicago, Milwaukee, and St. Paul Railroad, providing a rail link with the Canadian Pacific Railroad. The link with Canadian transportation facilities, including US Customs and Immigration Services, remains an important economic resource today.

The city of Sumas was incorporated in 1891, and the first school was built in 1892. While the early growth of the city was supported by the timber and mining industries, a gradual shift toward an agricultural base took place during the first decades of the 20th century. Dairy farming, poultry farming, and fruit raising became major contributors to the city's economy. A 1921 publication titled "The Show Window: Publication of the Chamber of Commerce, Bellingham, Whatcom County, Washington" identifies Sumas as "a desirable residence town" with "splendid schools, both grade and high, paved business streets, electric lights, good water supply, public library, telephone service, and other city conveniences."

Between 1900 and 1940, Sumas dwindled in size as a result of the shift away from timber and mining. By 1940 there were less than 700 residents in town. The size and economic base of Sumas then changed very little through 1990: the city continued to rely on border-related commerce and the surrounding agricultural base. Recent trends are discussed in a later section.

Prior Planning

Sumas developed a draft comprehensive plan in 1969, with the assistance of Urban Planning and Research Associates, a Seattle-based consulting firm. The plan included an inventory of existing land uses, a set of development and land use goals, a map recommending land-use zones, and a discussion of traffic circulation. Although an official zoning map was adopted after publication of the draft plan, the plan itself was never completed or adopted by the city council. As mentioned earlier, the GMA now requires that the city develop a more extensive plan.

Summary of Planning Pursuant to the GMA

Sumas began the process of complying with the GMA late in 1990. The first steps taken were to identify and protect critical areas including wetlands, frequently flooded areas, fish and wildlife habitat, geologically hazardous areas, and critical aquifer recharge areas. By March of 1992 an interim critical areas ordinance was in place.

Development of the comprehensive plan got underway in the summer of 1992. A consultant was charged with development of the plan, under the supervision of the planning commission. A citizen survey was distributed in July of 1992 and the results of the survey were distributed to city officials soon thereafter. In March of 1993 a town meeting was held to present the results of the survey and initiate a goal-setting process. In April of 1993 the county and the cities adopted county-wide planning policies. A draft set of local goals was developed in the summer of 1993 and presented at a second town meeting in September. The focus then shifted to establishment of an interim UGA, as required by a 1993 amendment to the GMA. After public hearings before the county planning commission and county council, an interim UGA encompassing 772 acres was adopted by the county council in May of 1994. Work on the comprehensive plan resumed in the spring of 1994 and continued until adoption of the first GMA-compliant plan in mid 1995.

In mid-1997 a plan update was begun as an outgrowth of a flood-planning process. Flood planning had revealed the need for different land uses in certain flood-prone areas, and also revealed that other areas were suitable for development. Other minor plan amendment requests had also been docketed. The planning commission began reviewing proposed amendments in the fall of 1997. In early 1998, the city council decided to simultaneously tackle an update of the Shoreline Master Program, which had not been revised since 1988 and which contained some problematic provisions. Wildlife and fish habitat consultants worked in the spring of 1998 to develop science-based data, and a coordinated proposed update of the SMP and the comprehensive plan was published in June, 1998.

The 2001 plan update was undertaken in order to develop and integrate a detailed parks and recreation element and to incorporate the results of a *Water System Comprehensive Plan* that was finalized in the fall of 2000. The planning commission began reviewing proposed amendments in the fall of 2000, and a draft plan revision was produced in spring 2001.

In 2002 the state legislature mandated that Sumas, together with other jurisdictions in Whatcom County, revise its comprehensive land-use plan prior to December 1, 2004. The review was to also include a review of all development regulations (i.e., zoning, subdivision, critical areas) to ensure consistency with the current goals and requirements of the Growth Management Act. The planning commission began the revision process in the fall of 2003 and produced a revised draft in the spring of 2004.

[Amendments to the GMA adopted after 2004 established that the city of Sumas, in coordination with Whatcom county and the other cities in the county, was required to review and update its comprehensive plan and development regulations and review its UGA by the end of June, 2016. Coordination with neighboring jurisdictions regarding the required review and update began in 2013. Initial work involved coordinating with staff from Whatcom county and the other cities in](#)

the county to develop an overall update schedule, a land capacity analysis methodology and background information. In the fall of 2013, a consultant hired by the county (but paid for by all of the cities as well) prepared high, medium and low projections for population and employment growth in the county through 2036 along with allocations of such growth to all of the UGAs, including Sumas. In late 2013, the city submitted a preliminary proposal to the county that identified the city's proposed allocations of population and employment growth. In early 2014, the Whatcom county council adopted a non-binding resolution establishing preliminary allocations of population and employment to all of the cities, including to the city of Sumas. In June of 2015, the Sumas city council authorized submission of the city of Sumas UGA Proposal, which included the same allocations of population and employment included in the prior county council resolution. The Sumas planning commission began the review and revision process in the fall of 2015, and the recommended revisions to the plan were made available in the spring of 2016. Final action adopting the 2016 update of the comprehensive plan was taken by the Sumas city council in June 2016.

Community Survey

In July of 1992 a survey was conducted to learn the feelings of the community. A copy of the actual survey document is included in Appendix III, along with the complete set of comments made by residents. The following is a brief summary of the survey showing the five major questions followed by the responses in priority order.

- Q. What do you like about Sumas?
 - Character
 - Sewer and water service
 - Open spaces and natural beauty
 - Air quality
 - Police and fire services

- Q. What are the issues or problems facing Sumas?
 - Defining land-use classifications
 - Striking balance between property rights and restrictions
 - Promoting job/business growth
 - Protecting and enhancing environmental quality

- Q. What actions should the city take to improve quality of life?
 - Improve flood control
 - Protect water supply
 - Improve and add roads
 - Assist job/business growth
 - Limit commercial strip pattern
 - Maximize property rights

- Q. In which direction should the city grow?
 - South
 - West
 - East

- Q. What is the best way to pay for public facilities built to accommodate growth?
 - Combination of revenues
 - Property taxes
 - User fees
 - Bonds

People's handwritten comments revealed a sharp division between those interested in promoting further commercial growth and those dismayed by the growth of the preceding 15 years. Each viewpoint was held by about the same number of people. Following are some verbatim comments that reveal the division.

Get rid of the service stations and bars and stop catering to the needs of business only.

I think the city is more concerned with the Canadian business owners than with its own citizens.

I preferred the old character of Sumas, businesses closed on Sunday and not all Canadian owned businesses -- I feel the average resident is worse off now than 15 years ago, with traffic pollution, and noise.

Fewer gas stations.

Don't let grocery stores and gas stations go beyond Cherry Street.

Try to think of Sumas and its residents, not just money and Canadians.

Sumas has been taken over by a foreign country and no longer exists as a small town. Small town services, businesses, etc., are gone. It no longer is a desirable place to live and raise a family. Pride in home maintenance is gone as more and more homes have absentee landlords. The Canadian dollar has not improved the average resident's life -- it has made it worse -- only the businessman profits! Zoning means nothing! HUD housing brings in more non-contributing residents.

Most of the favorable features or characteristics are gone -- sold to the highest bidder.

It's big enough now -- any more growth there will be no trees - or farmlands left. The animals won't have any homes -- our air would be ruined. Also cut down on Canadian traffic.

City revenue dollars -- long-term businesses create better paying jobs which in turn offer the opportunity for local youth to stay and work and prosper in their own hometown. Right now you have to look outside Sumas for good job opportunities.

As far as I see it, Sumas is right now nothing more than a gate. We have this huge fenced back yard with nothing in it to play with. If the city continues to restrict business growth, you may as well start making out a rent check to Lynden. There must be thousands of lost dollars going through Sumas to Lynden, Everson and Bellingham every day. Until this city decides to get off its hand and make a positive step towards business growth it will remain nothing more than a passageway to other points that can offer people what they need.

Let's not miss the opportunity for growth. We have many commercial opportunities we should take advantage of, and then allow residential growth to follow. We should take advantage of people passing through to better our community further.

Would like to see a wider variety of businesses. I would rather spend money in my own community and support it rather than supporting another which I must do more than 50 percent of the time I need something.

Serious considerations towards a mall complex of some sort with a variety of shops, etc., so tax dollars can stay in Sumas and not head to Everson or Lynden.

Keep the natural beauty, but please allow some space for commercial development. I feel that the city is not actively interested in a strong, broad tax base and future.

Community Vision and Goals

Based upon the results of the community survey, the input of the planning commission, and citizen feedback at public meetings, the following vision has been identified:

Sumas should be a small rural town that offers a vibrant commercial district, spacious residential neighborhoods, a variety of outdoor recreational opportunities, and an industrial base that provides decent jobs. The community should exhibit self-reliance and the citizens should have pride in their town.

Several [goals-policy objectives](#) have been identified to help the city attain this vision.

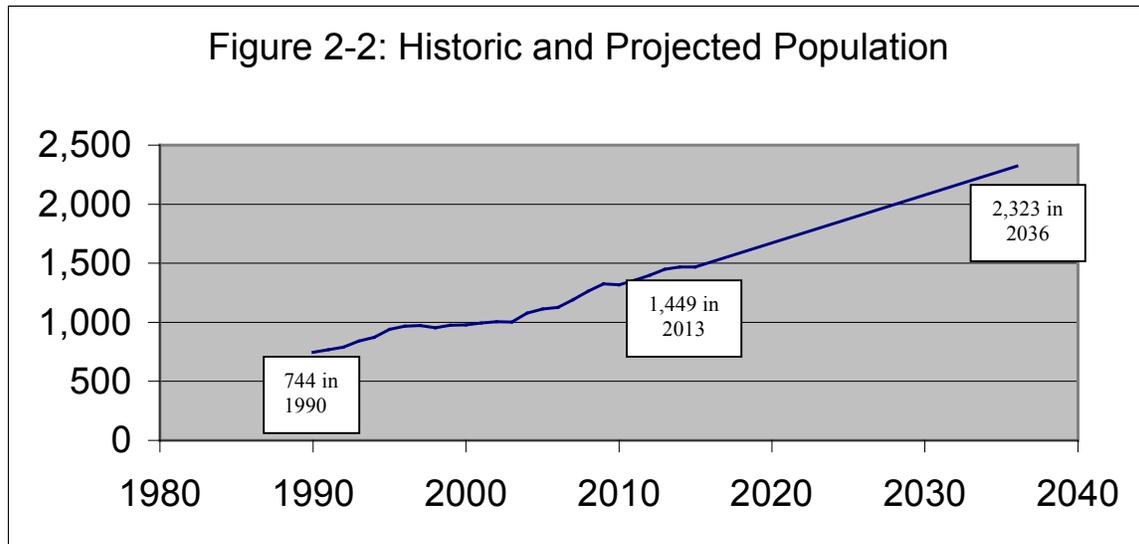
- Sumas should protect the natural elements -- the clean air, pure water, and beautiful open space -- that create the pastoral environment enjoyed by residents.
- Sumas should protect the residential character that is the essence of a rural town: residents should have "room to breathe", yet should still be able to walk anywhere in town.
- Sumas should encourage commercial development that provides a benefit to local residents. Sumas should capitalize upon the large number of "passers-through" in order to support desirable businesses that would otherwise not survive in such a small town.
- Commercial development should be contained within compact, well-defined areas, both to minimize the impact on surrounding neighborhoods and to serve patrons conveniently.
- Sumas should encourage "clean" industrial development in areas separate from residential use.
- Sumas should enhance the facilities at existing parks and also develop new trail and park facilities by conversion of land that is unsuitable for development because of flooding.
- [Sumas should protect groundwater resources to ensure that potable water meeting the current high standard and in quantities sufficient to support new growth will continue to be available into the future.](#)
- [Sumas should provide special protection of anadromous fisheries through implementation of the city's critical areas regulations and shoreline management master program goals, policies and regulations.](#)

[In addition to the goals set forth above, the planning goals established in the Growth Management Act \(GMA\) pursuant to RCW 36.70A.020 are hereby adopted and incorporated by this reference as planning goals under this comprehensive plan. In addition, the policy of the Shoreline Management Act established under RCW 90.58.020 is added as one of the GMA planning goal, without creating any priority order, and is incorporated by this reference into the Sumas comprehensive plan.](#)

Population Projection

After decades of relatively constant population, Sumas experienced substantial growth beginning in 1990. [Figure 2-2 summarizes the situation.](#) From 1940 to 1990, the average annual growth rate was a mere 0.25 percent, and during certain decades (e.g. 1950s, 1970s) the population fell by small amounts. In contrast, the average annual growth rate was 2.7 percent during the interval from 1990 through 2004, [which equated to an average increase of 24 people per year.](#) [This rapid rate of growth continued, and even increased somewhat, in the period from 2004 through 2015, during which time the average annual growth rate was 2.8 percent.](#) [Growth during this recent period saw Sumas add approximately 35 people per year.](#) [Figure 2-2 shows how the population in Sumas has grown since 1990.](#)

Figure 2-2: Historic and Projected Population



In ~~2002~~2013, the consultant firm ~~ECONorthwest-Berk and Associates (BERK)~~ provided a "High" and a "Low" range of population projections for population growth in Sumas in the year ~~2022~~ from the baseline year in 2013 through 2036 at the end of the planning period. ~~Those projections are also plotted in Figure 2-2. ECONorthwest's BERK's "High" estimate of 1,669 an increase of 814 people would be achieved if growth were to occur at an annual average rate of 2.451.96 percent in the period from 2004-2013 through 2022-2036, which equates to an average annual increase of approximately 35 people. That average annual rate is slightly lower than the 2.72.8 percent rate actually observed since 1990-2004. ECONorthwest's BERK's "Medium" and "Low" estimate reflects growth projections a-reflected growth rates of 1.71.6 percent and 1.4 percent, respectively. These growth rates equate to average annual increases of 28 and 23 through the twenty-three year period.~~

Survey results and citizen testimony reveal that residents desire some growth in coming years. The planning commission believes that a population of about ~~1,750~~2,300 would be compatible with the small-town atmosphere that residents wish to preserve.

In consideration of the consultant projections, historic growth rates and the residents' desires, *Sumas plans to accommodate a population of 1,750,323 in the year 2024-2036, which equals a net increase of 874 from the 2013 population of 1,449. The city's adopted population growth project through 2036 is also shown on Figure 2-2.* The target population will be attained if growth occurs at an average annual rate of ~~2.45~~2.07 percent, which equates to an average increase of 38 people per year. *The population growth rate adopted by Sumas is consistent with the strong growth in the city seen over the past twenty-four years and is based, in part, on the expectation that, over the next twenty years, increasing shares of overall county growth will be seen in urban areas due to limitations on growth in rural and resource lands as a result of the GMA.* Table 2-1 shows projected city population at milestone planning years, based upon the adopted ~~rate~~population growth number and using 2015 as the baseline year.

Table 2-1. Adopted Population Projection, 2013-2036

Milestone year	Projected population	Number of newcomers
<u>2010. Census.</u>	<u>1,319</u>	=
<u>2013. BERK Report.</u>	<u>1,449</u>	=
2004 <u>2015. OFM. Baseline.</u>	1,079 <u>1,468</u>	-
2010 <u>2022. Six-year capital planning horizon.</u>	1,248 <u>1,753</u>	<u>169</u> <u>285</u>
2022 <u>2026. ECONorthwest report horizon</u> <u>Mid-point in planning period.</u>	1,669 <u>1,946</u>	<u>590</u> <u>478</u>
2024 <u>2036. Planning period.</u>	1,750 <u>2,323</u>	<u>671</u> <u>855</u>

Employment Projection

Whatcom County has projected that the Sumas employment base will increase by 445 jobs over the course of the planning period. Consistent with this projection,, the City of Sumas has been allocated employment growth of 445 jobs through the year 2036.

Shoreline Goals and Policies

The 1995 regulatory reform act (ESHB 1724) established that the goals and policies of a shoreline master program (SMP) for a city are considered an element of the city's comprehensive plan; whereas all other portions of the master program are considered development regulations. The following goals and policies were formerly present in the City's SMP, but are now included here as part of an integrated rewrite of the SMP and comprehensive plan.

Goals

1. — ECONOMIC DEVELOPMENT

GOAL: Encourage utilization of all economic resources to improve the standard of living for residents of the City of Sumas. Assure that the economic resources are utilized in a manner that results in the least possible adverse effect on the quality of the shoreline and surrounding environment.

2. — PUBLIC ACCESS

GOAL: Assure acquisition and maintenance of an adequate supply of visual and physical access to the shorelines for the residents of the City of Sumas. As far as possible, assure utilization of public property for access areas.

3. — RECREATION

GOAL: Maintain an adequate number of recreational opportunities for the residents of the City of Sumas and a reasonable number of transient users.

4. — CIRCULATION

GOAL: Develop a safe, convenient, and diversified circulation system, consistent with the shoreline use goals, to assure efficient movement of people during their daily activities.

5. — SHORELINE USE

GOAL: Establish and implement policies and regulations for shoreline use consistent with the Shoreline Management Act of 1971. These policies and regulations should insure that the overall land use patterns fostered within shoreline areas are compatible with shoreline environment designations.

GOAL: Identify and reserve shoreline and water areas with unique attributes for specific long-term uses, including commercial, residential, recreational, and open space uses.

GOAL: Ensure that activities and facilities are located on the shorelines in such a manner as to retain or improve the quality of the environment as it is designated for that area.

GOAL: Ensure that proposed shoreline uses are distributed, located and developed in a manner that will maintain or improve the health, safety and welfare of the public when such uses must occupy shoreline areas.

GOAL: Ensure that planning, zoning, and other regulatory and nonregulatory programs governing lands adjacent to shorelines are consistent with the provisions of this plan.

6. — CONSERVATION

GOAL: Assure the preservation of unique, fragile and scenic elements and of non-renewable natural resources within the shorelines of the City of Sumas.

7. — HISTORICAL/CULTURAL RESOURCES

~~GOAL: Protect and restore areas having historic, cultural, educational or scientific values within the shorelines of the City of Sumas.~~

Policies

~~The following activities have been identified as those types of uses which can occur on shorelines of the City. Policy statements have been developed for these various activities in order to insure the proper use of the shoreline. The following policies apply to development on the shorelines within the City of Sumas.~~

- ~~1. — AGRICULTURAL PRACTICES. Agricultural practices are those methods used in vegetation and soil management. The methods used in the agricultural processes have a very great effect on the conditions of our shoreline and water quality.
 - ~~1. — A buffer zone of natural occurring vegetation should be maintained between all tilled areas and their associated bodies of water.~~
 - ~~2. — Livestock shelters and animal feeding facilities located within the shoreline area should make provisions to control run-off from feeds, manure, and associated animal wastes.~~
 - ~~3. — Pesticides, herbicides, and other chemical products which can potentially harm aquatic life should not be used within the shoreline area.~~
 - ~~4. — The watering of livestock in associated bodies of water should not be permitted.~~
 - ~~5. — Tilled areas must meet erosion control guidelines as outlined by the Soil Conservation Service, U.S. Dept. of Agriculture.~~~~
- ~~2. — AQUACULTURE. Aquaculture is the culture of food fish, shell fish, or other aquatic plants and animals. It is generally recognized that aquaculture development within the City of Sumas is unlikely. The following policies are therefore general in nature.
 - ~~1. — Aquaculture activities should be compatible with the surrounding shoreline environment.~~
 - ~~2. — Consideration should be given to visual and physical access to the shoreline when locating aquacultural activities.~~~~
- ~~3. — COMMERCIAL DEVELOPMENT. Commercial developments are those uses which are involved in wholesale and retail trade or business activities. Because most commercial developments depend on people to support their certain activities these developments lead to concentrations of people and traffic, which in turn has a great effect on the condition of the shoreline. Water dependent commercial developments require a shoreline location. If unregulated, however, these activities can have an undesirable impact on the shoreline.
 - ~~1. — Shoreline space should be reserved for those activities that are dependent on shoreline location for their day to day operations.~~
 - ~~2. — Although some activities, such as restaurants, do not require shoreline location, they do increase public enjoyment of the shoreline and should be given consideration for location there.~~
 - ~~3. — Commercial developments requiring parking should locate these areas away from the immediate water's edge.~~
 - ~~4. — Consideration should be given to the effect on physical and visual access by new commercial development.~~~~

4. ~~MINING. Mining is the removal of naturally occurring metallic minerals and non-metallic minerals from the earth for economic use. Removal of non-metallic aggregate (sand and gravel) from shoreline areas can lead to many adverse effects.~~
 1. ~~Mining of sand and gravel from the shoreline area should not be permitted except in conjunction with flood and drainage improvement and/or habitat creation and enhancement.~~
 2. ~~Mining of other minerals within the shoreline area should only be allowed if such development will have no significant adverse impact on the shoreline environment.~~
5. ~~OUTDOOR ADVERTISING, SIGNS AND BILLBOARDS. Signs are publicly displayed boards whose purpose is to provide information, direction or advertising. Signs and billboards, because they are intended to be very visible can have a great effect on the aesthetics of an area.~~
 1. ~~No off-premise advertising signs or billboards should be permitted within the shoreline area.~~
 2. ~~In general, signs should be constructed against buildings to minimize visual obstruction of the shoreline.~~
 3. ~~Size, height, density and lighting of signs should be compatible with adjacent shorelines uses.~~
6. ~~RESIDENTIAL DEVELOPMENT. Residential development includes housing subdivisions or tract housing built by a person for resale, single family residences, townhouses, apartment houses, condominiums, camping clubs, or mobile home parks. All residential development, including residential development exempt from the shoreline permit requirements, should be generally consistent with the following policies.~~
 1. ~~Subdividers should be encouraged to provide community access to the shoreline for residents of the subdivision.~~
 2. ~~Erosion and sedimentation control measures should be included as part of the development plans.~~
7. ~~UTILITIES. Utilities are systems which distribute or transport various items including electricity, oil, gas, communications, sewage and water. The installation of this apparatus necessarily disturbs the landscape but can be planned to have minimal visual and physical effect on the environment.~~
 1. ~~Multiple use corridors should be used as much as possible when locating utilities.~~
 2. ~~After installation/maintenance projects on shorelines, banks should be replanted in natural vegetation.~~
 3. ~~The location of utilities should be chosen so as not to obstruct scenic views.~~
 4. ~~Where possible utilities should be placed underground so as to not destroy the aesthetic qualities of the area.~~
 5. ~~The use of rights of way for public access to and along the shoreline should be encouraged.~~

8. ~~INDUSTRIAL DEVELOPMENT. This category contains those activities engaged in primary production. Industrial development can have a very great impact on shoreline areas. Their locations and size should be closely regulated.~~
 1. ~~Industrial development should be compatible with the surrounding shoreline area.~~
 2. ~~Cooperative use of parking and storage facilities by industry should be encouraged.~~
 3. ~~Except when human safety is at risk, industrial development should provide public access to the shoreline.~~
9. ~~BULKHEAD. Bulkheads are wall-like structures erected at bank edge or at the “toe” of a cliff. Their purpose is to protect uplands or fills from erosion by moving water. Bulkheads have been constructed of lumber and piles, reinforced concrete, rock, and steel beams. The type of construction materials used and the location of bulkheads are very important considerations to the protection of the natural shoreline. Because the rigid, artificial appearance of bulkheads has an adverse impact on the natural character of the shoreline, they should only be used where other more natural methods of shore protection are not feasible.~~
 1. ~~Bulkheads should be constructed in a manner that will minimize alterations of the natural shoreline.~~
 2. ~~Where possible, open type construction of bulkheads should be used.~~
 3. ~~Bulkheads should only be used for the purpose of protecting upland areas and not for the purpose of creating new uplands.~~
 4. ~~Bulkheads should only be used where other more natural appearing methods of shore protection are not feasible.~~
 5. ~~The use of natural appearing rock should be encouraged in construction of bulkheads.~~
 6. ~~Public access to the shoreline should be considered when locating bulkheads.~~
10. ~~LANDFILL. Landfill is creation of, or addition to dry land area by depositing sand, soil, or gravel into a shoreland, or wetland area. Landfill can destroy the natural character of the shoreline and may create unnatural heavy erosion and silting problems while reducing the existing water surface.~~
 1. ~~Factors such as total water surface reduction, impediment to water flow and circulation, reduction of water quality and destruction of habitat should be considered before granting landfill permits.~~
 2. ~~Landfills should be designed so as to minimize damage to the shoreline environment.~~
 3. ~~The perimeters of fills should be landscaped to retard soil erosion.~~
 4. ~~Fill material should be of a quality so as not to cause problems of water quality.~~

11. ~~DREDGING. Dredging is the removal of unconsolidated material (gravel, sand, silt) from the bottom of a stream, for purposes of drainage improvement, or to obtain bottom materials for landfill. If not adequately regulated, dredging has the potential to cause much environmental harm.~~
 1. ~~Dredging other than for flood control, channel maintenance, and habitat creation/enhancement purposes should not be permitted.~~
 2. ~~In those instances where dredging is permitted, the shoreline area should not be used as a disposal site for dredge spoils.~~
12. ~~SHORELINE PROTECTION. Shoreline protection activities include floodplain or stream bank modifications such as levees, dams, rip rap (quarry rock) revetments, or other structures directed at containing or controlling flood waters, or preventing erosion of stream banks and soil at flood stage. Such activities are often called structural flood control, and can be extremely expensive both to construct and maintain.~~
 1. ~~The design, location and construction of shoreline protection features should be undertaken only if it minimizes alteration of the natural shoreline.~~
 2. ~~The use of setback dikes should be encouraged in those areas that require diking.~~
13. ~~SOLID WASTE DISPOSAL. In general, all solid waste is a possible source of nuisance. Rapid, safe and nuisance free storage, collection, transportation and disposal are of vital concern to all persons and communities. If the disposal of solid waste is not carefully planned and regulated, it can become not only a nuisance but a severe threat to the health and safety of persons, livestock, wildlife and other living things. The shoreline is a particularly sensitive area and consequently especially susceptible to the environmental impacts that usually accompany the operation of solid waste disposal facilities.~~
 1. ~~Solid waste disposal facilities should not be permitted in the shoreline.~~
14. ~~EARTH CHANGE. This category includes those activities which re-shape or change the character of the surface of the land. Activities covered by this section include: landclearing, landscaping, excavation and grading or other earth moving projects. Landfill, although similar to the above items, is a special type of earth change covered elsewhere in this program and therefore not included here.~~
 1. ~~Earth change activities should be conducted in a manner which does not interfere with stream flow and with the flood carrying capacity of the streamway.~~
 2. ~~Earth change activities in the shoreline should only be done in conjunction with an approved shoreline development or use.~~
 4. ~~Careful scrutiny should be given to any earth change proposal which involves the use of machinery or equipment in water bodies, wetlands, or the conservancy environment.~~

- ~~15. ROAD AND RAILROAD DESIGN AND CONSTRUCTION. A road is a linear passageway for motor vehicles, and a railroad is a linear passageway with tracks for train traffic. Their construction can both provide and limit access to shorelines, impair the visual qualities of water-oriented vistas, expose soils to erosion and retard the runoff of flood waters, and accelerate or retard development.~~
- ~~1. Whenever feasible, roads and railroads should be located away from shorelines.~~
 - ~~2. The impact on the natural shoreline environment should be the main consideration when designing, locating and constructing roads and railroads in the shoreline area.~~
 - ~~3. Road designs should make provisions in their rights of way for pedestrian access to the shorelines.~~
- ~~16. ARCHAEOLOGICAL AREAS AND HISTORIC SITES. Indian and pioneer villages, military forts, old settlers homes, and trails were often located on shorelines because of the proximity of food resources and because water provided a practical means of transportation. These sites are nonrenewable resources and many are in danger of being lost through present day changes in land use and urbanization. Because of their rarity and the educational link they provide to our past, these locations should be preserved whenever possible.~~
- ~~1. Sites should be permanently preserved for scientific study and public observation.~~
 - ~~2. Developers should be required to notify town officials if such sites are uncovered during excavation.~~
- ~~17. RECREATION. Recreation is the refreshment of body and mind outdoors or indoors through forms of play, sports, amusement or relaxation. Water-related recreation accounts for a very high proportion of all recreational activity in the Pacific Northwest. The recreational experience may be either an active one involving boating, swimming, fishing or hunting or the experience may be passive such as enjoying the natural beauty of a shoreline, nature study, or picnicking. Priority shall be given to recreational activities that receive the most benefit from a shoreline location. These activities would include: walking, viewing, picnicking and camping.~~
- ~~1. Insure adequate space for shoreline walking, viewing, and general shoreline enjoyment.~~
 - ~~2. Encourage property owners to allow some public use of their shoreline land.~~
 - ~~3. Encourage only those recreational activities that are compatible with the shoreline environment.~~

3. Land Use Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. The chapter describes how the plan's overall goals will be implemented through land-use mechanisms. In overview, this chapter presents descriptions of the local environs, an inventory of existing land use, an estimate of future demands for land, and a description of the development that must occur, both inside and outside the existing city, in order to meet future demands.

Geography and Environment

The city of Sumas is located adjacent to the Canadian border in western Whatcom county, approximately 25 miles northeast of Bellingham. The nearest neighboring city is Nooksack, which lies seven miles to the southwest. Sumas is a small city encompassing just [884,924](#) acres of land. A major border crossing is located in town, so several transportation facilities terminate at Sumas, including SR9 and a Burlington Northern railroad line. As shown on [Map 1](#), the terrain consists primarily of gently sloping land in the Sumas River basin. At the north of town is a knoll known as Moe's Hill, site of the city's water reservoir. [Map 1](#) also shows that higher ground is located 1.5 miles west of town. These uplands stretch extensively to the west and northwest and consist of sand and gravel deposited by outwash during episodes of glaciation.

Geology. [Figure 3-1](#) reveals the local geologic environment. Two faults trend southwest-to-northeast from the San Juan Islands through Whatcom County and into southern B.C. Between the faults the bedrock has dropped relative to the surrounding land, and the down-dropped area has filled with unconsolidated sands, silts, and clays, forming the areas known as the Nooksack Valley, the Sumas Prairie, and the Upper Fraser Valley. The faults might still be active. Sumas is situated on the unconsolidated sediments near the north edge of the down-dropped area.

Soils. [Map 2](#) shows the locations of various soil types according to the [Soil-Natural Resource Conservation Service \(SNRCS\)](#). Soil types under the developed part of the city are numbers 22 (Briscot), 162 (Sumas), and 123 (Puget). These soils consist of nutrient-rich sediments deposited by the flooding that occurs regularly along the rivers and streams. When protected from flooding, these soils are good pasture or crop land. The soils have the strength to support buildings, but drainage around foundations and footings can be a problem. Outside town on the floodplain are two other soils with similar characteristics, numbers 107 (Mt. Vernon) and 115 (Oridia).

At the northwest of town, extending to the west along the border, are soils associated with the glacial deposits underlying Moe's Hill and the uplands. These soils are numbers 96, 97, and 98 (Laxton). These soils are adequate pasture or crop land and also have the strength to support buildings, although a seasonally high water table affects the use of these soils. Soil number 157 (Squalicum) exists on the slopes of Moe's Hill. This gravelly soil is good woodland, but the 15 to 30 percent slope hinders the soil's usefulness for other purposes.

At the west of town are areas of soil number 116 (Pangborn) and 144 (Shalcar/Fishtrap). These are mucky soils that have limited usefulness for either farming or building. To support buildings,

the muck must be excavated or the buildings must be constructed on pilings.

Groundwater. The sand and gravel upland to the west of town is a major regional aquifer known as the Abbotsford-Sumas aquifer. Sumas relies on the aquifer for its own domestic water supply, and Sumas also supplies groundwater to ~~two-three~~ neighboring water associations and the city of Nooksack. There are several seeps and springs scattered along the edge of the aquifer. Arrows in the northwest corner of **Map 1** identify the two springs that are most important to Sumas. The city has a wellfield located at each identified site. The westernmost site is the May Road wellfield, and the northern site is the Sumas wellfield.

Agricultural activities on the upland have led to degradation of water quality. The groundwater contains elevated levels of nitrate (caused by fertilizers and manure) and trace levels of organic chemicals (caused by pesticides). At Sumas's wells, nitrate contamination is the only concern. The May Road wells produces water with a nitrate concentration of about ~~11-9.5~~ milligrams per liter (mg/l), as compared to a maximum allowable concentration in drinking water of 10 mg/l. The water is thus used only for industrial processes at this time. The Sumas wellfield produces water with a nitrate concentration of ~~about 6~~below 5 mg/l.

Wetlands and surface waters. **Map 3** shows wetlands in and around Sumas as found in the National Wetlands Inventory (NWI) and in inventories conducted for the city by David Evans & Associates (DEA) and Bexar Consulting. Within the existing city limits, most wetlands are present to the west of downtown, between Halverstick Road and Kneuman Road. These wetlands are associated with the existing creeks or with sloughs formed by old courses of the creeks. Some are classified "palustrine emergent" (PEMC, PEMA according to the NWI), which means they are associated with stream courses and are seasonally flooded. Some are "riverine perennial" (R2UBH), meaning that they are permanent wetlands associated with the creeks. The westernmost wetlands on **Map 3** are "palustrine forested" (PFOC, PFOA) and are associated with marshy areas at the edge of the Abbotsford-Sumas aquifer.

The major local surface water is the Sumas River, which has its headwaters on Sumas Mountain, a foothill of the Cascade Mountains lying six miles to the southeast. The region slopes gently northward, so the Sumas River flows north to the Fraser River in Canada. Three other creeks converge in town: Sumas Creek flows from the west, and Johnson and Bone Creeks flow from the southwest. ~~The three creeks merge~~Sumas Creek merges with Johnson Creek at the west of the downtown area, and ~~the single resulting creek is~~ Johnson Creek, ~~which~~ flows east through the downtown area and empties into the Sumas River just east of the city limits. Sumas Creek originates at springs located at the edge of the Abbotsford-Sumas aquifer. Bone Creek empties into the Sumas River near the southeast corner of town. Another regional waterbody affecting Sumas is the Nooksack River, which flows west through the city of Everson (eight miles to the southwest) and empties into Puget Sound. During major flood events, the Nooksack River overflows its banks at a location southeast of Everson, and floodwaters flow north following the Johnson Creek corridor and then pass through downtown Sumas on the way to Canada. All the local rivers and creeks follow meandering courses and have shifted beds many times in the past.

According to the Department of Ecology, the Sumas River is a 'class A' waterbody, meaning that

water quality should meet high standards. Monitoring programs upstream from Sumas have revealed, however, that water quality fails to meet some class A standards: water temperature reaches 22° C in the summer, compared to a desired maximum of 18° C; dissolved oxygen concentrations have dipped as low as 6.1 mg/L, compared to a minimum of 8.0 mg/L; concentrations of fecal coliform bacteria and of certain metals (silver, cadmium, lead, mercury) have exceeded allowable levels. With the possible exception of the metals pollution, Sumas is largely blameless for the water-quality problems. Elevated temperatures are a consequence of low flows during the summer months combined with loss of shade trees adjacent to the river, and runoff from farms is regarded as the major cause of low oxygen and high coliform concentrations. Substandard water quality detracts from many beneficial uses of the river, but particularly impacts fish habitat.

Fish and wildlife habitat. In 1998, DEA prepared a *Fish Habitat Reconnaissance Assessment* that analyzes the habitat potential in the local streams. The report indicates that fish habitat conditions in Sumas range from poor to fair. Quoting from the report:

Physical in-channel features such as wood or large substrate are mostly absent from the streams, leaving habitat structure lacking in both diversity and complexity; resultant channel conditions are often long glides of uniform dimensions interspersed with a few ill-defined pools. The few pools that do exist are infrequent, occupy small areas, and are not much deeper than the glides, because they are often infilled with fine sediment. Spawning habitat was almost nonexistent in the study streams, with a few small patches of spawning gravels noted only in the upper reach of Sumas Creek. In many of the study reaches, opportunities for fish to find cover from prey were very limited; bank undercut does provide cover periodically. In areas where riparian canopy cover is lacking, reed canarygrass dominates the riparian vegetation.

Only one area of Sumas' riverine systems can be described as providing exceptional habitat. This area is located in an extensive wetland system at the headwaters of Sumas Creek. Even this area has received some degree of impact and has some shortcomings... (p. 5)

The report provides detailed recommendations about kinds of habitat enhancement needed along the various reaches of the local streams. The recommendations are summarized on [Map 3](#). Despite the degraded condition of the habitat, all the local creeks still function as habitat for anadromous fish. The Sumas River has steelhead and cutthroat that migrate to upstream tributaries such as Breckenridge Creek. Both Sumas Creek and Johnson [River Creek](#) have coho, chum, and cutthroat.

There is also significant habitat for birds surrounding Sumas. The flood-prone lands south and southwest of town are good habitat for raptors, heron, waterfowl, and swans.

Flooding. [Map 4](#) shows the location of flood-prone areas. The map shows a broad expanse of floodplain ("Special Flood Hazard Area" on [Map 4](#)) extending throughout much of the town. The floodplain is a result of flooding of the Nooksack River eight miles to the south. Given the prevailing northward slope, any overflow of the Nooksack heads north to Canada. Floods reach Sumas from the southwest along the path of Johnson Creek and are funneled toward town by the two railroad lines extending to the south and southwest. The elevated embankments function as

dikes that control the path of the flood. Flood water then heads northeast through the downtown region and across the border into Canada. Major floods occurred in 1989 and 1990, with water reaching a depth of five feet downtown.

Critical Areas and Resource Lands

As required by the GMA (RCW 36.70A.170), the city of Sumas has adopted ordinances to designate, classify, and protect natural resource lands and critical areas. A summary of the regulations pertaining to the various kinds of areas is presented below.

Frequently flooded areas. These areas are regulated by Chapter 14.30 SMC (the Flood Damage Prevention Ordinance). The code recognizes three kinds of areas. **Map 4** shows the approximate location of these areas, but the actual boundaries of regulated areas are as identified in the current adopted version of the Flood Management Plan. The flood *hazard* area encompasses all land that has a one percent or greater chance of flooding in a given year (i.e., the 100-year flood plain). Within that area, new buildings and major remodels must have the lowest floor at a height at least one foot higher than the flood elevation. The flood *risk* zone is a smaller area encompassing all land in and around a river channel, where water must move freely in order to carry the flood. Many kinds of development are prohibited in the risk zone. New buildings must stand on pilings so that flood water can pass freely beneath. Flood *corridors* are areas targeted for conversion from urban use to open space in order to provide increased flood-conveyance capacity through developed portions of the City. No new buildings are allowed on vacant lots within a corridor.

Wetlands and streams. These areas are regulated both by Chapter 15.20 SMC (the CAO) and by Chapter 15.04 SMC (the SMP). The SMP applies to Johnson Creek, Sumas River, and all [hydraulically connected](#) wetlands within the flood plain. The CAO applies to Bone Creek, Sumas Creek, and to wetlands outside the [flood plain jurisdiction of the SMP](#). [Identical Equivalent](#) provisions are enacted in both sets of code. The codes recognize four categories of wetlands:

- Category I. These are wetlands with exceptional resource value because they serve as habitat for endangered or threatened species or they harbor rare wetland communities with irreplaceable ecological functions. Natural Heritage Wetlands are included in this category. Generally, no development is allowed within [100-150](#) feet of category I wetlands, although exceptions may be made for certain public purposes.
- Category II. These are wetlands with a significant habitat value because of either large size, diversity of vegetation, or presence of open water year round. Wetlands adjacent to salmon-bearing streams are included in this category. Generally, no development is allowed within [50-100](#) feet of category II wetlands, although exceptions may be made for certain public purposes.
- Category III. These are wetlands [greater than 10,000 square feet, but](#) with relatively little habitat value, diversity of vegetation, and functional value for stormwater management. Generally, development is permitted provided a mitigation plan is followed.
- Category IV. These are wetlands [one acre or larger](#) that are not included in the previous three

categories. Generally, development is permitted provided a mitigation plan is followed.

Prior to approval of a development proposal, a delineation must be performed by a wetland specialist according to the method described in the *1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands* [or most recent update](#). In some instances, the city may waive the delineation requirement.

The codes also establish buffers adjacent to streams. Buffer widths vary according to the shoreline environment designations. In urban environments, buffers range in size from 10 to [25 over 100](#) feet. In the conservancy environment, an upland buffer of 100 feet applies. For both stream and wetland buffers, the codes allow averaging of buffer widths and also allow reductions in buffer widths if land owners develop enhanced buffers. Off-site mitigation is also permitted, provided that the mitigation receiving area is within a Natural System Protection Area, as described below.

Fish and wildlife habitat conservation areas. Habitat conservation is accomplished via the wetland and stream provisions of the SMP and the CAO, coupled with the Natural System Protection Area overlay zone. See the discussion of Natural System Protection Areas below.

Aquifer recharge areas. Sumas relies on groundwater as a domestic water source, but the wells are at the edge of town, and the *Wellhead Protection Program* reveals that recharge areas lie in Whatcom County and British Columbia. Sumas actively participates in binational groundwater protection forums such as the Abbotsford-Sumas Aquifer International Task Force and the Abbotsford-Sumas Aquifer Stakeholders Group. ~~As yet, no regulation specifically~~ [The CAO](#) protects aquifer recharge areas within Sumas's jurisdiction [from significant adverse impacts](#). The agricultural zoning surrounding the city well field serves to prohibit intense urban development that could pose a threat to water quality.

Geologically hazardous areas. There are two main categories of geologic hazard in Sumas. First, there are areas of steep slope on Moe's Hill that have been subject to small slides and that are inappropriate for development. Second, western Washington as a whole is seismically active, both because of major tectonic plate movements and because of movement along shallow faults such as the two bedrock faults mentioned earlier (see [Figure 3-1](#)). The two local faults were thought to be inactive until late 2000, when evidence of their activity was presented by researchers at Western Washington University. If the faults are indeed active, the threat of earthquakes in northern Whatcom County and the Upper Fraser Valley might be greater than that elsewhere within northern Puget Sound. In Sumas, the major dangers associated with seismic activity are physical shaking of structures and liquefaction of underlying soils. [Mucky soils are particularly susceptible to such shaking and liquefaction](#). Given the proximity of Sumas to the northern bedrock fault, there is also the possibility of vertical ground displacement on either side of the fault, but this threat is thought to be minor given the thickness of unconsolidated sediment overlying the actual fault.

The CAO contains ~~few~~ provisions specific to geologic hazards. Because the entire region is thought to be seismically active, most of western Washington is mapped as seismic zone 3 within

the [Uniform International Building Code \(UIBC\)](#), and stricter standards are therefore already applicable. It is not known whether more stringent standards should be enacted locally, given the proximity of the two bedrock faults. In the normal course of events, the UIBC will eventually be updated to reflect any greater danger proven to exist along the faults. Meanwhile, if larger jurisdictions such as Bellingham, Whatcom County, and the City of Abbotsford, B.C., adopt stricter standards because of the new evidence, Sumas should consider following suit.

Mineral, agricultural, and forest resource lands. No mineral, agricultural, or forest resource lands of long term [commercial](#) significance have been designated by Sumas within ~~either~~ the city limits, ~~or the proposed~~ urban growth area [or the urban growth area reserve designated by the county in 2009](#). However, Whatcom County's comprehensive plan does designate the surrounding unincorporated agricultural land as agricultural resource, except for portions within the Sumas UGA [and UGA Reserve](#). This makes it difficult for Sumas to expand without impacting County resource lands. The city intends to grow such that agricultural uses will be able to coexist within the UGA until the event of an annexation. At that time agricultural lands will become available for development.

Natural System Protection Areas

The 1998 revisions to this plan and to the SMP were designed to protect and enhance the habitat value of the streams and the high-value wetlands. The regulatory framework for habitat protection is the designation of Natural System Protection Areas (NSPAs) within this comprehensive plan, together with the establishment of policies applicable to such areas. Implementation of the policies is then accomplished in the CAO and the SMP. Policies with respect to NSPAs are as follows:

- Existing habitat within an NSPA should not be adversely impacted by adjacent development.
- The habitat quality within NSPAs should be enhanced where possible.
- Above-ground structures should be prohibited within NSPAs, including parking and impervious surfaces. Underground structures should be allowed when such structures do not significantly impact habitat quality.
- Enhancement of habitat should be accomplished through regulatory incentives, including reductions in mandatory buffers when buffer quality is enhanced.
- Enhancement of habitat should be accomplished through voluntary programs, such as public or private mitigation banking.
- Mitigation banking should be authorized by code, with NSPAs serving as target areas for off-site mitigation.

In order to provide the science-based data needed to identify the existing value of habitat and the potential for habitat enhancement, Sumas commissioned two studies. DEA conducted an assessment of the fish habitat value of local streams, and Bexar Consulting updated the city's wetland inventory. The wetland and stream data was then used, in conjunction with other criteria, to designate NSPAs. Designation criteria include:

- Areas now serving a valuable habitat function for fish and/or waterfowl.

- Areas capable of serving a valuable habitat function after enhancement.
- Areas serving additional function as flood conveyance paths or as wellhead protection areas.
- Areas with large parcel sizes, so that significant parts of a parcel would remain outside of a designated area and thus available for development.
- Areas not now containing urban development (i.e., impervious surfaces, buildings).
- Areas targeted for habitat enhancement by land owners.

Designated NSPAs are shown on [Map 4B](#). The following site-specific discussion is linked to the numbered areas on that map:

1. This 7.8-acre area includes the City's well-field parcel, as well as some land immediately adjacent to both the east and west. Sumas Creek flows through the southern edge of the area, and the area contains several springs feeding the creek, as well as forested wetlands hydraulically continuous with the creek. This part of the creek contains good spawning habitat, according to DEA's fish habitat assessment. The area also serves as the sanitary control area for the City's potable well field.
2. This 27-acre area contains all of Tract C of the Sytsma Lot-Line Adjustment, except for an 80-foot wide swathe across the southern edge of Tract C, which is excluded from the NSPA in order to provide the owners with greater flexibility of use. The area is designated as an NSPA because the intended use of Tract C is wetland mitigation banking. The area is attractive for this purpose because it abuts Sumas Creek and because it contains topography and soil types conducive to conversion to wetlands.
3. This 7.3-acre area includes portions of undeveloped parcels owned by Burlington-Northern Railroad and by Sumas. Sumas Creek flows through the parcels, and the parcels contain significant canopy cover, as well as wetlands continuous with the creek. Within the B-N parcel, a 60-foot wide swathe on the right bank is included within the NSPA, as well as all land on the left bank between the creek and Kneuman Road.
4. This 11.7-acre dumbbell-shaped area lies within an undeveloped 40-acre industrially-zoned parcel [owned by Hesselgrave Farms](#) that will likely be converted to industrial use early within the planning horizon. The northern part of the dumbbell corresponds to a forested Category II wetland, and the southern part contains a farmed wetland pasture that is mapped in the National Wetland Inventory. The farmed wetland has minor value as waterfowl habitat at this time and has potential for conversion to higher-quality wetland. The farmed wetland also serves an important flood- and stormwater-conveyance function. As mitigation for wetland impacts elsewhere on site, the eventual developer of the 40-acre parcel should enhance the farmed wetland either in its present location or in closer proximity to the forested wetland.
5. This 1.9 acre area lies within an undeveloped 20-acre industrially-zoned parcel [owned by Sumas Associates](#). The NSPA contains land within a 120-foot wide swathe centered upon Sumas Creek, along the reach of the creek from the culvert under W. Third Street to the culvert under the B-N main line. DEA's fish habitat assessment identifies several enhancements appropriate to this reach, including installation of in-stream structures and planting of riparian vegetation. The eventual developer of the 20-acre parcel should enhance the creek riparian zone as mitigation for wetland impacts elsewhere on site.
6. This 9.9 acre area extends along the reach of Johnson Creek from the rail trestle behind

Elenbaas to the rail trestle under the B-N main line. The area includes a 60 foot swathe along the left bank of the creek; and all of the right bank of the creek north of Front Street and west of the rail line; and the forested portion of the right bank south of Front Street; but exclusive of the Front Street right-of-way. This creek reach is identified as quality fish habitat within DEA's assessment. The reach should be preserved and enhanced. Possible enhancements include planting of riparian vegetation, particularly on the right bank at the north end of the reach. The area is also the main route of Johnson Creek flooding, which limits its development potential.

7. This 7.1-acre area stretches across the southern edge of four large parcels containing or intended for industrial development (~~Jaeger, Sumas Industrial Park, SOCC/SEL, Dentech~~). Existing development within the four parcels is distant from Johnson Creek. The NSPA contains a 60-foot wide swathe on the left bank of Johnson Creek, as well as all portions of the four parcels on the right bank of Johnson Creek. DEA's habitat assessment identifies improvements to riparian vegetation that could be made along this reach. Developers or the parcels should enhance the riparian zone as mitigation for wetland impacts elsewhere on site
8. This 3.6-acre area is a topographically low area on the left bank of Johnson Creek at the back of the Tyrell parcel, together with a swathe 60 feet wide on the opposite bank. DEA's report identifies this area as a good site for a constructed side-channel. The site should be enhanced as off-site mitigation for impacts to low value wetlands elsewhere in town.
9. This 1.4-acre area contains a wetland that is tributary to Bone Creek. DEA's report notes that the wetland could be enhanced to provide off-channel rearing habitat. Alternatively, the wetland could be enhanced to improve water quality and wildlife habitat functions. The site should be enhanced as mitigation for impacts to low value wetlands elsewhere in town.
10. This 1.8-acre area contains a forested wetland associated with an old oxbow of the Sumas River. The oxbow is no longer continuous with the river, but it does offer significant habitat value to water fowl. The oxbow wetland should be preserved.

Areas of Historical Significance

Several structures in Sumas are listed on the Whatcom County Register of historic places, including: the Parkinson House, the Sumas Methodist Church, the Thomas House, the BB & BC Railroad Depot, the Northern Pacific Railroad Depot, and the old U.S. Border Station. None of the sites are listed in either the state or national registers of historic places, although the U.S. Border Station was determined to be eligible for listing on the state register. The county register also includes a Native American campsite adjacent to the Sumas River at the east edge of the city.

Goals and Policies

Sumas adopts the following goals and policies pertaining to land use:

Goal: To encourage a land use pattern that supports a balance between residential, commercial and industrial development while protecting and enhancing the natural environment and quality of life enjoyed by local residents.

- The city should establish well-defined areas within which particular land uses are planned to occur.

- Wherever possible, the city should avoid creating conflicts between incompatible land uses.

Goal: To encourage a mix of residential housing opportunities that can meet the needs of current and future residents.

- The city should establish residential areas that accommodate low-, medium-, and high-density neighborhoods.
- The city should encourage in-fill within existing neighborhoods.

Goal: To encourage a mix of commercial businesses that can meet the needs of both local residents and those passing through town.

- The city should establish centrally located commercial areas within waling distance of most residents.
- The city should limit the proportion of the overall commercial area intended to serving the traveling public.

Goal: To encourage a mix of industrial businesses that can provide jobs and support the local tax base.

- The city should establish an industrial area that is geographically separated from residential neighborhoods.
- The city should encourage industrial businesses that increase employment opportunities over those that include low employment densities.

Goal: To protect the natural environment and increase recreational opportunities for local residents.

- The city should establish regulations to protect the functions and values of the natural environment, including wetlands, rivers, streams and other priority habitats.
- The city should develop and maintain parks and other recreational amendities to serve local residents.

Current Land Use

Table 3-1 contains a summary of land use within the city limits as of ~~January, 2004~~October 2015. The table is organized according to ~~the zones defined in the Sumas Municipal Code~~general land use categories utilized by the County Assessor's office. ~~For each zone, the table shows the total acreage within the zone, the amount of the acreage that has already been developed, and the amount that is vacant.~~Table 3-2 presents the total acreage within the City's current zoning designations. **Map 5** shows the locations of the various zones within the city. Generally, the business zones stretch the length of Cherry Street, the industrial zone is further west, bracketing ~~Halverstiek Road~~W. Front Street, and the residential zones are to the south and east, except for the low-density residential zone to the northwest at Moe's Hill.

Table 3-1: Current Land Use (City limits)

<u>Land Use Category</u>	<u>Acreage</u>	<u>Percentage</u>
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<u>Single-family residential</u>	<u>129</u>	<u>14%</u>
<u>Multifamily residential</u>	<u>10</u>	<u>1%</u>
<u>Mobile homes</u>	<u>15</u>	<u>2%</u>
<u>Commercial</u>	<u>42</u>	<u>5%</u>
<u>Industrial</u>	<u>81</u>	<u>9%</u>
<u>Public and quasi-public</u>	<u>89</u>	<u>9%</u>
<u>Agricultural</u>	<u>258</u>	<u>28%</u>
<u>Vacant</u>	<u>149</u>	<u>16%</u>
<u>Rights-of-way</u>	<u>161</u>	<u>17%</u>
<u>Total</u>	<u>935</u>	<u>100%</u>

Table 3-2: Current Zoning (City limits)

<u>Zoning Designation</u>	<u>Acreage</u>	<u>Percentage</u>
<u>Res – High density. A residential zone with minimum lot size of 6,000 sf. Multi-family units conditionally permitted.</u>	<u>193</u>	<u>21%</u>
<u>Res – Medium density. A single-family residential zone with minimum lot size of 7,200 sf.</u>	<u>112</u>	<u>12%</u>
<u>Res – Low density. A residential zone with minimum lot size of 10,890 sf.</u>	<u>48</u>	<u>6%</u>
<u>Agriculture. A zone containing agricultural use, accessory activities permitted.</u>	<u>100</u>	<u>11%</u>
<u>Business District – Traffic. A commercial zone that serves the needs of travelers. Motels, restaurants, convenience stores permitted. Retail, office, gas stations, and other businesses conditionally permitted.</u>	<u>17</u>	<u>17%</u>
<u>Business District – General. A commercial zone that provides day-to-day goods and services to residents.</u>	<u>50</u>	<u>5%</u>
<u>Business District – Low-impact. A commercial zone containing businesses that generate little traffic and that typically cater to the needs of residents. Residential use also permitted.</u>	<u>4</u>	<u><1%</u>
<u>Industrial. A zone containing light manufacturing, warehousing, wholesale, and selected retail businesses. Heavy manufacturing permitted as a conditional use.</u>	<u>376</u>	<u>40%</u>
<u>Mini-warehouse. A zone containing warehouses suitable for individual storage.</u>	<u>2</u>	<u><1%</u>
<u>RV Park. A zone containing</u>	<u>6</u>	<u>1%</u>

<u>recreational vehicle parks.</u>		
<u>Public</u>	<u>29</u>	<u>3%</u>
<u>Total</u>	<u>935</u>	<u>100%</u>

Buildable land supply Land capacity analysis

This section presents an analysis of the supply of land available to accommodate growth within the existing city limits and urban growth area. The land capacity analysis detailed methodology generally follows a scheme utilized to complete this analysis was developed by the county Growth Management Oversight Committee county planning staff working in collaboration with planners from the seven cities. The analysis starts with the gross acreage in each zone, then eliminates those parcels that are fully developed. Acreage within each parcel that is likely to be undevelopable due to the presence of critical areas, such as wetlands and flood corridors, are then subtracted. Additional reductions in developable acreage are then applied based on factors such as infrastructure needs and market factors. The resulting acreage is referred to as net developable acreage. This net acreage is then converted to population and employment growth capacities using factors that include assumed residential densities, occupancy rates, average persons per dwelling unit, floor area ratios and employment densities. The results of the land capacity analysis are presented in Table 3-3, which shows that the current city limits and UGA have a population growth capacity of 884 persons and an employment growth capacity of 460 jobs.

Residential supply. ~~“Vacant lots” comprise existing lots of record that are easily served with utilities. A total of 54 such lots are present in Sumas, as identified on Map 5A. “Underdeveloped lots” comprise those lots that contain some development (typically a house), but that could contain additional residences. An estimate was made of the specific number of homes that could be placed on each such lot. A total of 29 such home sites are identified on Map 5A.~~

~~Environmental constraints can make it prohibitively expensive to pursue development on certain parcels. This concept is reflected in the city's analysis of “Vacant land.” For the residential zones, vacant parcels within the Special Flood Risk Zone have been classified as undevelopable, as have areas within buffer setbacks adjacent to streams and high value wetlands. A total of 47.2 vacant developable acres is therefore available in the residential zones (22.6 acres High density, 22.2 Medium density, and 2.4 Low density). Map 5A identifies these lands with gray shading—they are generally located on Moe's Hill and in the area south of Rock Road. At a density of 3 units per gross acre (i.e., 4 units per net developable acre), 142 units can be accommodated in these areas.~~

~~Altogether, the above analysis reveals residential infill capacity for 225 housing units.~~

Commercial supply. ~~The only significant parcel of commercial land available in Sumas is the underdeveloped “Business—General” area south of Front Street, visible on Map 5. This area is 7.6 acres in size, but contains five existing homes and a church. There is also vacant land sandwiched between the railroad tracks and Johnson Creek, immediately north of Front Street, but development of this area is very problematic because of floodplain and shoreline issues.~~

Industrial supply. There are seven significant parcels of developable industrial land within Sumas, as identified on Map 5B. The combined developable area of the parcels amounts to 115 acres, as shown in Table 3-1. There is an additional 135 acres of industrial land that is not economically developable because it is within either the Special Flood Risk Zone, a buffer of a Category II wetland, or a stream setback. In addition, the usefulness of some industrial land is lessened by a second factor—some of the inventory is chopped into small parcels. The problem is worst near at the northeast corner of the industrial area, where industrial zoning replaced residential zoning a number of years ago. Parcels are very small in this area, and some are still occupied by single family homes.

Table 3-3: Land Capacity Analysis Results (City and UGA)

Use Category	Total Acreage	Net Developable Acreage	Population Growth Capacity	Employment Growth Capacity
All residential zones	338	81	947	0
All commercial zones	79	12	-49	169
All industrial zones	666	107	-14	291
Totals	750	200	884	460

Source: County Land Capacity Analysis, 2015.

Table 3-1. Land Inventory, Existing City Limits

Zone	Area (acres)			
	Total	Developed	Vacant Not developable	Developable
Res—High density.—A residential zone with minimum lot size of 6,000 sf. Multi-family units conditionally permitted.	188.6	131	35.1	22.5
Res—Medium density.—A single family residential zone with minimum lot size of 7,200 sf.	79.6	33.5	24	22.1
Res—Low density.—A residential zone with minimum lot size of 15,000 sf.	38.8	20	16.4	2.4
Agriculture.—A zone containing agricultural use, accessory activities permitted.	81.2	81.2	0	0
Business District—Traffic.—A commercial zone that serves the needs of travelers. Motels, restaurants, convenience stores permitted. Retail, office, gas stations, and other businesses conditionally permitted.	21.9	15.9	6	0
Business District—General.—A commercial zone that provides day-to-day goods	35.6	28	0	7.6

and services to residents.				
Business District— Low impact.—A commercial zone containing businesses that generate little traffic and that typically cater to the needs of residents.—Residential use also permitted.	8.7	8.7	0	0
Industrial.—A zone containing light manufacturing, warehousing, wholesale, and selected retail businesses.—Heavy manufacturing permitted as a conditional use.	397.4	145.2	137.2	115
Mini-warehouse.—A zone containing warehouses suitable for individual storage.	1.8	1.8	0	0
RV Park.—A zone containing recreational vehicle parks.	5.2	5.2	0	0
Public	25.6	25.6	0	0
Total	884.4	496.1	218.7	169.6

Note:—The classification of land as undevelopable in this plan does not affect a property owner’s right to develop a parcel. The classifications are theoretical assessments of the probability that given parcels will be economically developed.

Future Needs

As stated in the community vision, Sumas intends to promote growth that is balanced between the three major categories of land use.

Residential. In computing the demand for residential land, a value of ~~2.52.89~~ persons per household is used for the Residential, Low and Residential, Medium zones and a value of 2.21 persons per household is used for the Residential, High-Density zone, matching the Whatcom County Office of Financial Management average household size as identified in the 2000 census in 2015. ~~A density of 3 units per gross acre is used. This is equivalent to a density of 4 units per net developable acre, assuming that 25 percent of the gross area is consumed for public purposes such as right-of-way, utilities, parks, etc.~~ Assumed densities of 3.0, 4.0 and 7.0 dwelling units per net developable acre are used for the Residential, Low, Residential, Medium and Residential, High-Density zoning districts, respectively.

The population projection in Chapter 2 anticipates that a total of ~~671-855~~ newcomers must be accommodated in the coming 20-year period between 2015 and 2036. At an average of 2.52.7 persons per household and an occupancy rate of 94.5 percent, the newcomers can be accommodated in ~~268-335~~ households.

The city’s Floodplain Management Plan calls for the creation of two Special Flood Corridors that will traverse existing residential areas. The locations of the corridors are shown on **Map 5**. These corridors are intended for conversion to open space in order to provide conveyance channels that will then reduce flood impacts in the remaining parts of town. There are 51 existing homes located within the corridors. To accommodate the relocation of these residents, a total of 319 housing units will be needed—268 as computed above, plus 51 relocated familiesthe

city's land supply would need to be increased by by this amount; however, the conversion of these areas to open space has not been incorporated into the land capacity analysis at this time, but should be revisited during future updates.

The buildable land supply calculationland capacity analysis results revealed that 225 housing units can be accommodated within the existing city limits. An Urban Growth Area (UGA) is needed to accommodate the remaining 94 households884 persons can be accommodated in the current city limits and UGA. At an average of 3 units per gross acre, about 31 acres of residential land is required within the UGA. As recommended by DCTED, this base value of 31 acres should be inflated by a factor of 25 percent to account for imbalances between supply and demand. A residential UGA of approximately 39 acres is therefore requiredThis capacity is sufficient to accommodate the population growth allocation identified in chapter 2; however, should changed circumstances lead to a need for additional residential capacity, the 40-acre UGA Reserve located on the west side of Hovel Road would be the most likely area to be added to the UGA.

Commercial. Relative to its size, Sumas contains a large traffic-oriented business sector, and residents see little need for more retail development that caters solely to passers-through. However, residents describe a need for commercial development oriented toward local customers (e.g., florist, hairdresser, dentist), but also dependent on Canadian traffic. 7.6 acres south of Front Street were rezoned six years ago in 1998 in order to create a location for the desired retail development. Since that time, a three-acre parcel within this area has been purchased by Fire District14 and is planned as the future site for a new fire station. In addition, a Business-General zone has been established north of Front Street between Cherry Street and Sumas Avenue that could be converted from residential to commercial use over time to meet this type of need.

Truck traffic volumes at the Sumas port of entry have climbed steadily throughout the past ten years, even at a time when automobile crossings have declined. An average of 350-500-600 trucks per weekday now head south through Sumas, and this volume is projected to grow to 800 per day in the year 2021. The planned-realignment of SR9 has the potential to divert directed even more trucks to Sumas. Sumas is a reasonable location for a large truck plaza, including a gas station, restaurant, washrooms, mechanic bays, and parking areas. Such a facility has a footprint of about 20 acres, and there is no parcel of that size available within town adjacent to the highway. Such a plaza would need to be located in the UGA.

According to the land capacity analysis, the combined city and UGA includes capacity to support approximately 169 new jobs. This is more than enough capacity to accommodate the 50 commercial jobs anticipated over the planning period.

Industrial. Relative to other small towns, Sumas contains a large amount of undeveloped industrial land and a variety of existing industrial firms. Residents express mixed feelings about generally support the need for further industrial expansion. However, Sumas acknowledges that it is well positioned to accommodate certain kinds of industrial development because of factors such as: proximity to major truck and rail transportation facilities; existence of a 24-hour border crossing station; availability of water and electric power; and proximity to major gas pipelines. Sumas also

acknowledges the economic goals and policies developed by Whatcom County in response to county-wide needs and visions.¹ Those goals and policies support the development of a more diversified economy that contains a broad base of industrial employers, some of which will preferably locate in the eastern part of the county to provide job opportunities for Foothills residents. In recognition of all these factors, Sumas plans to accommodate substantial industrial development. Desirable industries include those dependent upon the identified factors unique to Sumas, yet requiring relatively little sewer service. Examples are intermodal transfer facilities (such as truck-rail or pipeline-rail), warehousing, manufacturing, and electric co-generation.

The land capacity results indicate that the city's industrial area has a capacity sufficient to accommodate approximately 291 jobs over the planning period. The city is planning on needing to accommodate 395 new industrial jobs through 2036; therefore, at some point the city will need to consider either shifting lands from commercial to industrial or working with the county to expand the Sumas industrial area. The most likely expansion area would be to the west of Barbo Road adjacent to Halverstick Road.

Public. Sumas owns a 9-acre park that includes a rodeo ground, two softball diamonds, a concession stand, and a restroom building (see blue "Public" zone at south of town on [Map 5](#)). The park abuts what used to be South Cherry Street, a local street that ~~will be~~ completely rebuilt in 2006 as the new alignment of SR9. This new highway segment ~~will be~~ an all-weather limited-access facility capable of supporting the growing volume of truck traffic that crosses to Canada through Sumas. The highway realignment ~~will create serious~~ resulted in impacts to the park. The main impact ~~will be~~ loss of parking. ~~Today, during a large event such as a rodeo, hundreds of cars park along the shoulders of the existing street. This parking will be eliminated when the highway is built. A secondary impact will be the loss of developed park land for use as highway. A portion of the developed area is within the right-of-way that was purchased by WSDOT. The park's viability is severely threatened by the highway realignment.~~

In 2007 Sumas ~~proposes to~~ expanded the park into the undeveloped area immediately adjacent to the east, thereby establishing access to the park from Hovel Road. The existing two ball diamonds can be A portion of the park was converted to off-street parking for rodeo contestants, who arrive with their stock in large trailer rigs. ~~Preliminary plans reveal that a parcel of 30 acres will be needed to accommodate~~ The new 17-acre park includes four ball diamonds and two soccer fields, together with associated parking and stormwater treatment-management facilities. ~~The "Parks and Recreation" discussion within Chapter 4 contains additional background regarding the planned ballfield. With the completion of the new ball fields, no additional land will be needed for park purposes.~~

Overall demand. ~~The above discussion reveals a need for a UGA containing at least 89 acres—39 acres for residential purposes, 20 acres for commercial, and 30 acres for park expansion. The Sumas UGA designated by Whatcom County in 1997-2009 contains enough acreage to meet Sumas's needs. If residential development does not meet planned densities, then a portion of the UGA Reserve west of Hovel Road may need to be added to the UGA before the end of the~~

¹ See chapter 7 of Whatcom County Comprehensive Plan, particularly policies 7A-1, 7A-6, 7A-8, 7K-4, 7K-6.

planning period. Given that the city is already showing insufficient industrial land to meet anticipated demand through 2036, additional land may need to be added to the UGA. The timing of any such expansion will depend largely on how quickly the existing industrial land base gets developed.

Sizes, and locations, and densities of proposed zones

Map 6 shows proposed future zoning for Sumas and the UGA. Table 3-24 shows the size of each proposed zone ~~and also accounts for the impacts of critical areas~~. This table can be compared to Table 3-12 to see what is gained with the proposed zoning in the UGA and the site-specific zone changes discussed in the next section. ~~As before, the "Total" column shows the total acreage occupied by each zone and accounts for all acreage in the combined city and UGA. Sumas might eventually expand into 158.7 acres of unincorporated land under this plan.~~

~~The minimum lot size for the Low density Residential zone is proposed to be changed from 15,000 sq. ft. to 10,890 sq. ft. in order to allow for compact urban development consistent with the densities identified in Goal 2N of the Whatcom County Comprehensive Plan.~~

Table 3-4: Future Zoning (City and UGA)

<u>Zoning Designation</u>	<u>City (acres)</u>	<u>UGA (acres)</u>	<u>Total (acres)</u>	<u>Percentage</u>
<u>Res – High density</u>	<u>177</u>		<u>177</u>	<u>18%</u>
<u>Res – Medium density</u>	<u>108</u>		<u>108</u>	<u>11%</u>
<u>Res – Low density</u>	<u>48</u>		<u>48</u>	<u>5%</u>
<u>Open Space/Agriculture</u>	<u>88</u>		<u>88</u>	<u>9%</u>
<u>Business District – Traffic</u>	<u>17</u>	<u>26</u>	<u>43</u>	<u>5%</u>
<u>Business District – General</u>	<u>49</u>		<u>49</u>	<u>5%</u>
<u>Business District – Low-impact</u>	<u>4</u>		<u>4</u>	<u>< 1%</u>
<u>Industrial</u>	<u>384</u>		<u>384</u>	<u>40%</u>
<u>Mini-warehouse</u>	<u>2</u>		<u>2</u>	<u>< 1%</u>
<u>RV Park</u>	<u>5</u>		<u>5</u>	<u>< 1%</u>
<u>Public</u>	<u>52</u>		<u>52</u>	<u>5%</u>
<u>Total</u>	<u>935</u>	<u>26</u>	<u>960</u>	<u>100%</u>

Map 6 also shows the city’s UGA Reserve. Prior to 2009, this approximately 78 acre area was included in the city’s UGA. In 2009, the County Council shifted this area into Reserve based in part on concerns that were raised related to potential impacts from sediments from Swift Creek that contain naturally occurring asbestos. This area is planned for future residential development, and the city anticipates that the area will need to be shifted back into UGA status during the next major update of the comprehensive plan.

Neighborhood-specific discussion of zoning

Locations of zones are established based on the geographic attributes of the land as related to goals and policies described elsewhere in this plan. The following area-specific discussion is linked to [Map 6](#) -- each numbered area listed below has a corresponding number on the map. Discussion is centered upon areas where zoning changes are proposed, significant future development is anticipated, or other unusual circumstances exist.

- 1) *Residential panhandle north of Kneuman Rd.* This 110-acre area is now zoned Agricultural and Low-, Medium-, and High-Density Residential. The area includes a ridge of high ground extending west from Moe's Hill. The ridge is partially forested and in certain places slopes so steeply as to make development unlikely. Good views are obtained from the crest of the ridge.

~~Table 3-2. Land Inventory, UGA & City Combined~~

Zone	Total	Area (acres)		
		Developed	Not developable	Vacant Developable
Res—High density	180.7	130.7	12.0	38.0
Res—Medium density	176.4	33.4	38.2	104.8
Res—Low density	47.7	20.0	25.3	2.4
Agriculture	101.2	101.2	0	0
Business District—Traffic	43.1	15.9	2.2	25.0
Business District—General	49.9	42.3	0	7.6
Business District—Low impact	3.6	3.6	0	0
Industrial	374.0	145.2	113.8	115.0
Mini-warehouse	1.8	1.8	0	0
RV Park	5.0	5.0	0	0
Public	59.7	25.6	0	34.1
Total	1043.1	524.7	191.5	326.9

At the south base of the ridge, the area includes wetlands and peat soil and is partially within the flood plain. Sumas Creek flows along the south boundary of the area, in the Kneuman Road ditch. The city's main potable well field is located at the far western end of this area, and the zone of contribution to the wells includes much of the area west of Barbo Rd. A major water line runs along the north edge of the area from the well field to the reservoir. [Open Space/Agricultural zoning](#) remains appropriate in the area closest to the well field. Residential zoning continues to be appropriate for the remainder. Along the high ridge, Medium-Density zoning will remain. On the low ground, the [Low-Density High-Density](#) zoning existing adjacent to Barbo Road ~~will remain is proposed to revert to Low-Density~~ in recognition of environmental limitations (peat soils, wetlands, and floodplain) and the character of the neighboring uses (i.e., Agricultural land to the south and west, and Low-Density Residential land further to the east).

2) *Triangular wedge between Kneuman Rd. and the Lynden rail spur.* This 99-acre area is now zoned Agricultural and Industrial ~~and was recently annexed~~. The Ag-zoned area to the north contains peat soils and is entirely within the flood plain. Sumas Creek flows from the well-field springs through the Kneuman Road ditch along the north boundary of the area. The Creek has good potential for enhancement of fish habitat, and the peat soils are well suited to conversion to wetlands. ~~As part of the annexation arrangement, the owner agreed to restrict development on the parcel.~~ The owner ~~intends to develop~~ has developed a portion of the site as a wetland mitigation bank, ~~possibly including relocation of Sumas Creek away from Kneuman Road.~~ Open Space/Agricultural zoning is proposed for the area in the interim before will remain to support continued development of the wetland ~~conversion is accomplished~~ bank. Much of the mitigation area is included within the Natural System Protection Area overlay zone. ~~Use of the area for stormwater facilities for the adjacent urban uses is also proposed.~~

The area has 3,000 feet of railroad frontage and is accessible ~~to SR9 along from~~ Barbo Road. Barbo Road and Kneuman Road are substandard roads not now capable of supporting industrial traffic. A heavy haul road could be extended from Bob Mitchell Avenue ~~could be extended~~ into the area from the east in order to provide heavy-load access. ~~Some of the~~ The area can ~~drain to the sewer under Bob Mitchell Avenue, but a new lift station may be needed in order to serve the west end of the area~~ be served by gravity sewers. Main water and electric lines run along Barbo Road and are also present on Bob Mitchell Way. A new water line from Barbo Road to Bob Mitchell Way is needed to provide industrial fire-flow to the area and to provide system redundancy. The cost of all necessary infrastructure improvements in this area should be borne by developers and/or outside sources such as CERB and the Whatcom County EDI fund. Industrial zoning will be retained in this area.

3) *Area west of B-N main line straddling Halverstick.* This is the major industrial area within the city. The area contains several wetlands (including a category II wetland proposed as a Natural System Protection Area), and most of the area lies within the flood plain. A swathe at the east is included in the Special Flood Risk Zone. The area has 6,000 feet of frontage on the railroad as well as 4,000 feet of frontage on W. Front Street (formerly SR9). A nonpotable water line, a potable water line, and a major power line extend along SR9W. Front Street, and sewer service is available throughout. The area is served by a haul road capable of supporting Canadian-weight trucks. Industrial zoning will continue in this area. Environmental constraints limit development in some of the area, but other portions are capable of supporting major industrial facilities.

4) *Panhandle south of city limits.* This 148-acre area ~~is now~~ includes approximately 82 acres that has been annexed into the city, with the remainder zoned Agricultural in the county and is in active farm use. Part of the area annexed into the city was utilized to develop the new ball fields, and a 48-lot residential subdivision was recently approved just south of Bone Creek adjacent to Hovel Road. Of the remaining acreage, 25.8 acres adjacent to SR9 are within the UGA and 40 acres adjacent to Hovel Road are designated UGA Reserve by the county. The area exists in large parcels and ~~all of it is controlled by two families.~~ Both

~~families endorse inclusion in the UGA, and both are discussing annexation. However, development might be hindered by the monopolistic pattern of ownership if the landowners seek above-market returns. The area is largely protected from flooding by the railroad embankment and state highway running along the west boundary. The culverts beneath the railroad are the path by which Nooksack flood waters reach this area, and only 20 percent of the area is contained within the 100-year flood plain. This area contains the largest chunk of non flood-prone land contiguous to Sumas. The area is served by Hovel Road, which is classified by the county as a local road, but which carries much north-south traffic to town. The B-N main line and Easterbrook Road SR9 run along the west boundary of this area, as does a state-owned right-of-way that will become the new alignment for SR9. The new realigned SR9 will be a limited access highway, and it will therefore be only possible to access it only via widely spaced, separated, intersecting streets or driveways. The backbone street network within this panhandle should therefore be east-west streets connecting Hovel Road to SR9. Provision of sewer service will should not be problematic because the panhandle is separated from existing sewers by Bone Creek. A of the new lift station near the northeast corner of the panhandle would work best with existing topography that was constructed in conjunction with the new ball fields. Main water lines already extend south along Hovel Road and Easterbrook Road SR9. East-west loop connections between these lines are needed to provide service within the panhandle. Public zoning is proposed at the north-center of the panhandle, in order to accommodate an expansion of the existing ballpark and rodeo ground in the area occupied by the new ball fields. Medium-Density Residential zoning is proposed for the remainder of the area, with the exception of a 25.8 acre parcel at the southwest corner of the panhandle. Given its frontage upon the new highway alignment, this parcel is recognized as a viable location for a large, full-service truck stop. If the entire parcel can be developed for this purpose by a single owner, the development would be consistent with this plan. No other commercial use of the parcel is supported, and the parcel should otherwise be developed as Medium Density Residential land. Likewise, should the proposed ballpark expansion fail, the proposed public zoning should be classified Medium Density Residential. An 8-inch high-pressure gas line traverses the area, and the intent of City is that residential lots be prohibited within 50 feet of the gas line easement.~~

- 5) *Parcel east of Hovel Road, south of Bone Creek.* This 10-acre parcel ~~is now zoned Agricultural in the county and was annexed into the city, but~~ is still in active farm use. ~~The parcel owner has repeatedly asked to annex to the City.~~ The eastern part of the area is a low flood-prone wetland continuous with Bone Creek and within a Natural System Protection Area. The western part adjacent to Hovel Road has no environmental limitations and is suitable for development. An 8-inch city water line runs along the west property line (Hovel Road). City sewer ~~does not yet extend south of Bone Creek, hindering development of the UGA panhandle (area 4 discussed above) and the incorporated land slated for park expansion will be extended to the southwest corner of this parcel as part of the Hovel Estates subdivision. Annexation of this parcel should be pursued in the near term in order to create a larger contiguous portion of developable land south of Bone Creek, thereby making provision of sewer feasible. This parcel is the logical location for a lift station that would serve the entire UGA panhandle.~~ Medium Density Residential zoning is in place and should be retained.

- 6) *Residential area south of Front Street and north of Bone Creek.* This area has been ~~the site of much multi-family development. It includes the 20-unit Creekside Meadows complex operated by the Housing Authority, a 52-unit condominium project under construction, and a site proposed to house four duplexes. Continued multi-family development is appropriately developed with a combination of single-family, duplex and multifamily housing.~~
- 7) *South commercial zone between Cherry Street and Sumas Avenue.* ~~A change in zoning is proposed in this area. Existing zoning includes Traffic-Oriented Business fronting Cherry, Low-Impact Business fronting Sumas, and General Business south of Front Street. The realignment of SR9 is likely to lead to rapid development of the southern General Business parcels, and there has been a minor resurgence of business in the Traffic-Oriented Business zone along Cherry. Most newly-sited businesses, however, have pursued uses not permitted outright within the Traffic-Oriented Business zone. The underground tanks have been removed at the old Yorkies gas station, and it has been converted to a retail use. Therefore, all businesses south of the Costeutter building are compatible with the General Business zone regulations at this time. It is not desirable to promote construction of more gas station / mini-marts in Sumas. To encourage the development of a new General Business area at the crossroads of SR547 and SR9, the zoning will be changed to~~ The General Business zoning in this area will be retained to support development of businesses other than gas stations, which are allowed in the Traffic-Oriented Business zone. This area provides a viable alternative location for businesses serving the local population that prefer to avoid potential congestion on Cherry Street.
- 8) *Minor ~~zone edge anomalies~~ zoning changes.* There are several small instances of illogical zone boundaries in the northern portion of town as noted below and as marked on **Map 5**:
- ~~*Industrial-Business-General parcels east-west of B-N main line.*~~ Three illogical ~~This~~ pockets of industrial-Business-General zoning between Cherry Street and Railroad Street west of the Burlington-Northern main line are is proposed to be rezoned to Business-GeneralIndustrial in order to match the surrounding zoning elsewhere between those streets. The poekets-parcel contains the post office, two tavern parking lots, and a swathe of the federal port-of-entry facility an auto repair shop, which is a use proposed to be added as a permitted use in the Industrial zone at the same time the rezoning would be approved.
 - *Residential, High-Density parcels west of Sumas Avenue.* A few small parcels llying on the west side of Sumas Avenue north of Front Street are currently zoned Residential, High-Density, but are surrounded by Business, General zoning. Business, General zoning is proposed, except for the parcel owned by the city, which is proposed to be rezoned to Public zoning.
 - *Agricultural parcel north of Johnson Creek.* This Agricultural parcel is located south of the go-kart track, adjacent to the Industrial zone. Johnson Creek runs through the parcel. The portion of the parcel north of the creek is proposed to be rezoned to Industrial to allow development on the area not limited by the shoreline setback and the special flood risk zone.
 - *Business-Agricultural parcel east of City playground adjacent to Sumas wellfield.*

~~Upon completion of a City playground connecting the tennis courts to the City park, a sliver of Business-General zoning was left east of the playground. The southern portion is in use for a business purpose, but the northern portion contains a residence. To minimize the possibility of expansion of business uses straddling the playground, the northern portion is proposed to be rezoned to High-density Residential. This parcel is located north of Kneuman Road adjacent to the City wellfield. It is owned by the city; therefore, Public zoning is proposed.~~

- ~~• *Residential parcel in flood buy-out corridor**New ball fields.* The old “Sutherland” property north of Garfield Street is predominantly Agricultural, but is assigned High-density Residential zoning toward the west. Part of this residential zoning is within the flood buy-out corridor, in which construction of a home on vacant land is impossible. The swathe of residentially-zoned buy-out corridor extending north from Garfield to Harrison is proposed to be rezoned Agricultural to match the adjacent land to the east. When the area planned for the new ball fields was annexed, the exact location of the new ball fields was not known. Therefore, the entire annexed area was zoned Residential, Medium-Density. The property containing the new ball fields that is owned by the city is proposed to be rezoned to Public.~~
 - ~~• *Hovel Estates Subdivision.* The Hovel Estates Subdivision received preliminary plat approval in 2015. This development includes two parcels, with the northern parcel being zoned high-density and the southern parcel being zoned medium-density. All of the lots in the subdivision are larger than 8,000 square feet and the property owner is planning on building single-family homes. The zoning on the northern parcel is proposed to be changed to Residential, Medium-Density.~~
 - ~~• *Mitigation Site south of RV Park.* When the re-alignment of the state highway was completed, the Washington State Department of Transportation created a mitigation site just south of the RV Park to accommodate the relocation of Bone Creek. Development of this approximately three-acre area is limited by a recorded covenant. The current Residential, High-Density zoning of this area is proposed to be changed to Public.~~
- 9) ~~*Proposed park expansion.* The City intends to expand the existing ballpark and rodeo ground as discussed earlier in the “Future Needs” section. The ideal expansion site is the 30 acres immediately east of the existing park and south of Bone Creek, including some land within the City as well as abutting unincorporated land to the south. As of May, 2004, the City applied for grant funding for the project and began negotiating for purchase of property. On Map 6, the proposed site is shown as Public zoning. Should the park expansion project fall through, the zoning for the site is proposed to revert to Medium-density Residential.~~

Long-Range Land Use Plan

While not required pursuant to the GMA, a long-range view of the Sumas environs is presented here. The foregoing discussion establishes that the designated UGA is adequate to contain planned growth in the coming 20 years. However, certain external factors could limit the usefulness of parts of the UGA and/or create the need for an adjustment to the UGA. Three likely factors are discussed below, each labeled with a letter corresponding to an area on **Map 6**.

- A) *Unavailability of UGA Reserve panhandle on the east side of Hovel Road.* The family that owns the majority of the land within the UGA [and UGA Reserve](#) operates a large dairy farm. They have invested heavily in expansion of the dairy, and the bulk of the investment has been in facilities located on the east side of Hovel Road. While it is desirable for them to allow annexation and development of the undeveloped land west of Hovel Road, redevelopment of the east strip would effectively destroy the viability of their entire dairy. They are not likely to pursue annexation and development of the 43 acres of land east of Hovel Road. [This land constitutes 40 percent of the residential UGA. The remaining 60 acres of residential UGA might not be sufficient.](#)
- B) *Rural development south of Rock Road, east of city limits.* This 18-acre area contains an 8-unit mobile home park and three hobby farms, all dependent upon septic systems. It is now zoned Agricultural in the county, but contains development that is more appropriately described as rural – i.e., 11 housing units in an 18-acre area. It is likely that eventual replacement or rehabilitation of the septic systems will be problematic because of the clay soils. The City’s 1997 flood modeling revealed that much of the area is either outside the floodplain, or subject to very shallow inundation. In a prior plan version, Sumas had proposed inclusion of the area in the UGA, but inclusion was not supported by Whatcom County. If landowners eventually pursue annexation because of sewer problems, Sumas is willing to accept this area. To make extension of the sewer economically feasible, a larger area than this must be residentially developed. An acceptable area would be the triangular wedge of land bounded by Rock Road, the Sumas River, and the center line of section 35.
- C) *Industrial UGA.* [Map 5B](#) shows a seemingly adequate number of “Vacant” industrial parcels. However, there is enormous interest in industrial development in Sumas at this time, primarily because of the softwood tariff. Canadian firms are relocating wood remanufacturing facilities to the U.S. in order to import low-value raw materials and add value here, thereby avoiding high tariffs. There are preliminary plans for [wood](#) remanufacturing facilities that would consume [three out two](#) of the [seven](#) parcels identified on [Map 5B](#). It is very possible that all sites will be developed within a 10-year horizon.

If additional industrial development is to eventually occur, the 39-acre parcel west of Barbo Road and north of Halverstick is the most logical site. It contains rail frontage and is also served by the City’s main electric and water lines on Barbo Road. It is underlain by reasonable soils and is predominantly out of the floodplain. The land owner desires to be included in the Sumas UGA.

Open Space and Physical Activity

Open space

Based on factors such as zoning, environmental limitations and planned capital improvement projects, there will be a substantial amount of open space in the city at the end of the planning period. Some open space will result from development of recreational facilities, but most will be a by-product of environmental regulations such as the flood ordinance, the critical areas ordinance, the shoreline management program, and the wellhead protection program.

Map 10 shows the expected locations of open space within the city and surrounding area. The areas adjacent to Johnson Creek, Sumas Creek and the Sumas River will remain as open space because of development restrictions related to shorelines, wetlands, and flood-prone areas. An area north of the city wells will remain as open space because it lies within the zone of contribution to the city wells. Agricultural areas, where development is limited due to the presence of the flood risk corridor and the special flood risk zone, are also shown as remaining in open space.

Finally, it is important to consider the conditions outside Sumas city limits. The city is entirely surrounded by land zoned agricultural within Whatcom County (see areas labeled "AG" on Map 10), all of which is designated as agricultural resource land of long-term significance. Nearly all of these lands are in current use or open space tax programs, which strongly support continued use for agriculture or open space.

Open space will also be maintained between Sumas and the nearest urban growth area, the City of Nooksack that lies seven miles to the southwest. All of the area between these two cities is zoned for agricultural use by the county and will, therefore, remain in open space.

Planning approaches to increase physical activity

Sumas has established several approaches to encouraging increased physical activity among its citizens. These include:

- Requiring the construction of sidewalks within all new subdivisions
- Planning for interconnections between neighborhoods
- Planning for a compact urban commercial area, including establishment of areas where provision of off-street parking is not required
- Establishing higher density residential areas at locations surrounding the downtown commercial core and along the major transit route through town
- Maintaining existing park facilities that include ball fields, tennis and basketball courts, play structures, wading trails and open space
- Maintaining public access to Johnson Creek to accommodate fishing and other water-related recreational activities
- Planning for and developing additional park, recreation, trail and open space facilities
- Securing easements for public access to off-street pedestrian trails

Essential Public Facilities

“Essential public facilities” include those facilities that are typically difficult to site, such as airports, state education facilities, state or regional transportation facilities, regional transit authority facilities, state and local correctional facilities, solid waste handling facilities, and in-patient facilities, such as substance abuse facilities, mental health facilities, group homes, and secure community transition facilities. This plan acknowledges a major public facility of *regional or statewide* significance—the new alignment of SR9. The proposed future zoning reflects the possibility that traffic will pass straight through town along a new southward extension of Cherry

Street.

A ~~second major public~~ facility of regional significance that is currently under consideration is the proposed construction of new jail facilities within Whatcom County. ~~Sumas anticipates the construction by Whatcom County of a minimum security facility in calendar years 2005 and 2006.~~ The County has proposed a funding mechanism whereby cities contribute to the capital cost of the facility through establishment of a countywide sales tax in exchange for the future ability to house prisoners at lower rates. This mechanism is conceptually acceptable to the City of Sumas, but has not yet been approved by voters, ~~and the capital facilities element of this plan includes the jail as a line item in the general fund. The City intends that the jail project be an acceptable use of funds from the Real Estate Excise Tax proceeds, as well as other general funds.~~

The county-wide planning policies contain a number of policies related to the siting of essential public facilities (see Appendix IV). The city ~~will participate as those policies are translated into firm processes, and the city will adopt the processes developed cooperatively with other jurisdictions~~ has adopted the countywide planning policies and will continue to participate in their implementation in relation to the siting of the new jail facility and other essential public facilities when proposed. The city also adopts the following goal and policies related to essential public facilities:

Goal: To cooperate with other federal, state and local agencies in planning for and siting essential public facilities.

Policy: When the county or a federal, state or regional government initiates the process of planning for the siting of an essential public facility that will serve or impact through its construction the citizens of Sumas, the city should become an active participant in the processes set forth by the initiating agency.

Policy: The city should incorporate expenditures related to the siting of essential public facilities into its capital facilities planning and annual budget processes.

Policy: The city comprehensive plan and development regulations shall not prohibit, nor shall they be construed to prohibit, the siting of essential public facilities.

4. Capital Facilities Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. This element is crucial because it serves as a gauge of the practicality and feasibility of the other elements. Essentially, this element reveals which public facility projects are required in order to accomplish the development described in other elements, and also proves that the city has the financial resources to undertake those projects.

The GMA defines public facilities as "streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools." (RCW 36.70A.030(12)) This element includes a discussion of each of these categories, although the transportation-related categories are all grouped together. In each section, the existing status of the system will first be described, and future needs will then be discussed. Preceding these sections is a presentation of Sumas's goals and policies related to capital facilities, as well as a discussion of the planning assumptions developed in other chapters that are pertinent to the analysis presented in this chapter.

Goals and Policies

Sumas adopts the following goals and policies [pertaining to capital facilities](#):

Goal: To provide capital facilities consistent with statutory requirements and with the other elements of this plan.

- The city shall accord highest priority to those projects required by statute or necessary for the preservation of public health and safety.
- The city shall develop capital facilities in a manner that directs and controls land-use patterns and intensities in accordance with the land-use element of this plan. As required by RCW 36.70A.070, the city shall reassess the land-use element if funding is unavailable for the capital projects needed to support a planned use. Development shall be allowed only when and where there are facilities and services available to serve that development.

Goal: To allocate the cost of a facility fairly among those that benefit from the facility.

- Long-term borrowing should be used to pay for facilities that will benefit more than one generation.
- General governmental revenues should be used to pay only for facilities of general benefit. Other financing methods such as connection fees, utility rates, LIDs, and revenue bonds should be used to pay for facilities that benefit a narrower group.
- Facilities providing benefit only to a new development should be paid for by the developer.
- Facilities providing benefits to both existing residents and newcomers should be paid for by both groups, with each group paying a share proportional to their corresponding benefit. Connection fees and impact fees shall be based upon this principle of proportional benefit.

Goal: To build and operate facilities as efficiently as possible.

- A planning process should precede all major capital expenditures. This capital facilities element should be the cornerstone of that process. This element should be updated every other year and, with the exception of emergency projects, the capital budget for any given year should include only those projects identified in this element.
- The city should coordinate the projects in a given location in order to reduce costs.
- The city should aggressively pursue low-cost funds such as grants and subsidized loans.
- Major developments should have a full range of facilities, including streets, water, sewer, storm sewer, sidewalks, and neighborhood parks. These facilities should be installed and paid for by the developer and thereafter dedicated to the city.
- The city should adopt and enforce sensible design and construction standards for capital facilities systems.
- Existing facilities should be adequately maintained, because maintenance is usually more cost-effective than replacement.

Sewer System

The following discussion is based on a [1991 Wastewater Facilities Engineering Report and General Sewer Plan 2007 study, Wastewater Treatment Alternatives](#), prepared by the engineering firm [Kramer, Chin, & Mayo \(KCM\) Wilson Engineering LLC](#). [Map 10](#) accompanies this discussion.

Existing conditions

Collection. Prior to 1972, sewage disposal in Sumas was handled by on-site septic [tank systems](#). In 1972 a sewage collection system and treatment plant were built. As shown on [Map 10](#), the sewage collection system now consists of [over](#) 10 miles of pipe spanning 300 acres, less than half of the incorporated area. The system provides service to [245-366 single-family residential](#), [37 multifamily](#), [70-66 commercial](#), and 11 industrial customers. ~~About a half dozen~~ [Approximately twelve](#) residences are still on septic tanks.

The system is divided into [five-seven](#) drainage basins, each basin served by a lift station. Generally, gravity mains carry sewage from south to north within each basin, and a lift station then pumps the sewage past a barrier such as a creek or highway. Sewage ultimately reaches lift station 1 in the northeast (i.e., the lowest) corner of town. Lift stations 1, 2, and 3 were rehabilitated in 1998 as part of the project to connect to the Abbotsford sewer and are in good shape. Station 5 was installed in 1997 in order to serve the western part of the industrial zone and is in good shape. Station 4 was installed in the mid to late 1980s, at the time that the Sumas industrial park was developed, and has ~~not since~~ received [any upgrade a major upgrade in 2005](#). ~~It is now running beyond design capacity accommodating the effluent generated at the SEI co-generation plant. A breakdown of even one of its two pumps would require that SEI reduce flow.~~ Station 4 ~~should be rehabilitated~~ [is in good condition](#), with a ~~larger maximum~~ design capacity

sufficient to accommodate new growth through the planning period. Station 6 is located adjacent to Hovel Road and was designed to serve the City as it expands to the south. It was constructed in 2007 in conjunction with development of the new ball fields and is in good condition. In addition, ~~there is a privately owned lift station~~ Station 7 is located at the west end of town near Barbo Road. This station is capable of handling anticipated flows from residential development at the west end of the Moe Hill.

As sewer systems age they tend to develop leaks, so the condition of a system can be gauged fairly well by measuring the amount of infiltration and inflow (I&I). The system experiences very low levels of I&I in the dry season, despite the fact that most lines are beneath the water table. I&I peaks are only noticed during high rainfall events, primarily during the winter. We therefore know that most of the system is very tight, with some leakage near the ground surface, either in manhole risers or through manhole lids. During major floods, huge amounts of water enters the sewer through flooded toilet fixtures.

Treatment. As of mid-1999, sewage has been treated at a large regional facility in Abbotsford, B.C. The facility is owned and operated by the Fraser Valley Regional District (FVRD). Sumas has a long-term contract with the FVRD and the City of Abbotsford, allowing for conveyance and treatment of sewage and disposal of sludge. The contract, which was extended in 2008, allows for a discharge of ~~317,500~~378,000 gpd during calendar year ~~2004~~2015, increasing by 5,500 gpd each year for the coming ~~15~~4 years, reaching an ultimate ceiling of 400,000 gpd. Existing average daily usage during the maximum month is in 2015 was approximately ~~230,000~~227,000 gpd, of which ~~130,000~~110,000 gpd is attributable to a single customer – the SEI co-generation plant. Surplus capacity is about ~~85,000~~151,000 gpd at present.

Future conditions

Collection. The design of the existing collection system makes it economical to extend sewer service to much of the remaining developable land within the city limits. ~~A recent~~An extension east along Garfield Street supports development in the northeast corner of town. Another extension east along Front Street supports development at the southeast. ~~Development in the central-east, near Victoria Street, can be handled by extending a line east along Vancouver Street.~~

Provision of service to the urban growth area and newly annexed areas will generally be more expensive because of natural barriers such as the Sumas River and Bone Creek. **Map 10** shows a likely arrangement of trunk lines that could serve outlying areas:

- *South.* In the area between Hovel Road and ~~Easterbrook Road~~SR9, west-to-east lateral lines would drain into a trunk line on Hovel Road. The trunk line would lead north to ~~a~~the new lift station ~~at south of~~ Bone Creek (station #6 on the map) that was constructed in conjunction with the new ball fields. The station ~~would pump~~pumps sewage a short distance north to station #2's basin.
- *Southeast.* The Sumas River separates the Swartwood Road area from the existing sewer system. A new lift station (station #87 on the map) would be needed to support development on either side of Rock Road. This station would probably pump west into station #2's basin.

The improvements mentioned above will be costly, but the capital cost of such improvements will be borne by developers and therefore need not be included in the city's six-year financial analysis.

Treatment. With existing surplus capacity of roughly ~~85,000~~150,000 gpd, and with a growth component (under the existing contract) allowing an increase of ~~82,500~~22,000 gpd over the coming ~~18-4~~ years, the contract with Abbotsford accommodates a total increase of approximately 173,000 gpd and offers adequate room for growth. Excluding the co-gen plant, the remaining current usage of ~~100,000~~117,000 gpd ~~can~~could expand by ~~180~~more than 147 percent ~~over~~through the planning period without exceeding the maximum contract quantity. Based on the growth rates presented in chapter 2, the city is projected to grow by approximately 60 percent through the planning period, leaving ample surplus capacity.

Table 4-1 identifies the 20-year capital improvement projects for the city's sewer system. Estimated costs for city-funded projects have been incorporated into the financial analysis presented at the end of this chapter.

Table 4-1: Sewer System 20-Year Capital Improvement Program

<u>Project #</u>	<u>Project Description, Location and Type</u>	<u>Cost</u>	<u>Year</u>	<u>Funding Source</u>
<u>#1</u>	<u>Lift Station #3 Control Panel Replacement</u>	<u>\$5,000</u>	<u>2016</u>	<u>rates</u>
<u>#2</u>	<u>Lift Station #2 Control Panel Replacement</u>	<u>\$5,000</u>	<u>2016</u>	<u>rates</u>
<u>#3</u>	<u>Lift Station #7 Control Panel Rebuild</u>	<u>\$7,000</u>	<u>2016</u>	<u>rates</u>
<u>#4</u>	<u>Lift Station #1 Control Panel Replacement</u>	<u>\$5,000</u>	<u>2017</u>	<u>rates</u>
<u>#5</u>	<u>Lift Station #5 Control Panel Replacement</u>	<u>\$5,000</u>	<u>2022</u>	<u>rates</u>
<u>#6</u>	<u>Lift Station #5 Control Panel Replacement</u>	<u>\$5,000</u>	<u>2030</u>	<u>rates</u>
<u>#7</u>	<u>Lift Station #8 – New construction</u>	<u>\$200,000</u>	<u>2031</u>	<u>DF</u>
<u>#8</u>	<u>UGA and UGA Reserve – New east-west lines from SR9 to Hovel</u>	<u>\$250,000</u>	<u>2035</u>	<u>DF</u>

Water System

The City recently ~~developed~~updated its water system comprehensive plan with the assistance of ~~David Evans & Associates~~the Cascade Engineering Group. The plan was approved by the state Department of Health in ~~December, 2000~~2012. ~~The September 11, 2000, revision of the City of Sumas Water System Comprehensive Plan~~The following information is based on the updated water system plan, which is incorporated by reference as a component of this capital facilities element. [\[Add map.\]](#)

Existing conditions

Source. The source of potable water is the Sumas Wellfield, which contains five wells. The wells draw water from the Abbotsford-Sumas aquifer, a glacial sand and gravel upland covering the

north end of Whatcom County and extending into lower British Columbia. Although artesian flow conditions exist at each well, submersible pumps or booster pumps are installed to achieve adequate pressure. The wells supply two distinct distribution zones. Two of the wells are used to supply wholesale customers south of town including the Nooksack Valley Water Association (NVWA) and the City of Nooksack. Three of the wells supply Sumas itself and the Sumas Rural Water Association (SRWA), which is located east of town. The two distribution zones normally operate independently, but an intertie is available to allow emergency supply from one system to another.

The City also operates the May Road Wellfield, tapping the same aquifer, there are two wells in the well field one serves our industrial customers and the other is tied into the Sumas distribution system.

In 2015, Sumas received approval from the Department of Ecology allowing an additional point of withdrawal under one of the city's water rights. The new point of withdrawal is at the location of one of the Meadowbrook Water Association (MBWA) well fields. Under the terms of a supply agreement entered into in 2015, the city supplies water to MBWA by allowing the association to withdraw additional water from its own wells, but under the Sumas water right. In this way, Sumas can supply the water without actually needing to pump or pipe the water from the city system. Consistent with the Sumas agreement, MBWA intends to supply water to Northwood water association and Northwood Park water associations, both of which have issues related to water quality from their current wells. In the future, MBWA may also supply wholesale water to the Everson water association and the Hampton water association, which are located just north of the city of Everson.

Treatment. Groundwater from the Sumas Wellfield is not "under the influence of surface water," so no filtration is performed. Chlorination is normally not performed, but equipment is available to inject chlorine into the distribution mains near the wellfield when bacterial testing indicates the need. However, the need arises infrequently. Perhaps once every couple of years coliform is detected somewhere in the combined distribution network of Sumas and its wholesale customers, always related to construction projects. Coliform has never been traced back to the wells themselves.

Storage. Sumas owns a 500,000 gallon reservoir located at the top of Moe's Hill. A second 500,000 gallon reservoir was built in 2001 next to the existing reservoir and is owned by the SRWA. Storage within the Nooksack/ NVWA zone is accomplished at reservoirs jointly owned by those entities.

Distribution. Within city limits is a distribution system consisting of 94,000 linear feet of pipe ranging from 1 to 12 inches in diameter. Major lines lead from the Sumas Wellfield along the Canadian border to the reservoir, and along Barbo Road and Halverstick Road to the south end of Cherry Street. A network of smaller pipes distributes water throughout the developed part of town.

Future conditions

Water Rights. Sumas has obtained and perfected several water rights over the course of many years. Table 4-1 shows that the maximum withdrawal available to the city under all of its water rights equals an instantaneous flow of 3,910 gallons per minute (gpm) and a total annual withdrawal of 3,744 acre feet (af). Of these totals, up to 298.8 gpm and 328.5 af must be returned to an adjacent tributary to Johnson Creek as mitigation necessary to maintain base flow levels in the creek. Table 4-2 (which updates and extends Table 2-1 from the City's water system plan from the year 2030 to 2036) presents information regarding planned water usage within the city and by its wholesale customers through the year 2036. As shown in the Table 4-2, based on existing consumption patterns, projected growth in consumption, and current and planned water supply agreements, Sumas has sufficient water rights to supply its retail and wholesale customers through 2036.

Table 4-2: Water Usage and Water Rights

Potable Water Demand	2030					2036				
	# of Connections	# of ERUs	PHD (gpm)	Flow Rate Supplied (gpm)	Annual Usage (af)	# of Connections	# of ERUs	PHD (gpm)	Flow Rate Supplied (gpm)	Annual Usage (af)
Sumas *										
Res., Comm. and Ind.	812					929				
Large Users	31					34				
Estimated Future Usage	843	1,319	933	700	416	963	1,541		700	486
Cogen - PSE Agreement				800	969				800	969
SRWA			1,100	700	600			1,100	700	600
Nooksack and NVRWA			1,969	1,000	1,000			1,969	1,000	1,000
MBWA User Agreement				450	400				450	400
Less Mit. incl. Below				-81	-72				-81	-72
Net Usage				369	328				369	328
TOTAL DEMAND				3,569	3,313				3,569	3,383
DOE Water Rights				Max. Rate (gpm)	Annual Usage (af)				Max. Rate (gpm)	Annual Usage (af)
G1-25171 (Kneuman)				2,250	1,919				2,250	1,919
G1-23698 (May Rd. #1)				800	449				800	449
G1-26398 (May Rd. #2)				860	1,376				860	1,376
Subtotal				3,910	3,744				3,910	3,744
Mitigation (May Rd.)				-298.8	-328.5				-298.8	-328.5
TOTAL RIGHTS				3,611.2	3,415.5				3,611.2	3,415.5
AVAILABLE				42.2	102.5				42.2	32.5

* Assumes 282 gallons per day per equivalent residential unit (ERU).

Storage. The Sumas water distribution/supply system is divided into two halves, with one half of the system supplying water to city customers and SRWA and the other half supplying wholesale water to Nooksack and NVWA. Water supplied to Nooksack and NVWA does not require storage because the existing city pump system pumps water directly into the NVWA/Nooksack system and into their combined storage tanks. Following construction of the SRWA 500,000-gallon storage tank, the city's 500,000 gallon water storage tank has more than enough capacity to meet the city's storage needs through 2036.

Distribution. The distribution system will require routine maintenance throughout the course of the planning period. It is anticipated that all major system extensions to serve the UGA and UGA Reserve will be paid for by developers; therefore, these projects are not included in the city's financial analysis.

Table 4-3 identifies the 20-year capital improvement projects for the city's water system. This table includes all remaining project identified in the city's water system plan. Estimated costs for

city-funded projects have been incorporated into the financial analysis presented at the end of this chapter.

Table 4-3: Water System 20-Year Capital Improvement Program

<u>Project #</u>	<u>Project Description, Location and Type</u>	<u>Cost</u>	<u>Year</u>	<u>Funding Source</u>
#1	<u>H7ydrant coverage remediation – 1 hydrant on Lawson</u>	<u>\$5,000</u>	<u>2021</u>	<u>rates</u>
#2	<u>Morton Street hydrant and new loop – Upgrade to 4-inch PVC</u>	<u>\$15,000</u>	<u>2017</u>	<u>rates, DF</u>
#3	<u>Lawson Street from Front to Mitchell – Upgrade to 8-inch PVC</u>	<u>\$20,000</u>	<u>2016</u>	<u>rates</u>
#4	<u>Alley between Mitchell and Morton (Cherry to Sumas) – Upgrade to 4-inch PVC</u>	<u>\$15,000</u>	<u>2022</u>	<u>rates</u>
#5	<u>Mitchell Street Line upgrade (Sumas Ave. west) – Upgrade to 2-inch PVC</u>	<u>\$9,000</u>	<u>2026</u>	<u>rates</u>
#6	<u>New transformer for Sumas wells</u>		<u>Completed</u>	
#7	<u>First Street Line (Sumas to Lawson) – Upgrade to 6-inch PVC</u>	<u>\$18,000</u>	<u>2027</u>	<u>rates</u>
#8	<u>Alley between Third and Second (Sumas Ave. west) – Upgrade to 2-inch PVC</u>	<u>\$7,000</u>	<u>2028</u>	<u>rates</u>
#9	<u>Retrofit Sumas Well Field wells 4R and 5 (SO7) with larger pumps to meet MDD demand</u>		<u>Not needed</u>	
#10	<u>Moe’s Hill pressure zone booster pump with generator</u>	<u>\$250,000</u>	<u>2030</u>	<u>DF</u>
#11	<u>Replace Well 2 (SO6)</u>		<u>Completed</u>	
#12	<u>New Pump House and Controls for Well 4R (SO7)</u>	<u>\$40,000</u>	<u>2018</u>	<u>rates</u>
#13	<u>Lawson Street from Mitchell to Garfield – Upgrade to 8-inch PVC</u>	<u>\$180,000</u>	<u>2025</u>	<u>rates</u>
#14	<u>Valve remediation – 1 per year for five years (\$8,000 X 5 years)</u>	<u>\$40,000</u>	<u>2017-23021</u>	<u>rates</u>
#15	<u>SR9 south of Bowen Rd. to serve UGA –New 8-inch line</u>	<u>\$200,000</u>	<u>2034</u>	<u>DF</u>
#16	<u>UGA and UGA Reserve – New east-west lines from SR9 to Hovel</u>	<u>\$150,000</u>	<u>2035</u>	<u>DF</u>

Storm Sewer System

Information about this system was provided by the public works director and the city crew. The crew mapped the storm sewer system in order to facilitate capital planning.

Existing conditions

Collection. Sumas has an extensive storm water system consisting of two pump stations, 38,000 lf of drainage line, and 3,000 lf of open ditch. The underground lines range in size from 4-inch to 36-inch, with the larger lines made of concrete and the smaller lines made of PVC, concrete, or clay. Johnson Creek divides the town into two drainage basins. The general layout of the

system is shown in [Map 11](#).

In the northern basin, the backbone of the collection system is a 36-inch square concrete drainage line installed by the WPA [seventy-eighty](#) years ago. This line extends from the railroad tracks through the heart of downtown and then east along Harrison Street to the city limits. The line continues cross-country under farm land to an outfall on the Sumas River.

Most of the northern basin is drained through the WPA line to the Sumas River, but the basin also includes four smaller outfalls directly to Johnson Creek. A pump station is located near an outfall on Gough Street. Generally, the basin drains by gravity through the various outfalls until water levels rise in the rivers. When water can no longer drain by gravity, flaps close to prevent creek water from backing up into the system, and the pump station kicks in.

The southern basin is less extensive and not as dependent upon a major trunk: there are fourteen outfalls to Johnson Creek, the Sumas River, and Bone Creek. Again, the outfalls are equipped with flaps to prevent backflow, and there is another pump station (also on Gough Street) that pumps into Johnson Creek during high water.

The existing system works well and there are few areas of town with drainage problems. ~~One exception is at the north end of Cherry Street, near the Red Apple market and the border crossing station. The area is almost entirely covered by asphalt and is prone to puddling.~~

The collection system requires regular maintenance, particularly those lines with small diameters. Some part of the system is flushed each year, and major line-flushing projects occur twice a decade. The eastern end of the WPA line ~~has become a~~ [also has](#) maintenance ~~burden~~ [issues](#). The line has weakened, and the line [occasionally](#) develops leaks ~~regularly~~, leading to cave-ins in the overlying farm fields.

Treatment. As is typical of a small-town system installed decades ago, most residential stormwater is discharged without treatment. [Recent subdivisions have been required to incorporate treatment facilities into project plans.](#) Since the mid 1980s the city has required commercial and industrial customers to install oil-water separators. The major expanses of pavement associated with gas stations and businesses along Cherry Street all have separators. Property owners are required to maintain the separators, and the city inspects them annually.

Since publication of DOE's *Stormwater Technical Manual* in the early 1990s, Sumas has required installation of stormwater BMPs at new industrial facilities. Both the co-generation plant and the IKO shingle plant have detention ponds as well as bioswales. The Port of Bellingham's industrial area east of Bob Mitchell Avenue is the only industrial site with no provision for stormwater treatment. Stormwater from this site is discharged untreated to Sumas Creek.

In 1997, Sumas adopted an ordinance requiring all new [development and redevelopment subdivisions](#) to comply with the guidelines established in the 1992 *Stormwater Technical Manual*. [As part of the 2016 update of development regulations, the City adopted an ordinance requiring all development and redevelopment to comply with the most recent update](#)

[of DOE's Stormwater Management Manual for Western Washington.](#)

Future conditions

Correct deficiencies. [At some point in the future, Sumas must will need to address two problems one problem](#) identified earlier. ~~First, drainage must be improved at the north end of Cherry Street. This can be accomplished by installing a new line from that area to the 36-inch WPA line, or by upgrading lines that currently connect the area to the WPA line. The cost of this project is unknown.~~

~~Second, the~~[The](#) east end of the WPA line ~~must will~~ ultimately [need to](#) be replaced. The best alignment for a new line ~~is and the timing for any such replacement are~~ open to questions. The existing line heads due east for 4,000 feet before reaching the Sumas River. If a replacement line were to instead veer southeast (roughly along the alignment of the abandoned C.M.St.P.&P. railroad spur that loops east of town), the line would reach the Sumas River sooner. There is the strong possibility that any replacement facility would be built as an open swale in order to accomplish some degree of treatment. No firm plans for replacement of the line are yet in place, [and it is anticipated that this project will not be undertaken during the planning period.](#)

Establish new standards. According to the requirements of the Puget Sound Stormwater Plan, Sumas must adopt a basic stormwater program containing at least the following elements:

- Ordinance establishing minimum stormwater requirements for new developments and redevelopment projects.
- Adoption of a set of technical design standards for stormwater facilities.
- Ordinance establishing an operations and maintenance program applicable to privately owned drainage facilities.
- Adoption of a public education program.

Sumas has at this time complied with the first two listed elements. A more comprehensive ordinance should be adopted once appropriate small-town models become available.

In addition, Sumas coordinates with the recently launched WRIA 1 watershed planning process, a county-wide multi-year process that includes water quality components.

Streets and Sidewalks

Please see the transportation element for a discussion of the transportation-related capital facilities in Sumas. That element was [originally](#) developed jointly with the Whatcom Council of Governments (WCOG), and [was subsequently updated by the city.](#) [Chapter 6](#) includes a discussion of existing conditions and future needs. A discussion of financial viability is included at the end of this chapter.

Schools

This plan section was first compiled in 1994 and has not been updated since. NVSD has made a policy decision not to impose impact fees, so no effort has been made to keep the section current.

Nooksack Valley School District No. 508 (NVSD) provides public schooling for Sumas as well as Everson, Nooksack, and part of unincorporated Whatcom county.

Existing conditions

NVSD operates ~~four~~ five schools as described in Table 4-~~23~~. According to criteria used by the state superintendent of public instruction, NVSD has excess capacity at all grade levels, as can be seen by comparing enrollments to building capacities. ~~Note, however, that primary enrollment is not balanced between the two facilities: the South Primary operates slightly above capacity and the North Primary has considerable excess capacity. This situation persists because more primary students live closer to the southern facility, and the district is reluctant to bus primary students over large distances.~~

NVSD's facilities are generally in good shape. The ~~South Primary~~ Everson Elementary school is ~~a new facility~~ was opened in the fall of 1993, and the ~~Elementary~~ Middle school underwent a major renovation in the 1993 - 1994 school year. Four new classrooms were added to the ~~Jr/Sr~~ High school during that school year. ~~The Nooksack Elementary School was opened in 1997. The district's capital improvement plans as of spring 2001 are unknown.~~ In 2015 voters in the district approved a major bond issue intended to fund significant upgrades at the High school and the reconstruction of the Middle school.

Future conditions

The state superintendent of public instruction provides enrollment projections based on cohort survival (i.e., the progression of students from one grade to the next). The projections show that K-~~56~~ enrollment will slowly ~~rise~~ increase from 805 in 2015 to 1,062 ~~in 1999-2021~~, grades 6-8 enrollment will increase from 330 to 413, and grades 79-12 enrollment will rise ~~decline slightly from 430 to 1,011~~ 428 in the same period. At those growth rates, ~~upper school enrollment will exceed available capacity in the year 2000, while lower school enrollment will become problematic in 2004.~~ the NVSD will have excess capacity at all grade levels through the planning period, although it is recognized that some facilities will be aging and needing to be upgraded.

~~The lower school projections based on cohort survival don't seem to adequately capture the regional demographic trends. All three cities in the NVSD service area grew at a rate of at least 4 percent per year between 1990 and 1993. Each city expects its incorporated population to double in the next two decades, and similar growth is expected in the unincorporated areas. At an annual growth rate of 3.5 percent, K-6 enrollment would grow to 1,192 in 1999 and thereby consume the available K-6 capacity.~~

~~In summary, NVSD will probably need to expand upper school capacity by the year 2000 and lower school capacity by 1999.~~ The NVSD has also planned a number of capital improvement projects that will upgrade District facilities based on the bond measure passed in 2015. With the

[planned upgrades and expansions funded through the 2015 bond measure, it is anticipated that the NVSD will have sufficient capacity through 2036.](#)

Table 4-23. Characteristics of School Facilities

School (location)	Grades	Classrooms (reg/hdep)	Capacity ¹ (reg/hdep)	Enroll- ment	Class size ²
North Primary Sumas Elementary (Sumas)	K-35	16/220	320/24400	243220	14.3
Nooksack Elementary (County)	K-5	22	440	349	
South Primary Everson Elementary (Everson)	K-35	14/217	280/24340	322234	21.5
Elementary Middle (Nooksack)	4-66-8	21/226	525/24650	420329	19.1
K-6 Subtotals	K-6	51/6	1,125/72	985	18.2
Jr/Sr High (county)	79-12	34/344	1,020/361,3 20	680429	21.6

¹ Capacity based on ratio of 20 students per room (K-35), 25 students per room (4-66-8), and 30 students per room (79-12), and 12 handicapped students per room (K-12).

² "Enrollment" divided by "Classrooms", with each handicapped classroom counted as half a regular classroom.

[The School District has planned three major capital improvement projects that will be funded by the bond measure passed by voters in 2015. These projects are described in Table 4-4.](#)

Table 4-4: Projects Funded through 2015 Bond Measure

School	Project Description	Total Cost	State Match	Local Share	Year
Middle School	Replace entire Middle School except covered, enclosed play area.	\$22,000,000	\$4,000,000	\$18,000,000	2016-2017
Nooksack Elementary	Enclose covered play area; add 1 kindergarten and 3 gen. classrooms.	\$2,240,000	\$0	\$2,240,000	2016
High School	Non-classroom facility replacement and expansion.	\$11,144,000	\$3,559,000	\$7,585,000	2016-2017

The District is also planning several capital projects to be funded through the regular (annual) capital levy. These projects include:

1. Everson Elementary School Roof - \$200,000 in 2016
2. Everson Elementary HVAC Controls - \$75,000 in 2018
3. Everson Elementary Gym Floor - \$60,000 in 2016
4. Nooksack Elementary Gym Floor - \$60,000 in 2016
5. K-5 Floor Coverings - \$25,000 per year for five years beginning in 2016
6. High School Gym Roof - \$30,000 in 2020
7. High School Stadium Roof - \$30,000 in 2020

In summary, it is anticipated that NVSD will have sufficient classroom capacity through the year 2036.

Parks and Recreation

Development of element

In the summer of 2000, the Mayor directed that a parks and recreation planning process begin, leading to a more detailed parks plan than previously contained in the Comprehensive Land-Use Plan. The city administrator and planning commission therefore completed the planning process described below:

- August, 2000. Introduction of topic at planning commission meeting. Discussion of existing parks facilities and request for commissioners to bring ideas to next meeting.
- September, 2000. Review of existing facilities, solicitation of commissioners' and public's ideas. Decision to perform community survey.
- October, 2000. Survey prepared and mailed to all residents. (A copy of the survey document is included in Appendix III.) Survey results tabulated.
- November, 2000. Survey results presented to planning commission and public. Discussion of results. Group workshop to tentatively prioritize projects based upon citizen preference, financial viability, and ease of implementation.
- November, 2000. First draft chapter written and presented to planning commission, lacking CIP and many details. Comments received from commissioners.
- January, 2001. Revised draft incorporated into draft comprehensive plan.
- February, 2001. Second draft chapter presented to commissioners. Group workshop to develop proposed CIP and balance projects with financial capability.
- March, 2001. Third draft chapter presented to commissioners and approved for forwarding to City Council and public review.

Existing conditions

Listed below is an inventory of all City facilities and easements pertinent to parks and recreation. **Map 12** shows the locations of the various facilities.

- City park. This 2.5-acre facility is alongside Johnson Creek in the city center. The facility includes picnic tables, a restroom building, and a barbecue gazebo as well as an expanse of maintained lawn adjacent to the creek. The park is the site of various annual events sponsored by service organizations, such as Community Days and the Fishing Derby.
- Ball park/rodeo ground. This 9-acre facility is located at the south end of the city. The facility includes two lighted softball fields, restroom facilities with showers, a concession stand, and a rodeo ground used for the Sumas Junior Rodeo and the Bull-a-Rama. The softball fields are used for recreational league play by several groups within the Nooksack Valley, the rodeo grounds are used by riding clubs, and the grounds as a whole are used for occasional meetings and events.
- New Ball Fields. [This 20-acre facility is located southeast of the rodeo grounds and was constructed in 2007. It includes two baseball fields and one soccer field. The facility also includes a gazebo, concession stand/restrooms, a stormwater pond and a footbridge across Bone Creek.](#)
- Playground. This 1.5-acre facility is located on either side of Second Street, between Cherry and Sumas. The facility includes a tennis court, a basketball court, and some playground equipment. The facility received a major facelift in 1999, when new playground equipment was installed and the tennis and basketball courts were repaved, fenced, and equipped with new lights.
- Youth center. This 2-story remodeled house is located on Second Street immediately west of the playground. The City operates a drop-in youth center that is open for a small number of hours each week. The center is run by part-time co-managers and is also staffed by volunteers. The City has struggled to operate the facility -- funding constraints, volunteer availability, and customer behavior are a challenge to operations.
- Senior center & library. This complex is on Second Street east of Lawson. The 4,000 sq-foot building was built in 1998 and houses a branch of the Whatcom County Library System, as well as a senior center operated by the Whatcom County Parks Department. The City owns and maintains the building, and the leaseholders operate the programs.
- Riparian tract. The Port of Bellingham deeded this 1-acre parcel of land to the City in 1998. The parcel straddles Sumas Creek near the north end of Bob Mitchell Avenue. The parcel is not useful for industrial purposes because of environmental constraints associated with the Creek. The parcel contains a deed restriction limiting use to passive recreational activities or riparian enhancement.
- Sytsma farm easement. As a condition of the industrial rezone of the Sytsma farm in 1997, the City received an easement allowing a trail across part of the farm. A 29-acre portion of the farm is earmarked for wetland mitigation and possible relocation/reconstruction of the stream itself.

Typical planning standards call for 2.5 acres of community park and 1.5 acres of neighborhood park per 1,000 population. Sumas itself has a population of [9801,468](#), but Sumas is also the

major service provider to an unincorporated rural community with an estimated population of 2,200-2,500 (based upon the number of rural route customers served by the Sumas Post Office) and encompassing about 35 square miles. For a service population of 3,200 nearly 4,000 people, planning standards would therefore call for about 7.510 acres of community park and 4.56 acres of neighborhood park. In comparison, Sumas has about 9-29 total acres of park that can variously be thought of as either neighborhood or community park (i.e., 1.5 acre playground, 2.5 acre city park, 20-acre new ball fields, and 5 acres of ball fields within the rodeo complex). In addition, the city's facilities are supplemented by the fields and playground associated with the Sumas Primary Elementary School. The school places limits upon what use may be made of its athletic field.

A comparison to typical planning standards supports conclusions that are obvious to local users. First, the existing City parks perform well in their capacity as “neighborhood” parks. The needs of nearby residents are well met, and facilities such as the playground equipment and the tennis courts are not crowded. Second, with the addition of the new ball fields, the ~~City parks are deficient in their capacity as “community” facilities. The City softball fields are heavily used by adult and youth leagues within the Nooksack Valley, and~~ the community’s need for baseball and soccer fields is now well met ~~at other facilities, all of which are also heavily used. Users now find themselves driving large distances (i.e., 7 miles to Everson, 12 miles to Lynden, 23 miles to Ferndale) in order to participate in many organized leagues as well.~~

Survey results

A survey was mailed to approximately 350 households in October, 2000. All ideas generated by planning commissioners and the public during early brainstorming sessions were contained as options in the survey. Most proposed facilities are self-explanatory, but a few must be described:

- Recreation center. This facility would contain an exercise room, weight room, and gymnasium large enough for basketball and volleyball. An indoor pool might also be included in the center, in a separate phase.
- Recreation program. This would be a summer program for local youth with typical offerings such as: sports education using the City’s basketball and tennis courts; arts or crafts offerings conducted in the Youth Center building; field trips to local events.
- Expand rodeo. This option would involve expanded use of the rodeo grounds, either through making physical improvements, offering more events, or promoting greater use of the facility for other kinds of events (i.e., reunions, “camp-in” meetings of clubs, etc.).

A copy of the survey document is enclosed in Appendix III. A total of 35 responses were returned, an excellent response rate in comparison to other City surveys. The results of the survey are tabulated below in order of the total number of responses in favor of each choice.

Desired Facility	Priority Assigned to Facilities by Respondents									Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	
Swimming Pool	8	3	3	4	5	1	0	0	0	24
Recreation Center	9	4	3	3	2	1	0	0	0	22

Expand Rodeo	5	4	5	1	3	0	0	0	1	19
Trails	8	2	3	3	2	0	0	0	0	18
Rec. Program	4	5	3	3	2	0	1	0	0	18
Skateboard Park	2	2	4	4	3	2	0	1	0	18
Baseball Fields	4	3	4	0	0	1	0	0	0	12
Soccer Fields	1	1	2	0	5	0	2	0	0	11
Civic Auditorium	2	2	1	0	2	1	0	0	0	8
BMX Park	2	0	0	4	2	0	0	0	0	8
Playgrounds	1	0	3	3	0	1	0	0	0	8
Sidewalks	1	3	1	0	0	0	0	0	0	5
Horse Trails	0	0	1	0	1	0	0	0	0	2
Discontinue Rodeo	0	1	0	1	0	0	0	0	0	2

Respondents had the following additional comments and ideas:

- A trail or sidewalk should link the new Garfield St. subdivisions with the rest of town (2 responses).
- A neighborhood playground is needed at the new Garfield St. subdivisions (3 responses).
- A sidewalk is needed on Mitchell St. heading east from the school to Victoria St..
- A ballfield complex should contain two 60-foot diamonds and one 90-foot diamond. Infields should be grass, not rock and sand.
- An auditorium could host a community theatre.
- A multi-use arena is needed, with ability to convert to an ice arena.
- A recreation center should contain an indoor jogging track.
- The city has enough playgrounds already.
- Expand the school playground for toddlers.
- Include a climbing wall in a recreation center.
- Build a fishing pond.
- Build a dog-training park.
- Take what we have and make it better.
- Build a wetland park with trails.
- Existing sidewalks need to be kept clean and passable.

Goals and objectives

In consideration of local capacity, existing facilities, and community vision/preferences, the following goals and objectives are adopted.

- Goal 1. Provide sidewalks and trails in support of the Comp. Plan vision of easy pedestrian access to all downtown amenities.
 - Objective 1.1. Provide pedestrian access from major neighborhoods to the downtown core.
 - Objective 1.2. Provide pedestrian access to major public facilities such as schools, churches, and libraries.
 - Objective 1.3. ~~As part of the SR9 realignment process on S. Cherry Street, assure~~Provide pedestrian access to the rodeo grounds and new ball fields.
- Goal 2. Provide neighborhood parks consistent with the overall City vision of convenient pedestrian access.
 - Objective 2.1. Provide a neighborhood park in the Garfield Street subdivision.
 - Objective 2.1. Ensure that adequate land for neighborhood parks is acquired through developer dedication when processing major new subdivisions.
- Goal 3. When economically feasible, support the recreational needs of the Nooksack Valley community.
 - Objective 3.1. ~~Develop additional athletic fields (soccer, baseball) in a configuration that will support hosting of athletic tournaments~~Continue to assess the need for additional community facilities to serve city residents and the surrounding area.
 - Objective 3.2. Allow access to City recreational programs and facilities by residents of the Nooksack Valley.
 - Objective 3.3. Develop a skateboard/BMX facility.
- Goal 4. When economically feasible, provide facilities and events targeted to the County and the region.
 - Objective 4.1. Continue to provide a facility for rodeo events.
 - Objective 4.2. Develop a recreational center targeted at a regional user-group, including amenities such as a rock-climbing wall, jogging track, weight room, exercise room, gymnasium, and/or pool.
- Goal 5. Provide recreational facilities and opportunities to residents of all ages.
 - Objective 5.1. Continue to provide a senior center facility and program.
 - Objective 5.2. Enhance the program currently offered at the Youth Center, to include more operating hours and structured summer classes and activities.
 - Objective 5.3. Maintain existing facilities such as the basketball and tennis courts that are used by people of all ages.
 - Objective 5.4. Develop a trail system for recreational walkers.
- Goal 6. Provide facilities that are compatible with and capitalize upon Sumas's rural setting.
 - Objective 6.1. Develop trails that link downtown with planned open spaces, including wetland mitigation areas.

Project feasibility analysis

The feasibility of developing various facilities was explored by ranking each facility against a number of criteria. Four projects were omitted from further consideration based upon their poor showing in the survey: horse trails, sidewalks, civic auditorium, and conversion of the rodeo ground to an alternate use. The following matrix shows the results of the feasibility exercise.

	Soccer fields	Recreation center	Playgrounds	Recreation program	Pool	Baseball fields	Trails	Skateboard/BMX park	Fishing pond and nature trail
Ranking in survey (L, M, H)	M	H	L	H	H	M	H	H	-
Capital cost (L, M, H)	M	H	L	L	H	M	L	M	M
Operating cost (L, M, H)	M	H	L	M	H+	M	L	L	M
Staffing requirement (L, H, Zero)	L	H	0	M	H+	L	0	0	L
Grant funding likelihood (L, M, H)	M	L	L	L	L	M	H	L	H
Revenue from user fees?	Y	Y	N	Y	Y	Y	N	?	Y
Risk (L, M, H)	M	H	L	L	H	M	L	M	M
Target market (City, Local, Region)	R	R	C	C	R	R	L	R	R
Competition	Sumas, Lynden, Everson	Lynden Y, Everson private gym	-	Lynden Y, Church, misc. leagues	Lynden Y, Bellingham, Abbotsford	Sumas, Lynden, Everson	-	Bellingham	Saxon

Project prioritization and phasing

Upon completion of the feasibility analysis, projects were placed into the following three groups corresponding to a conceptual development schedule.

Near term (1 – 2 years). These facilities/programs are popular, yet require little capital investment. They are within the realm of possible development by the City acting alone.

- **Trails.** Rights-of-way and easements already available to the City provide the skeleton upon which a trail system could be developed. Relying upon those easements, a proposed trail/sidewalk system is included on **Map 12**. The proposed facilities are discussed in priority order, based upon existing need and feasibility of construction.
 - *Sidewalk connecting Garfield Street subdivisions to downtown.* There will eventually be 65+ homes straddling Garfield, and the area already contains ~~30+~~a substantial number of children. Residents of the area must now walk on the paved shoulder of Garfield Street to reach town. A sidewalk is needed along the south shoulder of Garfield, separated from the street by curbing or by a grass strip. \$15,000
 - ~~○ *Trail/sidewalk east along Mitchell Street from the school to the undeveloped Perry Street right-of-way.* This facility is also needed to move children off the street. The school district has agreed to allow construction of a crushed rock trail along the north and east edges of their field. This trail can be used to reach school, and also can be used as a jogging track in P.E. classes. \$4,000~~
 - *Western lowland loop.* A loop can almost be completed through the western industrial area using the rights-of-way along Van Street, Johnson Street, Hesselgrave Way, and Barbo Road, together with the trail easement through the Sytsma wetland tract. A missing link exists along Sumas Creek, immediately east of the Sytsma tract. The City should approach Burlington-Northern to gain an easement and allow completion of the loop. The length of the loop would be about 13,000 feet, and cost for a crushed rock trail is estimated at \$50,000.
 - *Western highland loop.* As development occurs along Moe Hill, the City should require developer installation of the proposed trail, which could make use of existing Barker Avenue and Spring Street rights-of-way. Cost is estimated at \$18,000.
 - *Southern loop.* As development occurs south of Front Street, the City should require developer installation of a trail to connect the rodeo grounds to the Perry Street trail mentioned above. ~~The segment connecting the rodeo ground to town along Sumas Avenue should be included within WSDOT's upcoming SR9 realignment project. WSDOT proposes to upgrade Sumas Avenue as part of that project~~This project should include connecting Sumas Avenue to the footbridge located adjacent to the new ball fields.
- **Recreation program.** A ~~fledgling~~ summer youth program ~~should~~could be attempted in the ~~summer of 2002~~coming years, if sufficient interest and community support exist, using a design that minimizes capital expense – i.e., maximum use should be made of existing facilities such as the youth center and the tennis/basketball courts. The major expense would be associated with staff, but the fees charged to participants could be set

so as to recover the bulk of the cost. ~~For budget purposes, the City should assume that \$10,000 of non-reimbursable cost is incurred.~~

- **Promote use of rodeo ground.** A marketing effort should be launched to promote increased use of the rodeo ground for private events such as reunions, riding clubs, etc. Such an effort could be channeled through the Chamber of Commerce and could use media such as a web site, brochures, or direct email to targeted clubs/organizations.
- ☐ ~~**Pursue pond/nature trail project.** The feasibility of construction of a pond within the Sytsma wetland tract should be explored. Sumas Creek is available as a natural water source for such a pond, and the Creek could be relocated away from Kneuman Road as part of the project. Additional trails could be looped around and near the pond, and parking and interpretive signs could be installed. Cost for such a project is roughly estimated at \$300,000. Resource agencies (Ecology, DFW) have commented upon the great potential of this wetland tract. Should the project prove feasible, grant funding should be pursued through such sources as the Aquatic Lands Enhancement Account, and construction of the facility should occur in later years.~~

Medium term (2 - 6 years). These facilities require significant planning and capital outlay, and the City does not have the financial resources to pursue them immediately. At the same time, the cost of these facilities is of a small enough magnitude that the City should be able to develop a funding mechanism.

- ~~**Baseball & soccer fields.** There is a clear shortage of baseball and soccer fields in the local area—all existing facilities are used heavily by youth groups and clubs. Building upon the two existing baseball fields, development of additional baseball fields would make it likely that Sumas could attract tournaments, which typically require at least four fields. A baseball/soccer field complex, together with bathrooms, parking, and concession stand, should be developed. Such a complex would occupy 10+ acres and cost \$250,000 to \$400,000. Construction of the new ball fields was completed in 2007. This facility includes two baseball fields (four baseball diamonds) and one soccer field.~~
- **Skateboard park.** Few opportunities are available in the region for the many youth who like to skateboard. Most local cities view the use of skateboards on streets and sidewalks as a hazard and have enacted ordinances prohibiting such use. Owners of private parking lots have also typically prohibited use of their facilities by skateboarders. The new facility in Bellingham is 45 minutes distant by car, and most skateboarders are too young to drive. A facility in Sumas would accommodate local youth, but also serve a wider region including Everson, Nooksack, Lynden, and Abbotsford. The cost of a facility would be \$100,000 to \$300,000, depending upon size and complexity. Grant funding would need to be obtained to support development of a skateboard park.
- **BMX park.** Similar to the skateboard situation, there are few dedicated facilities for BMX riders in the region. Riders have built makeshift trails on both private and public parcels. A dedicated facility would attract riders from throughout the region and could be the site of races and events. Size and cost of such a facility are unknown at this time. Grant funding would likely be necessary to obtain.

- **Playgrounds.** Neighborhood “tot lots” are needed in two areas. One should be developed in the Garfield Street subdivisions, and eventually, a second in the undeveloped area south of Front Street. At Garfield Street, development of a lot will involve purchase (or donation) of a land parcel, whereas near Front Street, the land should be acquired through dedication during the subdivision process. On top of land costs, the cost of playground equipment would be about \$7,000 per site.

Long term (10+ years). An indoor swimming pool and recreation center are included in this category. These facilities require a major capital outlay and pose the greatest risk, in that there are competitive facilities within the target regional market. A recreation center is of lesser risk than a pool because of the possibility of conversion of the building to an alternate use, the lower capital and operating costs, and lesser need for staffing. Similar to the new Bellingham pool, it is assumed that a pool would be used for swim teams, public swims, rentals, lessons, and youth programs. The two facilities would ideally be co-located in order to share facilities such as parking and changing rooms. Capital costs would be in the range of \$2+ million.

Financial Plan

A sequence of desired projects is included in the table pertaining to General Government expenditures, in the overall *Six-Year Financial Analysis* that immediately follows this section. The following are funding sources available for development of park/recreation facilities:

- General fund revenue. Capital could be allocated annually to an improvement program from general fund revenues. Given the other demands on this fund, ~~an annual expenditure of approximately \$20,000 is the most that could be accommodated~~ use of these funds will likely be quite limited.
- Capital facilities fund. This fund receives revenue from the Real-estate Excise Tax and has gradually built to a fund balance of about ~~\$80,000 over a nine year period~~ \$255,000.
- Economic development revolving fund. This fund ~~receives previously received~~ receives revenue ~~of about \$50,000 per year~~ of about \$50,000 per year from the Electric Fund, ~~but such funds are no longer available.~~ but such funds are no longer available. Certain projects with a clear economic development linkage could be funded from the balance remaining in this fund.
- Limited purpose levy. The voters could be asked to approve a levy for the specific purpose of raising money for a facility. ~~In Sumas, a levy of \$0.50 per \$1,000 of assessed valuation would bring in about \$70,000 in each year levied. A four year levy would therefore provide enough money to tackle a project such as a ballfield complex. However, given that Sumas is currently at its statutory maximum levy, this option is not currently available.~~
- IAC/RCO grant. Upon acceptance of this Parks & Recreation Chapter by the state Interagency Committee on Outdoor Recreation (IAC), now the Recreation and Conservation Office (RCO), Sumas ~~will be~~ became eligible to apply for state grants for facilities such as ballfields and trails.

- ALEA grant (or similar). Projects such as the wetland trail loop will be eligible for grants from resource agency programs such as DNR's Aquatic Lands Enhancement Account (ALEA).

Police

Existing conditions

The Sumas Police Department provides police protective services within Sumas City limits. Coverage is provided 24 hours a day, seven days a week. During major emergency events, additional law enforcement support is provided by various state and local law enforcement agencies. The Police Department offices are located within Sumas City Hall, and the Department has a staff of five full time officers in addition to the Chief of Police. The Police Department operates and maintains a fleet of six patrol cars in addition to office and other equipment related to law enforcement.

Level of Service. Based on a 2015 population of 1,468 people within the City, the Police Department currently provides the following levels of service:

- 4.1 officers per 1,000 population; and
- 4.1 patrol cars per 1,000 population.

The City proposes to maintain the following level of service standards:

3.0 officers per 1,000 population; and
3.0 patrol cars per 1,000 population.

Future conditions

Based on the 2036 population allocation of 2,323 people, the City would need 6.9 officers and 6.9 patrol cars to accommodate planned growth while maintaining the above level of service standards. The current staffing level of six officers and six patrol cars is sufficient to serve projected growth through the year 2026; however, in approximately 2027 the City will need to add an additional officer and patrol car to maintain the above level of service standards.

The primary capital improvement expenditures anticipated by the Sumas Police Department are those associated with purchase of new patrol cars. Based on a typical useful life of six years for patrol cars, the City anticipates the need to replace one patrol car every year. Over the past several years, the federal government has provided grants that covered up to one hundred percent of the cost of purchasing a new patrol car; however, more recently, these grants have been covering a smaller percentage of such expenditures. The City's financial analysis assumes that the City will need to pay fifty percent of all such acquisition costs within the planning period.

The Department will continue to be housed within Sumas City Hal, so no major building expenses are anticipated. The City will likely need to replace or upgrade its radio system to remain compatible with the system used by the U.S. Border Patrol. The financial analysis

provided later in this chapter includes a \$6,000 expenditure each year for replacement of the current radio system, although it is hoped that, as in the past, grant funding will be available to offset all or a portion of these costs.

Fire protection

Fire protection services within the city of Sumas are provided by Whatcom County Fire Protection District 14. Such services are provided under the terms of a multi-year contract between District 14 and the city. District 14 prepared a capital facilities plan that was adopted in 2015 that addresses growth within the District's service area, including Sumas, through 2036.

Existing conditions

Fire District 14 operates primarily on a volunteer basis. The District maintains three fire stations – one in Sumas, one in Kendall and one in Welcome – and a fleet of 23 vehicles, including fire engines, tenders, aid cars and other vehicles.

Future conditions

The District's capital facilities plan identifies a number of capital improvement projects that are needed over the course of the planning period. With the passage of the levy increase by the voters in 2015, the District is expected to have sufficient resources to complete the improvements needed to serve new growth through 2036.

Six-Year Financial Analysis

This section demonstrates whether the city has the resources to pay for the capital facilities anticipated during the next six years. No attempt is made to account for the on-site costs of expected development. Developers will bear those costs completely. We will instead focus on major system-wide projects, such as new wells, substations, etc.

Five spreadsheets are shown below, corresponding to the five major funds (or groups of funds) in the Sumas accounting system. Each spreadsheet shows projected revenue and expenditure over the six-year span from ~~2004-2016~~ through ~~2009-2021~~. The spreadsheets are based on the ~~2003-2015~~ year-end results. The dozens of line items in the accounting system are consolidated into a few major categories. For instance, expenditures are generally allocated to just four categories: salaries and benefits, operations and maintenance, debt service, and capital outlay. The major capital projects discussed earlier in this chapter are listed individually.

One column contains percentage values used to predict future trends. For the most part, we simply assume that revenues and expenditure will increase proportionate to the expected growth rate of 2.72.2 percent. For some kinds of revenue and expenditure (e.g., scheduled debt), no growth in costs is shown. No adjustment for inflation is made, but no rate increases are shown either. We assume that rates can be increased in proportion to inflationary pressure.

At the bottom of each spreadsheet are two lines showing the annual operating results and the cumulative fund balance. Annual results are calculated by subtracting annual expenditure from actual annual revenue (i.e., ignoring the balance brought forward from a prior year).

Following is a discussion of each system-specific spreadsheet:

General Government. This spreadsheet represents costs associated with legislative, executive, judicial, legal, general governmental, police, health, fire, park, cemetery, and library cost centers. ~~The No major capital expenses in this fund relate to park projects—it is this fund that must support the parks and recreation capital improvement plan. A ballpark complex estimated at \$950,000 is scheduled for construction in 2006. The assumption is that the City will develop a successful IAC grant application that will pay 45 percent of the cost, and that donations, in-kind contributions, force account (water, sewer, electric materials and labor) and a one-time drawdown of the Economic Development Fund will pay for the remainder. improvement projects are identified under this fund, except the planned replacement of patrol cars by the police department.~~

Absent some new source of revenue, this fund shows a pattern of gradual decline over the coming six years. General government, together with the transportation system, are the fund groups that have suffered most from the decline in tax revenue associated with the drop in Canadian passers-through (i.e., sales tax, gas tax). The repeal of the gambling tax has also affected this fund.

Given the presence of major industrial natural gas consumers in town, one reasonable option is

the imposition of a utility tax on natural gas. A tax capable of producing revenue of ~~\$160,000~~100,000 in the year ~~2005-2017~~ is proposed. The tax is shown in italics in this spreadsheet. This level of revenue is sufficient to create a small surplus at the end of the six-year period, which ~~is then~~would then be available to use to cover ~~the~~shortfalls in the Transportation System funds discussed below.

Transportation System. This spreadsheet represents costs associated with the street fund. It is assumed that future major street projects (~~e.g., SR9 auto-queuing area~~) will be funded through state and federal grants, a reasonable assumption given the City's eligibility for federal border and corridor funds and its participation in the binational IMTC planning process. ~~The \$360,000 FHWA revenue shown in the spreadsheet is already in hand.~~

Ignoring major projects, the underlying fund shows a pattern of gradual decline over the coming six years. ~~As discussed above in the General Government section, a new tax is proposed that would generate enough revenue to balance both the Transportation System and General Government fund groups. These declines are due in part to the city's inability to allocate any of the annual property tax revenue to this fund.~~

Electric System. ~~The future health of this fund hinges upon the wholesale power rate charged by BPA for the 2006—2011 rate period. BPA will be able to reduce rates substantially in 2006, because there is now a better alignment between its committed load and its hydropower system capacity. A 15 percent decrease in wholesale power costs is shown in the spreadsheet for the years 2006 and beyond. Given the anticipated wholesale rate reduction and the completion in 2004 of the conversion to 12.5 kV transformers, the~~This fund is shows a gradual decline over the six-year period. Although not incorporated into the spreadsheet, the city will likely need to pursue a modest rate increase in 2016 to keep the fund healthy through 2009/2021 and beyond.

Substantial cash is transferred from this fund to the General Government fund, ~~partly~~ because of a 6-percent payment in lieu of utility tax, ~~and also because of a \$50,000 annual transfer to the City's Economic Development Fund.~~

Sewer System. This spreadsheet incorporates the sewer fund, the sewer bond fund, and the bond reserve fund. ~~The only project planned for this utility is the installation of an in-line grinder pump in the year 2004. A series of minor projects are planned through the six-year period, all of which will be paid for using revenue from existing rates. The fund is in good shape and shows an increasing balance through the six-year period., and it would~~Based on these results, it may be reasonable to begin a program of prepayment of debt. The debt associated with the Canadian hook up will be paid off by 2008, but this event will have no effect on the fund's finances, because it is anticipated that the City will simultaneously eliminate the "debt amortization surcharge" component of the industrial sewer rate that was imposed in 1998 in order to pay down the Canadian debt. This is shown as a reduction in the sewer sales revenue from SEI-1.

Water System. This spreadsheet incorporates the water fund, the water bond fund, and the bond reserve fund. There are a number of minor capital improvement projects but no major projects planned for this fund, and the fund is in good shape.

Consolidated results. This spreadsheet simply adds together the results of the previous five. It shows that the city has the overall resources to fund the projects anticipated in the next six years, with a projected cumulative surplus of about \$~~600,000~~1,000,000. ~~About half of that surplus is due to the expected reduction in BPA's wholesale power rates.~~

5. Housing Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. In overview, this chapter describes existing characteristics of housing, provides a statement of goals and policies related to housing, projects future housing needs, and demonstrates the availability of sufficient land for housing.

Planning Assumptions

This chapter has been developed in accordance with county-wide planning policies and has been integrated with other plan elements to ensure consistency throughout the plan. In particular, two assumptions developed in the land-use element are used as the basis for projections in this chapter:

- The population of the city will increase substantially during the planning period, from [1,0791,469](#) in [2004-2015](#) to [1,7502,323](#) in the year [2024-2036](#).
- The number of persons per household is [2.52.7](#) and is expected to remain constant during the planning period.

Existing Conditions

Information about existing housing conditions was gathered from [three-several](#) sources: the [2000 2010 US Census](#), [the 2010 American Community Survey](#), [the city's 2010 census of housing and population](#), the city's building permit records, and the Whatcom County Housing Authority [data](#).

2000-2010 Census data

~~The 2000 Census data was gathered in two ways. Some questions were asked of the whole population and every housing unit (referred to as "100-percent" questions), and some questions were asked of only a part of the population (referred to as "sample" questions). Data derived from the sample questions was then extrapolated to make assumptions about the entire population. Statistics derived from the sample data are often slightly inconsistent with those based on the 100-percent data because of various errors inherent in the statistical methods. An example of this inconsistency is apparent in the data for Sumas. By definition, the number of *occupied housing units* (which is based on 100-percent data) should be the same as the number of *households* (which is based on sample data). However, the 2000 Census data shows that Sumas had 357 households, but only 343 occupied housing units.~~

~~Residences associated with farming—that is, units on land larger than one acre or having an income from agricultural products—are NOT included in sample calculations such as value of housing units and size of rents. Nonfarm residences are identified as Specified Owner-Occupied and Specified Renter-Occupied housing units. For the sake of consistency, various nonfarm statistics were used for analysis of the entire population. This may skew the data toward lower~~

value figures and has been taken into consideration in the summary of this chapter. To summarize:

- ~~100-Percent Data: Derived from the entire population and every housing unit.~~
- ~~Sample Data: Derived from a sample of the entire population and then extrapolated to make assumptions about the entire population.~~
- ~~Specified Owner-Occupied and Specified Renter-Occupied Housing Units: Nonfarm residences generally located on one or less acres of land and having little or no income from the sale of agricultural products. Using nonfarm data provides a more accurate picture of the housing value and rent calculations.~~

~~This document indicates, whenever 2000 Census data is cited, whether 100-percent figures, sample figures, or specified housing units have been used for analysis. Refer to the 2000 US Census for more information.~~

~~Amount and type of housing. Based on 100-percent data~~ According to the 2010 U.S. Census, the city of Sumas had ~~405-465~~ housing units² within city limits, of which ~~254-304~~ were detached single-family residences, ~~37-63~~ were mobile homes, RVs, or trailers, and ~~114-98~~ were multi-family residences. Comparing the ~~1990-2000 U.S.~~ Census data to the ~~2000-2010~~, there was an increase of ~~27-50~~ detached single-family residences, ~~a decrease of 43-16~~ multi-family residences, and ~~13-an increase of 26~~ mobile homes, RVs, or trailers. ~~The~~ Based on the 2010 U.S. Census, ~~the majority of the~~ growth in Sumas (i.e., 68 percent) ~~was~~ appears to ~~have been~~ accommodated in ~~structures other than~~ single-family residences. ~~Other than data error, there is no clear explanation for why the 2010 U.S. Census showed the number of multifamily units as having decreased. In this regard, the city's 2010 census appears to provide better data.~~

~~The city's 2010 census showed a total of 514 residential units, including 326 single-family units, 159 multifamily units and 29 mobile homes. Comparing the city's 2010 census to the 2000 U.S. Census shows a net increase of 109 units, including an increase of 72 single-family units, an increase of 45 multifamily units, and a decrease of 8 mobile homes. Based on this comparison, new housing units included a mix of both single-family and multifamily units, with the majority of the new units (59 percent) being single-family. This pattern reverses the pattern seen in the 1990s where over fifty percent of new units were multifamily.~~

~~Age of housing stock.~~ Table 5-1 describes the age of the housing stock based on ~~sample U.S Census~~ data. In general, the housing stock reflects the same kind of trends as revealed in the population data discussed in Chapter 2. There is a substantial amount of very old housing (pre-1939) and of very new housing (post-1990), and a period of relatively little housing construction during the mid- to late part of the ~~last~~ century.

Table 5-1. Age of Housing Stock

² A housing unit is a structure or a portion of a structure in which a single family or a single individual lives. A single apartment or a single family house is considered 1 unit, while a duplex is considered 2 units.

(US Census, ~~2000~~2010)

Year Built	Number of Units	Fraction of Total
1999-2005 – 2000 or later	<u>233</u>	<u>47%</u>
1995-2000 – 1998 2004	<u>1424</u>	<u>35%</u>
1990 - 1994	<u>7383</u>	18%
1980 - 1989	<u>4044</u>	10%
1970 - 1979	<u>7653</u>	<u>191%</u>
1960 - 1969	<u>4643</u>	<u>119%</u>
1940 - 1959	<u>3779</u>	<u>917%</u>
pre 1939	<u>117106</u>	<u>2923%</u>
Total	<u>405465</u>	100%

Condition of housing stock. The ~~2000-2010~~ US Census provides certain measures of interior conditions considered to be substandard ~~and the target of home improvement/rehabilitation efforts.~~ ~~Three~~No housing units ~~were was~~ identified as lacking complete plumbing facilities. ~~One~~Also, no unit was identified as lacking complete kitchen facilities.

Ownership and occupancy. The ~~100-percent~~Census data shows that out of ~~314-371~~ occupied units, ~~144-229~~ (~~46-62~~ percent) were owner-occupied, and ~~170-142~~ (~~54-38~~ percent) were renter-occupied. ~~Based on sample data,~~ 97-120 (67-52 percent) of the owner-occupied homes were mortgaged and 47-109 (33-48 percent) were owned free and clear.

Value of housing stock. Table 5-2 profiles the value of specified homes in Sumas. The median value of Sumas's owner-occupied homes was \$~~119,800~~204,200. The equivalent statistic for Whatcom County as a whole was \$~~155,700~~293,500.

Table 5-2. Value of Specified Owner-Occupied Housing Units
(US Census, ~~2000~~2010)

Value \$	Number of Units	Fraction of Total
< 50,000	<u>42</u>	<u>01%</u>
50,000 - 99,999	<u>3712</u>	<u>265%</u>
100,000 - 149,999	<u>877</u>	<u>603%</u>
150,000 - 199,999	<u>1589</u>	<u>4039%</u>
<u>200,000 -</u> <u>299,999</u>	<u>85</u>	<u>37%</u>
<u>300,000 -</u> <u>499,999</u>	<u>20</u>	<u>9%</u>
> <u>2500,000</u>	<u>414</u>	<u>36%</u>
Total	<u>141229</u>	100%

Table 5-3. Percentage of Income Toward Rent and Housing Costs
(US Census, ~~2000~~2010)

% of Income Toward Rent or Housing	Owners	Renters	Total	Fraction of Total
< 20%	55 130	42 51	97 18 1	31 49 %
20 - 29%	36 36	50 30	86 66	27 18 %
> 30%	44 63	68 57	110 1 20	35 33 % ←
Not computed	[90]	[104]	[194]	6% --
Total Units	144 229	170 138	314 3 67	100%

Affordability of housing. HUD defines housing as "affordable" when a household pays less than 30 percent of its total income toward housing costs. Households paying less than 20 percent are considered to live in "very affordable" housing. Table 5-3 summarizes the affordability of both owner- and renter-occupied units within the city of Sumas. The table is derived from sample data and therefore has some built-in inaccuracies, ~~as discussed earlier~~, but the table nevertheless allows identification of trends. The row marked by the arrow shows the part of the community living in unaffordable housing.

As seen in the left columns, ~~31-28~~ percent of *owners* live in unaffordable housing (i.e., ~~44-63~~ out of ~~144~~229). It is impossible to know whether those owners have assumed large mortgages as a matter of choice or have encountered hard times and are struggling to keep their homes. As shown in the next column, the situation of the *renters* is worse: ~~40-41~~ percent of renters live in unaffordable housing (i.e., ~~68-57~~ out of ~~170~~138). Overall, ~~35-33~~ percent of the community lives in unaffordable housing, which is slightly lower than the 35 percent identified in the 2000 Census.

Table 5-4 shows the economic situation of households in Sumas according to classifications established by HUD. The left column shows HUD's definitions of income brackets. Note that each bracket is defined with respect to the *median household income* within the community. That value was \$~~29,297~~42,411 in Sumas, so a "very low" income household would be one with an income less than 50 percent of that amount, or less than \$~~14,648~~21,206, as shown in the second column. The right column reveals an interesting profile: there are large high- and low-income segments of the community, and a smaller middle ground. In addition, there has been a

an slight deterioration improvement since the 1990-2000 Census, which showed that 49-53 percent of households were Very Low, Low, and Moderate Income, as compared to 53-44 percent in the year 2000-2010.

Table 5-4. Households By Income Group
(Derived From US Census, American Community Survey, 2000-2010)

HUD Definition of Income Brackets	Corresponding \$ in Sumas	# Households	Fraction of Total
Very low < 50% of median	< 14,648 <u>\$21,206</u>	<u>9969</u>	<u>2819%</u>
Low 50 - 80% of median	14,649 <u>\$21,206 - 23,438</u> <u>\$33,929</u>	<u>4564</u>	<u>1317%</u>
Moderate 80 - 95% of median	23,439 <u>\$33,929 - 27,832</u> <u>\$40,290</u>	<u>4529</u>	<u>138%</u>
Middle/High > 95% of median	> <u>32,228</u> <u>\$40,290</u>	<u>168209</u>	<u>4756%</u>
Totals		<u>357371</u>	100%

Building permits

Census data from 2000-2010 fails to reflect activities of the last four-five years (April 2000-2010 - March 2004-2015). In this period there were permits issued for 24-19 new residential structures, providing a total of 42-22 new housing units. One mobile home unit was removed. 18-17 single-family residences were constructed with a median construction value of approximately \$141170,000, which after adding the average lot price o \$60,000 yields an amount somewhat higher than the overall median of \$119,800204,200 reported in the 2000-2010 Census. Six-Two building permits were for multi-family structures (all four plexesone duplex and one triplex). The recent permits show a continuation of the trend-pattern mentioned earlier in which the majority of new housing units (i.e., 57-77 percent, 24-17 out of 42-22 units) are multisingle-family.

Subsidized housing

Several subsidized housing projects have been undertaken in Sumas, as discussed below.

- *Creekside Meadows.* Two multi-family structures, including 20 units, are located south of Front Street. Creekside Meadows was funded by the state as a Tax Credit Project. Rent and utilities are no more than 30 percent of a household's adjusted income. Eligibility is based on income. Two- and three-bedroom units are available.
- *Sumas Square.* Sumas Square is an 11-unit structure managed by the Whatcom County Housing Authority for elderly and handicapped persons. Rent, including utilities, equals 30 percent of monthly income, after medical expenses have been deducted. Eligibility is based on age, disability, and income.
- *Sunrise Apartments.* This 12-unit structure was built several years ago under WCHA's

sponsorship, but is now privately owned. Rents are established based upon monthly income.

- *Two HUD-owned homes.* HUD owns two homes that are available for rent by eligible low-income families.
- *Rehabilitation project.* In the early 1980s, about 25 homes were rehabilitated using federal grant funds.
- Habitat for Humanity. Over the past decade, Habitat for Humanity has constructed six residential dwelling units (three pairs of attached, zero lot line homes) that are now owner-occupied.

Section 8 vouchers and certificates are available in Whatcom county. There are approximately 25-19 families in the Sumas zip code area involved in Section 8 programs, of which an unknown number live within city limits.

Summary

Considering all of the data presented above, a number of conclusions can be reached:

- Census data reveals a large proportion of Sumas residents are Very Low, Low, and Moderate income, according to HUD standards. The proportion of people within those categories grew declined during the 1990s2000s, with 5344 percent of residents now falling in-into those categories.
- Housing within Sumas is generally at the low-cost end of the spectrum of what is available within the county. Existing homes have lower median value, and new construction is marketed at a cost that is lower than median home values elsewhere in the county.
- Since 19902000, the majority of housing built in Sumas was multisingle-family.
- Census data indicates that 110-120 households (35-33 percent of the total) are situated in unaffordable housing and that 68-about half of those households are in rental units. There are 45 units of subsidized rental housing available in town, so more such units could be used.

Projected Housing Needs

Amount of housing. New housing stock will be needed to accommodate anticipated growth. Table 5-5 identifies the projected housing demand for Sumas over the course of the 20-year planning period. The table relies upon an assumption that the relative economic condition of residents will remain constant (i.e., that the same proportion of people will be low income over time). The table shows that Sumas will accommodate about 268-335 new households, of which 109-121 will consist of Low- or Very Low-income people.

Availability of sufficient land. As described in Chapter 3, available infill sites in combination with the established UGA provide enough land to accommodate 268-375 new housing units, including a market factor of over 20 percent.

Provision for diverse needs. As noted in the summary above, the marketplace has done a good job of adjusting to the needs of the diverse economic segments found in Sumas. Availability of suitable land will ensure continued responsiveness in the marketplace, and the land-use plan identifies such land. The regions identified for infill development (see **Map 5A** in the land-use chapter) are adjacent to varied kinds of existing housing. The region to the northeast abuts a higher-income single-family neighborhood and can be expected to attract more development of a similar nature. The region to the northwest (Moe Hill) is also attracting larger single-family homes. The region to the south (Boon Street) encircles an attractive subsidized apartment complex, and other multi-family development has recently located there. That area will probably continue to attract [a mix of single-family and](#) multi-family housing, and the description of the area (Area 6 discussed on p. **3-15**) emphasizes its suitability for [a mix of single-family and](#) multi-family development.

Table 5-5. Projected Housing Demand

	20042015	20092021	20142026	20192031	20242036
Population	1,0791,468	1,2181,712	1,3751,916	1,5512,119	1,7502,323
Persons Per Unit	2.52.7	2.52.7	2.52.7	2.52.7	2.52.7
Occupancy Rate	94.5%	94.5%	94.5%	94.5%	94.5%
Income Bracket	Number of Units Needed in Bracket				
Very Low	109121	127136	143154	158173	173196
Low	9854	11461	12869	14178	15588
Moderate	4654	5461	6069	6678	7387
Middle/High	322203	376229	421258	465291	510329
Total Housing Units	432-575	487-671	550-751	620-830	700-910

Goals and Policies

Goal: Support healthy residential neighborhoods that reflect a high degree of pride in ownership.

Policy ~~Enforce~~ [The city should enforce](#) the ordinances that affect the appearance of neighborhoods, such as the ordinances pertaining to abandoned cars and to noxious weeds.

Policy ~~Adhere~~ [The city should adhere](#) to the residential zoning code and refrain from granting variances that might change the character of neighborhoods.

Goal: Strive to preserve and enhance the existing housing stock.

Policy ~~Serve~~ The city should serve as lead agency for residents interested in seeking federal grant funds targeted at rehabilitation of housing.

Goal: Encourage the development of affordable housing for all income brackets.

Policy ~~Supply~~ The city should supply enough residential land to meet the projected housing need over the next 20 years.

Policy ~~Support~~ The city should support the development of some neighborhoods containing only single-family residences.

Policy ~~Allow~~ The city should allow for the development of multi-family housing to meet affordable housing needs, provided that the character of the community is maintained.

Policy The city shall regulate the construction and siting of manufactured housing in the same manner as site-built housing and shall not discriminate against the siting of manufactured housing within residential zoning districts.

6. Transportation Element

Pursuant to the Growth Management Act, the transportation element of each comprehensive plan must include the following elements:

1. Inventory of all transportation facilities and services (land, air and water including transit alignments);
2. Land-use assumptions used in estimating travel forecasts;
3. Identification of system expansion needs and transportation system management needs to meet current and future demands;
4. Level of service standards for all arterial and transit routes;
5. Specific actions and requirements for bringing into compliance any facilities or services that are below the established level of service;
6. Traffic forecasts (based on an adopted land-use plan) to provide information on the location, timing, and capacity needs of the future;
7. Finance, including a multi-year financing plan and identification of additional funding sources if there is a funding shortfall;
8. Intergovernmental coordination; and
9. Demand management strategies.

This chapter will first establish Sumas's transportation-related goals and policies. It next will demonstrate how the transportation element meets the requirements listed above. Finally, it will contain sections describing Existing Conditions and Future Conditions.

Goals and Policies

In consideration of the needs and issues identified within this chapter, the City of Sumas adopts the following goals and policies:

Goal: Provide transportation systems that provide convenient and safe access to employment, educational and recreational opportunities for citizens and visitors, and that provide for the movement of goods and services.

Policy: ~~Control~~ The city should control access to arterials and connectors in order to minimize disruption of traffic.

Policy: ~~Front~~ The city should require new subdivisions to front on connectors and arterials rather than state routes.

Policy: ~~Establish~~ The city should establish and maintain connectivity between new subdivisions, benefiting pedestrians, automobiles, utilities, and emergency services.

Policy: ~~Keep~~ The city should keep industrial / commercial truck traffic off residential and local streets.

Policy: Within the city's financial ability to do so, the city should bring poor roads up to standard.

Policy: ~~Consider~~ The city should consider Intelligent Transportation Systems, when cost effective, to increase the capacity and safety of the transportation system.

Goal: Coordinate transportation planning and construction with neighboring jurisdictions and with the state.

Policy: ~~Set~~ The city adopts LOS "D" (V/C ratio of 0.8 during p.m. peak hours) for non-HSS state routes within city limits.

Policy: ~~Set~~ The city adopts LOS "D" for city-designated principal arterial streets.

Policy: ~~Participate~~ The city should participate in the regional planning processes coordinated by Whatcom Council of Governments (WCOG), including the IMTC process.

Policy: ~~Coordinate~~ The city should coordinate with the Washington State Department of Transportation (WSDOT) with regard to state routes.

Policy: ~~Coordinate~~ The city should coordinate with Whatcom County with regard to county arterials and collectors.

Policy: ~~Coordinate~~ The city should coordinate with WTA with regard to transit.

Policy: ~~Coordinate~~ The city should coordinate closely with Whatcom County during annexations and work toward solutions providing long-term benefit to citizens of both the city and the region.

Policy: ~~Incorporate all~~ The city should incorporate Intelligent Transportation Systems initiatives and projects with-into the Whatcom Regional ITS Architecture.

Goal: Build and operate facilities as efficiently as possible.

Policy: ~~Maintain~~ The city should maintain and preserve the existing transportation system.

Policy: ~~Aggressively~~ The city should pursue low-cost funds such as grants and subsidized loans.

Policy: ~~Undertake~~ The city should undertake effective planning and build only what ~~is~~ has been planned.

Policy: ~~Coordinate~~ The city should coordinate road projects with utility projects.

Policy: ~~Adopt~~ The city should adopt road design standards that are sensible and that do not needlessly ~~impose-increase~~ cost.

Goal: Allocate costs fairly among those that benefit.

Policy: ~~Use~~ The city should use SEPA to mitigate off-site impacts associated with new development and redevelopment.

Policy: ~~Use~~ The city should use “no-protest” agreements, when appropriate, as a means of allowing approval of individual small-scale projects, while still providing for eventual construction of necessary improvements through formation of LIDs.

Policy: Facilities providing benefit to both newcomers and existing residents should be paid for by both groups, with each group paying a share proportional to their corresponding benefit.

Policy: The city should require all developments to provide transportation facilities meeting adopted levels of service and other standards to be provided concurrent with completion of such developments; otherwise, the city should not issue permits and approvals for such developments until concurrency requirements have been met.

Goal: Encourage system efficiency, energy conservation and minimize impacts to the environment.

Policy: ~~Develop~~ The city should support development of park-and-ride facilities when feasible.

Policy: ~~Control~~ The city should control stormwater run-off in order to reduce impacts to ground and surface waters.

Policy: ~~Consider~~ The city should consider use of Intelligent Transportation Systems (ITS) that will reduce the need for construction, decrease emissions through reduced delays and idling times, and enhance the transportation network in a way that minimizes noise, and environmental impacts, and preserves open space.

Policy: The city should research opportunities for requiring commercial truck traffic coming from or going to the international border crossing to travel through the industrial district to reduce congestion on Cherry Street. Utilization of ITS should be considered.

GMA Requirements

This chapter meets GMA requirements as shown below:

1. Inventory of Transportation Facilities

The Existing Conditions report in this chapter includes an inventory and assessment of transportation facilities in the City of Sumas.

2. Land Use Assumptions

The Land Use element of this comprehensive plan (Ch. 3) gives a detailed description of the land use assumptions for the twenty-year planning period. **Map 6** in the Land Use element shows the expected pattern of development on which this transportation plan is based.

3. Identification of Needs

Citizen input is a key to identifying the needs of the community. A public workshop, survey and results of a 1992 survey were used to identify transportation needs of the Sumas community.

[These needs were reviewed and, where necessary, updated by the city planning commission and city council through the 2016 public review and public hearing process.](#)

1992 Community Survey

The Planning Commission distributed 400 surveys to the community asking about likes, dislikes, issues, needs and how to fund future actions. The survey was not a transportation survey, and transportation issues were only minimally addressed. The results of a question on "the most critical issues or problems facing Sumas" were ranked in numerical order. Transportation issues followed items such as defining land use classifications, promoting business growth, protecting environmental quality, containing and directing growth, protecting private property rights, defining the edge between rural and urban and providing affordable housing. Improving transportation services and facilities ranked ninth. Many comments were directed toward the perceived problems caused by the border crossing.

Public Transportation Workshop

A public transportation workshop was held in Sumas on September 9, 1993. An opinion survey was distributed, focused on identifying transportation issues and needs in the community. Eighteen people attended the workshop.

Public Opinion Survey

Twelve opinion surveys were completed and returned. The survey asked respondents to identify how much they agree or disagree with statements about problems, needed improvements and methods of paying for changes. For each statement, the respondent rated their level of agreement or disagreement on a one to five scale, with 1 being "disagree," 5 being "agree," and 3 [as-being](#) "neutral."

In the problem identification section, the statements "tourist traffic is the main reason why we have traffic problems" and "making left turns across traffic is difficult" [are-were](#) generally agreed with (4.83 and 4.82 out of 5, respectively). Other high scores (all above 4.50) [are-for-were](#): "traffic has gotten worse in the last five years" and "senior citizens need alternate types of transportation."

In the section identifying needs, all statements [are-were](#) ranked above 3.7, indicating general agreement with all of the statements. The highest scores are for: sidewalks along routes used by school children (4.90), public bus service (4.30), sidewalks in residential areas (4.20), and intersection safety improvements (4.18).

Regarding the section titled "How to Pay for Changes," there ~~is~~ was little agreement as to how to pay for improvements. An exception ~~is~~ was obtaining state and federal funds, which ranked 4.9.

Many individual comments identified the problems with the border traffic or the need for public transit to connect with Lynden.

Road Issues Identification

The second part of the survey asked respondents to mark on a city map the locations of dangerous intersections, areas of traffic, where sidewalks and bicycle paths should be located, and where the street was in bad shape. Most respondents concentrated on identifying unsafe intersections (results reported below). Many did not use the secondary code ~~that identifies~~ to identify the extent of the problem.

Respondents identified the following intersections as unsafe: Front/Cherry (9 responses), Garfield/Cherry (8), Second/Cherry (7), Third/Cherry (6), and First/Cherry (4). Other intersections mentioned include: Harrison/Cherry, Cleveland/Cherry, Vancouver/Cherry, Mitchell/Cherry, Morton/Cherry and Hovel/Front.

Other responses indicated the need for bicycle lanes on Halverstick, Front and Rock; the presence of excessive traffic on Front and Cherry; and the need for sidewalks on Gough Street.

Identified Issues and Needs

Summarized below are the issues and needs identified by the Sumas community and confirmed by the city planing commission and city council:

Issues

1. Canadian border traffic.
2. Dangerous intersections on Cherry Street, especially at Garfield Street and Front Street.
3. Difficulty making left turn movements on major streets.

Needs

1. For actions to reduce the level of border traffic.
2. To investigate public transit to connect Sumas with Lynden.
3. Sidewalks in residential areas, especially where school age children travel.
4. Intersection improvements.

4. Level of Service Standards

The Growth Management Act requires that the transportation chapter of the county and city comprehensive plans set regionally coordinated level of service (LOS) standards on all principal arterial and transit routes. The definition of level of service is left to the discretion of the local

jurisdiction. HB1487 clarifies that WSDOT is responsible for establishment of LOS on Highways of Statewide Significance (HSS). The portions of SR9 within Sumas are HSS.

Level of service is a road-use standard used to judge how well a road operates. Typically, LOS is based on the amount of time delay experienced by a motorist at a traffic signal or along a road segment. For roadways, LOS A means that the roadway is free-flowing and is free from congestion. LOS F means that the route is so heavily congested that traffic no longer flows in a steady stream—the number of cars exceeds the road’s capacity. Although levels of service are normally defined qualitatively, a standard set of engineering calculations assigns LOS rankings to roads, intersections, or other facilities. Comparing traffic volume with the capacity of a given route segment defines existing levels of service. That same comparison, using projected future traffic volume, yields insight on future levels of service.

Volume to Capacity Ratio

Sumas levels of service will be defined in terms of the peak hour volume-to-capacity ratio (V/C ratio). The V/C ratio is calculated by dividing existing or projected volume of a particular road segment by its capacity in trips per day or per peak hour. If the result ranges from zero (0) to one (1), the section is operating within capacity. As the result nears one (1) and exceeds it, the section will begin to operate less efficiently and safely. Increasing volume-to-capacity ratios imply that as growth occurs, road improvements may have to be made to maintain levels of service.

Level of Service	V/C Ratio Range	Typical Flow Conditions
A	0.0 to 0.5	Free flow; individual users virtually unaffected by presence of others in traffic stream
B	0.5 to 0.7	Within range of stable flow, but presence of others in traffic stream begins to affect individual behavior and freedom to maneuver within traffic stream
C	0.7 to 0.8	Within range of stable flow; individual users significant affected by presence of others
D	0.8 to 0.9	High density, but stable flow; speed and freedom to maneuver are severely restricted; ability to maneuver within traffic stream becomes difficult
E	0.9 to 1.0	Operating conditions are at or near capacity level; all speeds reduced to low, uniform value; freedom to maneuver within traffic stream extremely difficult
F	Greater than 1.0	Forced or breakdown flow; amount of traffic approaching a point exceeds the amount that can transverse point and queue forms; operations within queue characterized by extremely unstable stop-and-go

Table 6-1 Relationship between Level of Service and V/C Ratios		
Level of Service	V/C Ratio Range	Typical Flow Conditions
A	0.0 to 0.5	Free flow; individual users virtually unaffected by presence of others in traffic stream
		waves

While a relationship between V/C ratio and level of service is not strictly defined, the relationship shown in Table 6-1 is typically regarded as a standard and is considered as such in defining the level of service classifications for the City of Sumas.

Sumas Level of Service

The busiest roads in Sumas are SR 9 (~~Halverstiek Road and~~ Cherry Street) and SR 547 (Rock Road). Recent [regional transportation impact studies conducted in conjunction with proposed industriessystem modeling completed by the WCOG](#) showed that SR 9 and SR 547 currently operates at LOS A. [All other road segments within Sumas included in the WCOG model were also found to be operating at LOS A.](#) We therefore conclude that all of Sumas's transportation network is now operating at LOS A. The severe congestion sometimes seen on Cherry Street is not so much a function of roadway LOS as of border-station LOS.

WSDOT has adopted, as an element of its State Highway System Plan, LOS C for state highways in rural areas and LOS D for state highways in urban areas, including SR9 and SR547 in Sumas. For HSS segments within Sumas, WSDOT’s LOS value is binding. Whatcom County is proposing LOS D for county roads within county UGAs, and levels of service matching the affected cities’ LOS in city UGAs. As seen in the policies above, Sumas has adopted LOS D for city-designated principal arterial streets, and LOS D for non-HSS state routes within city limits. WSDOT, Whatcom County, and Sumas therefore have consistent LOS policies within Sumas and its UGA.

5. Action Needed to Correct Existing Deficiencies

There are no facilities in the City of Sumas that are currently operating below the established LOS standard.

6. Traffic Forecasts

The Future Conditions section below contains forecasts of traffic volumes. [Based on the results of regional transportation modeling completed in 2015 by WCOG consistent with land use assumptions developed in conjunction with the county’s 2016 comprehensive plan update, all roadway segments within Sumas that are part of the regional transportation system are anticipated to continue to operate at LOS A through 2036.](#)

7. Finance

Multi-Year Financing Plan

The City of Sumas annually adopts a Six Year Transportation Improvement Program (TIP) as required by the State of Washington. The adoption of the Six Year Program qualifies the city to receive ~~either Urban Arterial Trust Account (UATA) or Transportation Improvement Account (TIA) funds~~ federal and state grants, including grants made available by the state Transportation Improvement Board (TIB). The city’s Six Year Transportation Program, shown below, displays all major roadway improvements scheduled during the first six years of the planning period. In some cases project completion is dependent on the availability of state and federal funding that has not yet been secured.

Funding Sources

The TIP reveals a reliance upon three sources of funds. First is revenue from the local option gas tax. Second is FHWA funds that are anticipated to be procured through the ~~auspices of the IMTC, in association with expansion of the port of entry facility in 2008~~ federal Surface Transportation Program, which is coordinated through the WCOG. Third is state TIB funds, which ~~are likewise anticipated to be received when the border-related work is undertaken~~ include grants made available on an annual basis based on the results of a competitive application process.

Table 6-2 City of Sumas Six Year Transportation Improvement Program: ~~20042016-20092021~~

<u>Project</u>	<u>Work Description</u>	<u>Non-Local Funds</u>	<u>Local Funds</u>	<u>Cost</u>	<u>Year</u>
<u>Bob Mitchell Avenue Overlay Gough Street Rebuild</u>	<u>Asphalt Overlay From Vancouver to Mitchell</u>	0	<u>9510,000</u> Gas tax	<u>9510,000</u>	<u>20052016</u>
<u>Cherry/Garfield Signalization Lawson Street Rebuild</u>	<u>Signalization R ebuild from Second to Third Street</u>	<u>180,000</u> FHWA <u>0</u>	<u>2012,000</u> Gas tax	<u>20012,000</u>	<u>20082017</u>
<u>Third Street Rebuild</u>	<u>Rebuild from Sumas Avenue to Lawson Street</u>	<u>0</u>	<u>50,000</u>	<u>50,000</u>	<u>2019</u>
<u>First Street Rebuild</u>	<u>Rebuild from Sumas Avenue to Lawson</u>	<u>0</u>	<u>50,000</u>	<u>50,000</u>	<u>2020</u>

	<u>Street</u>				
<u>New East-West Connector</u>	<u>Construct new road within UGA to connect Hovel Road to SR 9</u>	<u>2,000,000</u> = <u>Developer</u>	<u>0</u>	<u>2,000,000</u>	<u>2025*</u>
<u>Garfield Street Reconstruction</u>	<u>Design and reconstruction from Gough Street to Heron Lane</u>	<u>1,020,000</u> - <u>TIB</u>	<u>100,000</u>	<u>1,120,000</u>	<u>2021</u>
<u>Auto-queuing Area Hovel Road Sidewalk</u>	<u>Construct auto queuing area at bordersidewalk on west side connecting to the ball fields</u>	<u>2,673,000</u> FHWA/TIB <u>38,000</u> - <u>Developer</u>	<u>2738,000</u> <u>Gas tax</u>	<u>2,70076,00</u> <u>0</u>	<u>200820</u> <u>16-2018</u>
<u>Totals</u> <u>20042016-20092021</u>		<u>2,853,0001</u> <u>,058,000</u>	<u>142260,000</u>	<u>2,995,0001,3</u> <u>18,000</u>	

* Unfunded project not within the 6-year TIP timeframe.

None of the projects listed in the most recent TIP is identified as being federally funded; however, the city has identified two additional projects that are eligible for federal STP funding that are anticipated within the 20-year planning period, but beyond the first six years. These projects include the replacement of the Cherry Street (SR 9) bridge over Johnson Creek and the reconstruction of Sumas Avenue. The bridge replacement project will help reduce congestion on the state highway and has an estimated cost of \$3,000,000. The Sumas Avenue project includes reconstruction from Front Street (SR 547) to Garfield Street and has a cost estimate of \$2,300,000. Completion of both of these projects will only be possible when federal and state funding becomes available. At the current time, the city does not anticipate the adoption of transportation impact fees.

8. Intergovernmental Coordination

Sumas's policies supporting intergovernmental coordination are included in the Goals and Policies section above. This Transportation Element has been developed consistent with the Regional Transportation Plan developed by the Whatcom Council of Governments, serving as the Regional Transportation Planning Organization.

9. Demand Management Strategies

Sumas's policies supporting demand management strategies, including development of non-motorized transportation and park-and-ride facilities, are [included](#) in the Goals and Policies section above. [The city currently utilizes signage on northbound SR 9 to direct truck traffic off of Cherry Street and through the industrial district when congestion occurs on the state highway approaching the international border crossing. At present, this signage is activated manually by the Sumas police department based on observed levels of congestion.](#)

Existing Conditions

Basic Transportation System

State Route 9 ([Cherry Street](#)), State Route 547 (Rock Road), and the Burlington Northern Railroad form the regionally significant elements of the city's transportation system. SR9 is part of the Federal Highway System and is a designated Highway of Statewide Significance. SR 9 provides access to the international border crossing with Canada. The operations of the international border crossing facilities by U.S. and Canadian Customs cause the single most significant impact affecting the general performance of the city's transportation system. Other significant roads [that are part of the regional system](#) providing access [within and](#) to Sumas include [Bob Mitchell Way, Hesselgrave Way, Garfield Street, Sumas Avenue](#), Jones Road, Halverstick Road, ~~[Easterbrook Road](#)~~, and Hovel Road. [See Figure 6-1.](#)

Roadway Classifications

There is a direct relationship between roadway functional classification and roadway design standards. Federal, State, and local agencies adopt roadway design standards to carry vehicular traffic volume at specific speeds. The American Association of State Highway Traffic Officials (AASHTO) has adopted standards that are the bench marks for most road design standards. The city has adopted, by ordinance, AASHTO standards for new roads as part of the city's subdivision development standards. These standards are not applicable to existing city roads.

R.C.W. 35.78.10 and R.C.W. 47.26.180 require local jurisdictions to adopt a street classification system consistent with state and federal requirements. R.C.W. 35.78.010 identifies the classification system and definitions by which cities are to classify the street system. R.C.W. 47.26.180 has a provision that allows cities outside Census designated urban areas to develop one category of arterial streets. SMC 9.08.010 sets the arterial roadway classifications within the city. Cherry Street and Front Street are classified by the city as arterial [streets](#).

Access Control Classification

R.C.W. 47.50.010 required that all state routes be designated by WSDOT with an access control classification. Highway access classifications identify the number of, and the distance between, entrances on a particular roadway segment. Because turning movements disturb the traffic flow, roads with fewer access points may accommodate higher speeds. In 1993, WSDOT established highway access classifications for all state routes. In Sumas, SR 9 from ~~[Barbo Road](#)~~[the southern city limits](#) to the Canadian Border is classified as a Class 5 facility, and SR 547 (Front Street) from the Sumas east city limits to SR 9 (Cherry Street) is categorized as a Class 4 facility. Class 4 highways typically post speed limits between 35 and 45 mph, with intersections spaced a minimum 0.5 miles apart. Driveways are generally required to be at least 250 feet apart. Both classes allow a high level of vehicle access and typically have fairly low speed limits.

Traffic Volumes

Traffic volumes represent the number of vehicles that pass a point on a road during a specified time. Because volumes vary hourly, daily and seasonally, roads are normally designed to meet the highest volume (peak). Congestion occurs when the traffic volume equals and exceeds the road's capacity. As the population of a region grows, traffic increases proportionally causing congestion on roadways.

~~Using lines of varying widths, Figure 6-1 shows the evening peak traffic volumes recorded by WCCOG along local roadways in the City of Sumas. WCCOG's traffic counts were conducted between October 1 and December 31, 1993. Figure 6-2 shows where each of WCCOG's traffic counts was taken on the local streets for this study. Figure 6-1 also displays handwritten ADT values measured by WSDOT in 1997.~~

~~Table 6-3 presents recent traffic count data for the major roads within the city that are included in the regional transportation system. For each road segment, traffic counts are provided for total average daily trips (ADT) and for the peak hour. Traffic counts are provided for both travel directions. Where data were not available from WSDOT, traffic count data were supplemented with data results from the WCOG regional transportation model, which has been calibrated to closely match existing traffic count data.~~

~~Table 6-3: Traffic Counts on Streets in the Regional System, 2013~~

Street Segment	ADT	ADT	Peak Hour	Peak Hour
	N or E	S or W	N or E	S or W
SR 9 north of Front Street	3,578	3,881	315	259
SR 9 south of Front Street	3,954	4,018	359	325
SR 547 east of SR 9	1,181	1,144	112	101
Bob Mitchell Way	319	373	26	32
Garfield Street west of SR 9	964	1,179	96	96
Sumas Avenue north of Front Street	306	258	37	31
Hovel Road	215	165	19	17

~~Source: WSDOT traffic counts compiled by WCOG and supplemented with results from the WCOG regional transportation model.~~

~~The roads with the heaviest traffic volumes are is generally SR 9 (Halverstick Road) and Cherry Street) to the Canadian border. This is due to the concentration of retail and commercial activities along Cherry Street and the proximity to the Canadian border. As shown in Figure 6-1 the table, most traffic in the city is on the street system north of Front Street. The local streets with the heaviest traffic volumes are Sumas Ave and the east-west streets north of the Sumas River/Johnson Creek that connect Railroad Street, Cherry Street and Sumas Ave. It is apparent that motorists are using the city's street network to by pass traffic on Cherry Street to reach the international border as quickly as possible.~~

~~The lack of a sufficient auto queuing area at the border results in large queues that form down the length of Cherry Street, and occasionally onto Halverstick Road that at times extend south of~~

Front Street. Adding to the queue delays are the numerous turns resulting from the curb cuts for local business along both sides of Cherry Street from Front Street to the Canadian border.

The above traffic estimates were analyzed in relation to volume to capacity ratios (V/C) and the adopted level of service (LOS) standards discussed earlier in this chapter. The results of this analysis are shown in Table 6-4.

Table 6-4: Traffic Congestion on Streets in the Regional System, 2013

	<u>V/C</u>	<u>V/C</u>	<u>LOS</u>	<u>LOS</u>
<u>Street Segment</u>	<u>N or E</u>	<u>S or W</u>	<u>N or E</u>	<u>S or W</u>
<u>SR 9 north of Front Street</u>	<u>0.4</u>	<u>0.36</u>	<u>A</u>	<u>A</u>
<u>SR 9 south of Front Street</u>	<u>0.4</u>	<u>0.36</u>	<u>A</u>	<u>A</u>
<u>SR 547 east of SR 9</u>	<u>0.11</u>	<u>0.05</u>	<u>A</u>	<u>A</u>
<u>Bob Mitchell Way</u>	<u>0.03</u>	<u>0.04</u>	<u>A</u>	<u>A</u>
<u>Garfield Street west of SR 9</u>	<u>0.06</u>	<u>0.05</u>	<u>A</u>	<u>A</u>
<u>Sumas Avenue north of Front Street</u>	<u>0.05</u>	<u>0.04</u>	<u>A</u>	<u>A</u>
<u>Hovel Road</u>	<u>0.03</u>	<u>0.02</u>	<u>A</u>	<u>A</u>

Source: WCOG.

Based on this analysis, all of the above roadways that are included in the regional transportation system are operating at LOS A. Figure 6-2 presents the results of the WCOG model in terms of both volume and LOS.

Pavement Conditions

Most Sumas arterials are in excellent or good condition, as shown on **Figure 6-3**. This information was collected during a “windshield” survey and does not reflect an engineering analysis of pavement conditions. The range of pavement conditions used was: Excellent, Very-Good; Good; Fair-Poor; and Unknown. Excellent and Very-Good are pavements that are new with no cracks, deflections, or utility cut repair patches. Good pavements are somewhat older in age with a relatively few amount of cracks, utility cut repair patches, or deflections. Pavements rated in Good condition had some cracks, utility cut repair patches, pavement may be raveling, and street edges may be beginning to break up. Fair-Poor street pavements had a large number of cracks, or utility cut repair patches. Fair-Poor pavements also had a large amount of the surface breaking up from the edges to centerline. Streets needing repair based on Fair-Poor include:

- Gough Street from Vancouver Street to the street end.
- Lawson Street between Second and Third Streets.
- Morton Street from Lawson Street to the street end.
- Third Street between Sumas Avenue and Lawson Street.

The streets in Fair-Poor condition experience relatively small amounts of traffic, so it is not critical to make immediate ~~reconstruction~~ repairs to these facilities.

Accidents and Safety

Analysis of 1991 and 1992 accident records provided trends and locational information. A total of 48 reported accidents occurred in the two-year period, as shown on Table 6-1 and Table 6-2. Thirty-six of the accidents occurred along Cherry Street (State Route 9). This triples the number of accidents (12) reported in the Sumas Border Study by Kittleson & Associates, Inc. for the proceeding three years (1987-1990). The increase in the number of collisions reflects the increase in border traffic, growth of retail trade in the area and overall general worsening of traffic conditions along the Cherry Street corridor. As seen in Figure 6-6, most accidents occur north of Third Street on Cherry Street. Table 6-5 presents the total number of accidents (collisions) recorded in the Sumas Police Department's database for the years, 2012-2015. As can be seen, the number of collisions varied somewhat through this four-year time period. The largest numbers of reportable collisions were considered "reportable, non-injury." Table 6-6 presents the total numbers of accidents during the four-year period that were reported on the busiest streets in the city. By far the largest number of collisions occurred on Cherry Street (SR 9).

Table 6-5: Collision History by Year, 2002-2015

<u>Year</u>	<u>Reportable, Injury</u>	<u>Reportable, Non-Injury</u>	<u>Non-reportable/ Other</u>	<u>Total</u>
<u>2012</u>	<u>0</u>	<u>15</u>	<u>13</u>	<u>28</u>
<u>2013</u>	<u>2</u>	<u>5</u>	<u>12</u>	<u>19</u>
<u>2014</u>	<u>2</u>	<u>14</u>	<u>10</u>	<u>26</u>
<u>2015</u>	<u>1</u>	<u>7</u>	<u>11</u>	<u>19</u>

Table 6-6: Collision History by Street, 2012-2015

<u>Street</u>	<u>Reportable, Injury</u>	<u>Reportable, Non-Injury</u>	<u>Non-reportable/ Other</u>	<u>Total</u>
<u>Cherry (SR 9)</u>	<u>5</u>	<u>27</u>	<u>21</u>	<u>53</u>
<u>Front Street</u>	<u>0</u>	<u>4</u>	<u>*</u>	<u>13</u>
<u>Garfield Street</u>	<u>0</u>	<u>7</u>	<u>2</u>	<u>9</u>
<u>Sumas Avenue</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>4</u>
<u>Bob Mitchell</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>

U.S. Canadian Border Crossing

The international border crossing at Sumas is the single most important source of traffic in Sumas, and also the primary source of traffic congestion. The border crossing in Sumas is one of two 24-hour commercial and passenger vehicle crossings located in Whatcom County. The crossing is located approximately 25 miles from Interstate 5 and one mile from the Trans-Canada Highway. Total [automobile](#) crossings in Sumas are approximately one-fourth of the combined

number of crossings at the two ports of entry in Blaine and about fifty percent greater than the number of crossings at Lynden-Aldergrove. Automobile crossings at Sumas account for approximately 17 percent of the total crossings at the four ports of entry from Blaine to Sumas. For those traveling to and from Bellingham, one route is through Sumas along SR 9, connecting then with SR 546 (Badger Road), SR 544 (Pole Road), or SR 542 (Mt. Baker Highway).

Total vehicle crossings ~~today are~~ in 2014 were down substantially by approximately 7 percent from the prior year a decade ago. ~~In the early 1990s, a number of studies evaluated the destinations of those crossing the border. One study showed that more than two thirds of the border crossings at Sumas did not have destinations beyond city limits. Things have changed profoundly since then.~~ The declining Canadian dollar led to a drastic reduction in the number of Canadians choosing to shop in Sumas. This pattern of decline continued in 2015, during which time automobile crossings declined by an additional 19 percent from 2014. ~~The actual count of southbound vehicles by U.S. Customs in calendar year 2000 was 941,959 (123,420 trucks and 818,539 cars). The two-way AADT on SR9 (Garrison Road) as measured by WSDOT in 2000 was 5,000, which corresponds to an annual one-way southbound traffic volume of about 912,000. This is only slightly less than the southbound traffic measured at the border. It seems clear that of those crossing the border, the vast majority are now passing through Sumas to other destinations.~~ However, the trend prior to 2014 showed a dramatic increase in auto crossings. From 2009 to 2013, automobile crossings increased by over ninety percent.

In 2014, there were over 1,072,000 automobile crossings northbound and over 1,130,000 auto crossings southbound. In the same year, there were over 119,000 truck crossings northbound and over 149,000 truck crossings southbound at the Sumas-Abbotsford port of entry. ~~The latest count of southbound traffic at U.S. Customs (131,455 trucks and 599,730 cars in 2003) shows a continued decline in automobile traffic and a small increase in truck traffic. Truck traffic has steadily increased over the past decade, in contrast to the pattern of automobile traffic generally increased by 2 to 5 percent per year over the past four years.~~ The large difference between the northbound and southbound truck volumes can be explained in part based on the limitations on truck crossings southbound at the Lynden crossings. It appears that some trucks that cannot cross into the U.S. at Lynden use the Sumas crossing southbound and enter Canada through the Lynden-Aldergrove crossing, which is assumed to be the closer port to their origin/destination in Canada.

In 2012, NEXUS lanes were established at the Sumas border crossing. Vehicles using the NEXUS lanes accounted for approximately 16 percent of the northbound automobile crossings in 2014. This percentage increased to 22 percent in 2015.

~~State Route 9 Alternate Route Analysis~~

~~In 2001, a TEA-21 grant was received by the IMTC project to undertake a traffic management study within the Sumas city limits. In that study, Sumas established preferred short and long-term solutions to the problem of how best to move international traffic through town. Solutions identified through the process are as follows:~~

- ~~☐ Create auto-queuing area at north end of Cherry Street~~
- ~~☐ Create truck-queuing area at north end of Sumas Avenue~~
- ~~☐ Create truck bypass route along Johnson Street, leading to a new truck crossing plaza to be located on the west side of the rail main line~~

Overland Freight

Transportation of goods by trucks often affects a transportation system. Trucks accelerate ~~slower~~more slowly, are less maneuverable and have longer stopping distances. Vehicle weight also affects local road conditions by decreasing the durability of the road surface.

~~In 1992 a study of Whatcom County international truck crossings, was conducted by WCCOG and a WSU graduate student. According to the study data compiled by the WCOG, truck crossings at the Sumas International border crossing represent approximately 22-24 percent of heavy vehicle traffic crossing the border in mainland Whatcom County. Most traffic enters the county from the Peace Arch and Pacific Highway crossings in Blaine. In Sumas, Cherry Street (SR 9) serves as the commercial vehicle route for through-vehicles meeting U.S. weight restrictions, to and from the international border.~~

~~The 1992 study also provided information regarding travel patterns that trucks take in the western county area. As seen in Figure 6-7, only 11.1 percent of total observed truck trips chose the SR-9 route through the City of Nooksack. Only 2.2 percent of trucks traveling to or beyond Bellingham use SR-9. Most trucks crossing the Sumas border use Badger Road (SR 546) to the Guide Meridian (SR 539) to Interstate 5.~~

~~No information is available that identifies locally generated truck trips or travel behavior patterns. For 2013, the U.S. Department of Labor, Bureau of Labor Statistics estimated that goods valued at over two billion dollars passed through the Sumas-Abbotsford border crossing, with the largest commodity components including manufacturing and wood products.~~

As part of the development of the Sumas Cargo Terminal facility, the Port of Bellingham, received a grant from the U.S. Economic Development Administration to construct a truck overload road from the International Port of entry to the Cargo facility. Due to the lower U.S. weight standards the U.S. road system cannot support the Canadian trucks. The construction of Bob Mitchell Way was necessary because of these weight standard differences. Bob Mitchell Way was constructed to allow commercial vehicles that meet Canadian weight restrictions entry to the U.S. and access to the Sumas Cargo Terminal. In the terminal, cargoes are trans-shipped to rail or other vehicles that meet U.S. weight restrictions. The heavy-load haul road was

extended an additional 1,700 feet in 1997, and is now present as a frontage road parallel to [Halverstiek Road \(SR9\)W. Front Street](#) that services the west end of the Sumas industrial zone.

Rail Systems

The Burlington Northern Railroad operates a north-south rail line that runs west of Cherry Street. The line connects Sumas to Sedro Woolley and continues southwest to Burlington where it connects to the primary north-south rail corridor ([see Figure 6-8](#)). The route has moderate freight volumes between three and five million gross ton-miles per mile and will continue to be an active part of the Burlington Northern freight operations. A spur line also runs west to the City of Lynden. Freight trains use this spur approximately once a week.

As of March 1995, passenger rail service in Whatcom County was reinstated. West Coast Amtrak provides twice-daily service along the coast from Seattle to Vancouver, B.C., with stops in Everett, Mt. Vernon, and Bellingham.

The U.S. Congress formally designated the Portland, Oregon to Vancouver, British Columbia rail corridor as a high-speed passenger rail corridor. The designation has provided the impetus for the Washington State Legislature to enact Chapter 231, Laws of 1991 (SHB 1452), directing that a comprehensive feasibility assessment be conducted for developing a high-speed ground transportation system in Washington State. A preliminary long range high-speed rail plan was completed by the High Speed Ground Transportation Steering Committee in October 1992. The high-speed rail service would operate at speeds in excess of 150 miles per hour, as compared to the existing 80 miles per hour speeds.

One preliminary proposal for the location of the system identifies the use of the same SR 9 corridor used by the present Burlington Northern Railroad. A proposed station at Nugents Corner (15 miles south of Sumas) would provide residents access to the system. The system would provide access to Vancouver, B.C., Skagit County, Seattle, Sea-Tac Airport, Olympia, Vancouver, WA and Portland, Oregon. Construction of the high-speed rail system may also provide city residents supplemental benefits, such as connecting bus or shuttle service. The actual location of the route and station may change as the planning process continues. Two major obstacles to completion of the high-speed rail are financing and negotiation of rights-of-way.

Air Transportation

The nearest air facility is the municipal airport of the City of Abbotsford, B.C. The Abbotsford airport is a surplus military facility taken over by Abbotsford in 1996. As population grows in the Fraser Valley, and as the Vancouver airport becomes busier, the Abbotsford airport [becomes will become](#) increasingly important. Flights are now available to inland Canadian cities (Regina, Calgary) and to resort destinations in the U.S. (e.g., Reno). In Whatcom County, the nearest airport is the Lynden Municipal Airport, primarily used by private aircraft and charters. The Bellingham International Airport, operated by the Port of Bellingham, provides commercial air carrier and charter services.

Scenic and Recreational Highways Program

The 1991 Transportation Budget (ESHB 1231) directed a review of all state routes for inclusion in the Scenic and Recreation Highway System. The goal of the program ~~is~~ was to identify those highways that have significant natural, cultural or recreational characteristics and to work with local governments to protect the resources from undesirable or inappropriate development. Front Street (SR547) was included in 1969 and the entire length of SR 9 (~~including both W. Front and Cherry St.~~) was included as part of a 1991 system expansion study. Although no mandatory regulations exist, the city should consider development actions consistent with the intent of the legislation.

Commute Patterns

The ~~1990-2010 census~~ American Community Survey provides a variety of information on the commute patterns and behavior of the employed Sumas residents aged sixteen years or older as shown in Tables 6-~~37~~, 6-~~48~~ and 6-~~59~~. Table 6-~~37~~ shows that of the ~~397-476~~ employed city residents, ~~76-78~~ percent drove alone, ~~40-7~~ percent carpooled, ~~7-14~~ percent walked, ~~5-0~~ percent commuted by some other means (bicycle, taxi or public transit), and ~~3-2~~ percent worked at home.

Table 6-7: Means of Transportation Used to Work

<u>Means</u>	<u>Number</u>	<u>Percentage</u>
<u>Drove Alone</u>	<u>371</u>	<u>78 %</u>
<u>Carpooled</u>	<u>31</u>	<u>6.5 %</u>
<u>Walked</u>	<u>67</u>	<u>14 %</u>
<u>Other</u>	<u>0</u>	<u>0 %</u>
<u>Worked at Home</u>	<u>7</u>	<u>1.5 %</u>
<u>Total</u>	<u>476</u>	<u>100 %</u>

Source: 2010 U.S. Census, American Community Survey.

Table 6-~~48~~ shows that 11 percent of the work force begin their commute before 6:00 a.m. Over one-half the commuters left home between 6:00 a.m. and 8:00 a.m.

Table 6-8: Time Leaving Home to Go to Work

<u>Time</u>	<u>Number</u>	<u>Percentage</u>
<u>12:00 a.m. to 4:59 a.m.</u>	<u>15</u>	<u>3.2 %</u>
<u>5:00 a.m. to 5:59 a.m.</u>	<u>35</u>	<u>7.5 %</u>
<u>6:00 a.m. to 6:59 a.m.</u>	<u>121</u>	<u>25.8 %</u>
<u>7:00 a.m. to 7:59 a.m.</u>	<u>118</u>	<u>25.2 %</u>
<u>8:00 a.m. to 8:59 a.m.</u>	<u>37</u>	<u>7.9 %</u>
<u>9:00 a.m. to 11:59 a.m.</u>	<u>143</u>	<u>30.5 %</u>
<u>Total</u>	<u>469</u>	<u>100 %</u>

Source: 2010 U.S. Census, American Community Survey.

Table 6-5-9 shows that approximately 70 percent of the employed residents worked within twenty minutes from their place of residence. Approximately 6 percent spent more than one hour commuting to work. Over fourteen percent of the employed work force commute between 20 and 44 minutes.

Table 6-9: Travel Time to Work

<u>Commute Time</u>	<u>Number</u>	<u>Percentage</u>	<u>Cumulative Percentage</u>
<u>Less than 10 minutes</u>	<u>115</u>	<u>24.5 %</u>	<u>24.5 %</u>
<u>10 to 19 minutes</u>	<u>125</u>	<u>26.6 %</u>	<u>51.1 %</u>
<u>20 to 29 minutes</u>	<u>70</u>	<u>14.9 %</u>	<u>66.0 %</u>
<u>30 to 44 minutes</u>	<u>95</u>	<u>20.3 %</u>	<u>86.3 %</u>
<u>45 to 59 minutes</u>	<u>48</u>	<u>10.2 %</u>	<u>96.5 %</u>
<u>60 or More Minutes</u>	<u>16</u>	<u>3.5 %</u>	<u>100 %</u>
<u>Total</u>	<u>469</u>	<u>100 %</u>	<u>100 %</u>

Source: 2010 U.S. Census, American Community Survey.

Demand Management Strategies and Commute Assistance

Currently, WTA offers Monday through Saturday demand response services to the general public. Users of the service phone WTA and ask for service at a particular time and pick-up point. WTA then transports the person to Lynden, a location where fixed-route service is available to connect to Bellingham and other points within Whatcom County. WTA also offers van-pool service in Sumas.

Public Transit

~~There is no~~ The WTA provides fixed route public transit service ~~in to~~ the City of Sumas. ~~WTA provides this service to Bellingham, Lynden, Ferndale, Blaine, and other areas inside the Public Transportation Benefit Area (PTBA). Although Sumas is in the PTBA, WTA has no plans to extend fixed route service to Sumas, because of low rider volumes. As mentioned above, WTA operates a dial a ride program connecting Sumas to Lynden~~ This service includes four buses per day from Bellingham to Sumas and five buses per day from Sumas to Bellingham. WTA also offers flex-service in Sumas and the surrounding area where riders who are unable to travel to a bus stop on the fixed route can arrange for a regularly scheduled bus to make a stop at a location within the defined “flex” service area.

Private Taxi Service

There are no taxi services based in Sumas. However, several taxi companies provide county-wide service, which would include service to Sumas and the surrounding community. ~~There are only a few companies that own vehicles that are wheelchair accessible. Table 6-6 lists the taxi and~~

~~shuttle bus companies who provide county wide service as compiled by the Whatcom County Council of Governments in 1993.~~

Bicycle Facilities

Bicycles serve many purposes in a community. They provide a source of low-cost transportation and mobility to youths and residents who do not drive. In addition, many residents use bicycling for recreation. There are no designated bicycle facilities in the city. The local street system with the low speed limits and volumes has served as the bicycle network.

The proposed Bay-to-Baker Trail would connect Sumas with Bellingham to the southwest and Mt. Baker to the east, ~~shown in Figure 6-11~~. The trail proposes using abandoned rail right-of-way for most of its 74-mile project. The segment of the Trail near Sumas would run along the abandoned C.M.S.T.P.&P. Rail line at the south of town. The Bay-to-Baker Committee does not have title to this facility. The city will continue to be active in reviewing plans for routing within the city limits.

Pedestrian Facilities

Access sidewalks ~~may~~ provide a convenient and safe route for pedestrians to use that is separate from the road ways. Sidewalks are most important in the areas of high traffic and higher residential densities. A complete sidewalk network in high-density areas ~~will~~ would provide an alternative ~~means-mode~~ route for transportation.

Figure 6-~~12-4~~ shows that sidewalks are mainly found in commercial areas of the city. The City is gradually building a network of sidewalks throughout the older residential core area.

Future Conditions

Future roadway conditions will be influenced by both *regional* and *local* factors, each of which is analyzed briefly below.

Regional factors

- Cross-border truck traffic. Cross-border truck traffic is expected to grow at an annual rate of ~~at least 4.6~~ between 2 and 5 percent over the coming twenty-~~one~~ years (2015-2036). Applying ~~that a 3 percent~~ rate to existing southbound truck crossings at Sumas, about ~~323,150~~ 285,280 trucks per year (~~885-780~~ per day) can be expected to cross southbound at Sumas. This is a ~~245~~ an 86 percent increase over today's volumes. A similar percentage increase in the number of northbound trips can be assumed. Accommodation of this large volume of truck traffic ~~will~~ may not be feasible with today's pattern of roadways within town, although recent changes on the state highway directing truck traffic to use the heavy haul road (Bob Mitchell Way) has helped shift truck traffic off of Cherry Street through the downtown area. An IMTC sponsored traffic planning process took place in 2001 and involved collaboration with WSDOT, BC MOTH, and Abbotsford to develop a plan for accommodation of anticipated

~~truck traffic. The most feasible solution involved acquisition of property near the border to build a queuing area. As of 2004, this recommendation has been tabled pending completion of a port expansion study underway by U.S. Customs. Any change to the truck queuing area has to dovetail with changes in the actual port facilities.~~

- Growth in lower mainland. The Fraser Valley region of the lower mainland is experiencing rapid growth at this time and the trend is expected to continue over the planning period. The increasingly large population in the Abbotsford area will lead to increasing use of the Sumas crossing point over time. ~~The 2001 IMTC planning process produced a recommendation for construction of additional auto queuing lane capacity in the area immediately south of the port of entry. As of 2004, this recommendation has been tabled pending completion of a port expansion study underway by U.S. Customs. Any change to the automobile queuing area has to dovetail with changes in the actual port facilities.~~ Improvements to queuing areas both northbound and southbound have been made in recent years that have helped reduce congestion, but congestion remains a significant problem.
 - Cross-county corridor. The 1996 GSA border business plan put forward the notion of an east-west connection from Sumas to I-5. The connection would acknowledge the population growth referred to above, and would also facilitate shifting of traffic from one crossing point to another, depending upon queue lengths experienced at a given time. The Gateway Pacific shipping terminal project contemplates a similar east-west connection in order to facilitate movement of cargo from Cherry Point into the continental interior via the Trans-Canada Highway alignment. The City of Sumas supports the cross-county corridor concept and also supports an alignment that has an eastern terminus at Sumas.
- ~~□ SR9 realignment. WSDOT owns an undeveloped right-of-way extending due south adjacent to the B-N rail line from the south end of Cherry Street (SR9) to the Badger Road. WSDOT intends to reconstruct SR9 on this alignment. The new alignment will have better access management than the existing highway, so it is expected that the new alignment will have higher capacity and will attract regional traffic to the Sumas border crossing. The realignment has been considered by the City when establishing zoning in the south end of town.~~

Local factors

- Local growth. As described in the Land-use and Housing elements, **a total of 291** new housing units are anticipated in Sumas in the coming 20 years. The impact of Sumas's residential growth will primarily affect roadways at the south end of town. The effect of Sumas's commercial and industrial growth will impact the state highways and the heavy haul roads in the industrial area.

The predicted effect of these regional and local factors is revealed by the results of modeling that has been performed by WCOG. ~~Figures 6-13 and 6-14 are designed to show~~ Table 6-6 presents the model results in relation to the major roadway segments within Sumas that are part of the regional transportation system. Model results are presented in terms of both average daily trips (ADT) and peak hour trips. Figure 6-13 shows the status quo as of the year 2000, calibrated to traffic counts collected from WSDOT, Whatcom County, and other jurisdictions. Figure 6-14 shows traffic anticipated in the year 2022, assuming no population growth occurs in Sumas. By comparing the differences in traffic counts between the two figures, it is possible to identify the impacts of

regional factors. For instance, the sum of the traffic on the three roads that converge at the south end of town is 7,338 in 2000 (i.e., 1,345 on Rock Road, 5,938 on Halverstiek Road, and 55 on Easterbrook Road). By 2022, that value is expected to grow to 10,248 (i.e., 3,446 on Rock Road, 300 on Halverstiek Road, and 6,502 on Easterbrook Road). The figures reveal about a 40 percent increase in traffic due to regional factors. The results presented in Table 6-10 can be compared to those included in Table 6-3 to see the increases in volume anticipated over the course of the planning period on the major roadways in Sumas.

Local factors

□ Local growth. As described in the Land-use and Housing elements, a total of 268 new housing units are anticipated in Sumas in the coming 20 years. Figure 6-15 is designed to help understand the impact of this growth. It shows the same regional scenario as in Figure 6-14, but also includes the new housing in Sumas. The impact of Sumas’s growth can therefore be deduced by comparing Figures 6-14 and 6-15. Referring again to the three roads that converge at the south end of town, a total count of 11,487 is revealed (i.e., 4,205 on Rock Road, 354 on Halverstiek Road, and 6,928 on Easterbrook Road), which is 1,239 more trips than shown in Figure 6-14. The effect of Sumas’s growth therefore amounts to a 17 percent increase over the 2000 baseline condition (i.e., 1,239 trips compared to a baseline of 7,338).

Table 6-10: Traffic Model Results for Streets in the Regional System, 2036

<u>Street Segment</u>	<u>ADT N or E</u>	<u>ADT S or W</u>	<u>Peak Hour N or E</u>	<u>Peak Hour S or W</u>
<u>SR 9 north of Front Street</u>	<u>5,116</u>	<u>5,985</u>	<u>362</u>	<u>351</u>
<u>SR 9 south of Front Street</u>	<u>6,058</u>	<u>6,233</u>	<u>497</u>	<u>466</u>
<u>SR 547 east of SR 9</u>	<u>2,225</u>	<u>2,051</u>	<u>188</u>	<u>195</u>
<u>Bob Mitchell Way</u>	<u>456</u>	<u>522</u>	<u>48</u>	<u>46</u>
<u>Garfield Street west of SR 9</u>	<u>1,343</u>	<u>1,584</u>	<u>107</u>	<u>113</u>
<u>Sumas Avenue north of Front Street</u>	<u>1,137</u>	<u>806</u>	<u>173</u>	<u>98</u>
<u>Hovel Road</u>	<u>368</u>	<u>258</u>	<u>41</u>	<u>27</u>

Source: WCOG regional transportation model.

Regional factors appear to will likely be the dominant factors affecting traffic growth near Sumas. The table below shows the p.m. peak hour capacity of various types of roads at various levels of service. Sumas and WSDOT have adopted LOS D for arterials in the city. The table shows that a 2-lane arterial has a peak hour capacity of about 1,420 trips at LOS D. Local growth will obviously consume a relatively small portion of the capacity of local roadways. Regional factors will outweigh local growth. As stated previously in this chapter, LOS D has been adopted for all roadways within the Sumas UGA. Table 6-11 presents the future traffic volumes in terms of V/C and LOS to analyze future congestion on roadways within the regional system.

Table 6-11: Traffic Congestion for Streets in the Regional System, 2036

	<u>V/C</u>	<u>V/C</u>	<u>LOS</u>	<u>LOS</u>
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<u>Street Segment</u>	<u>N or E</u>	<u>S or W</u>	<u>N or E</u>	<u>S or W</u>
<u>SR 9 north of Front Street</u>	<u>0.46</u>	<u>0.49</u>	<u>A</u>	<u>A</u>
<u>SR 9 south of Front Street</u>	<u>0.56</u>	<u>0.52</u>	<u>B</u>	<u>B</u>
<u>SR 547 east of SR 9</u>	<u>0.24</u>	<u>0.15</u>	<u>A</u>	<u>A</u>
<u>Bob Mitchell Way</u>	<u>0.06</u>	<u>0.05</u>	<u>A</u>	<u>A</u>
<u>Garfield Street west of SR 9</u>	<u>0.05</u>	<u>0.05</u>	<u>A</u>	<u>A</u>
<u>Sumas Avenue north of Front Street</u>	<u>0.23</u>	<u>0.13</u>	<u>A</u>	<u>A</u>
<u>Hovel Road</u>	<u>0.06</u>	<u>0.04</u>	<u>A</u>	<u>A</u>

Source: WCOG regional transportation model.

Based on analysis of the projected traffic volumes presented in Table 6-6, all roadways within the Sumas UGA will continue to meet the adopted level of service standard through the year 2036. The 2036 results of the WCOG model are also shown on Figure 6-5 in terms of volume and LOS.

7. Utilities Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. In overview, this chapter presents the general location and capacity of all existing and proposed utilities for the city of Sumas and the surrounding UGA.

The GMA defines electricity, natural gas, and telecommunications as "utilities," and this chapter contains a discussion of each, as well as a discussion of cable television. Water, sanitary sewer, and storm sewer systems are defined as "public facilities" and are addressed in the Capital Facilities Element (Chapter 4). Sumas is unusual in that it owns and operates its own electric utility. The discussion of this utility is therefore more extensive than that of the privately owned utilities. [The financial analysis contained in Chapter 4 includes a detailed discussion of the city electrical utility's financial condition. The final section of the chapter presents goals and policies pertaining to private utilities.](#)

Natural Gas

Existing conditions

Natural gas is provided by the Cascade Natural Gas Corporation ([Cascade](#)). Cascade serves its Whatcom county customers from a Northwest Pipeline Corporation transmission line that originates in Canada, crosses into the U.S. just east of Sumas, and runs south to the Columbia River. A second major line, the ARCO lateral, runs west from the Northwest Pipeline Corporation line across the county to the ARCO refinery, passing just to the south of town.

East of the city, a two-inch service pipeline branches off the Northwest Pipeline Corporation line and runs along Jones Road into Sumas. To the south, another two-inch branch line originating from the ARCO lateral enters the city on Hill Road. These trunk lines are shown on [Map 12](#). Smaller service lines extend from these trunk lines.

The number of customers receiving natural gas fluctuates slightly every month, due to economics, development and weather. In the month of March, [19942016](#), Cascade served [247-459](#) customers in Sumas ([193-390](#) residential, [and 54-66](#) commercial [and 3](#) industrial). ~~With current facilities, approximately 500 additional residential units could be accommodated within Sumas and the surrounding UGA.~~

Future conditions

Future expansion is based on economic feasibility. Cascade Natural Gas's growth includes new residences, commercial uses, and industrial uses, as well as existing buildings converting to natural gas from other forms of power. Factors influencing growth include the relative costs of gas and electricity, regional power planning priorities, and trends in growth and economic development. Because of Sumas's proximity to the Northwest Pipeline Corporation line, there are no physical limits to future natural gas capacity. [When Cascade is contacted by a prospective](#)

customer, a feasibility analysis is conducted and Cascade determines the improvements that would be needed to serve that customer or development and how such costs would be allocated. For major developments, the prospective customer may be required to pay the costs of system improvements necessary to serve the development.

Electricity

Sumas is unusual in that it owns and operates an electric utility that provides service within city limits. The following information about the electric system was provided by the public works director ~~and the city crew.~~

Existing conditions

Source and transmission. Sumas purchases power from the Bonneville Power Administration (BPA), a federally owned electric utility, under a contract that expires ~~on 1 October 2004 at the end of September 2008. A contract extension covering the 2002—2006 period has been executed.~~ BPA generates most of its power at hydroelectric facilities located on the Columbia River. Power from those facilities reaches Sumas through transmission lines operated by BPA and by Puget Sound Energy (PugetPSE). Power is transmitted from the Columbia River to BPA's Custer substation through high-voltage lines owned by BPA. Power is transmitted from Custer to Puget's PSE's Schuett's Corner substation (2 miles south of Sumas) through high-voltage lines owned by PugetPSE. At Schuett's Corner, the voltage is stepped down to 13 thousand volts (kV) and transmitted to Sumas along two routes. One route is along Garrison Road and Halverstick Road, and the other is along Telegraph Road, Hovel Road, and E. Front Street. Both routes arrive at Sumas's South substation, which is located on W. Front Street near the railroad lines. Power is metered at this substation before distribution within the city. **Map 13** shows the two routes, as well as the location of other major electric facilities in town.

Distribution system. The city's distribution system is divided into two basic service areas, Circuit 12 and Circuit 16. As mentioned above, Circuit 12 comes from the southwest along Garrison Road and West Front Street, and Circuit 16 comes from the southeast along Hovel Road and East Front Street, meeting at the intersection of Johnson and West Front Streets. These are metered before going to the distribution service area. The Circuit 12 service area includes all of the area west of the BNSF railroad mainline, making up the Industrial Load, and Circuit 16 serves all of the area east of the BNSF railroad, making up the Commercial and Residential Load. ~~Sumas's distribution system is divided into three basic service areas. These areas are fed from lines originating at either of two substations. The South substation mentioned earlier provides power to two service areas. The first area is the industrial region west of the railroad lines. The city delivers power to large industrial customers at 13 kV (the same voltage as the incoming power) so that the power need not be routed through the city's step-down transformers. This preserves capacity in the substation transformers for other uses. The second area fed by the South substation is the southern half of the main commercial and residential core. Power is stepped down to 2.4 kV at the substation and then distributed throughout the area on overhead lines. Transformers located on power poles are used to step down the power a final time for delivery to customers at 120/240 volts.~~

~~A 13 kV feeder line runs from the South substation to the North substation along the Johnson Street right-of-way west of the tracks. The North substation serves the third service area, which is the north half of the commercial and residential area. Again, the substation steps power down to 2.4 kV for distribution through the neighborhoods.~~

~~The two residential/commercial service areas are connected by the 13 kV feeder mentioned earlier, and also by a major distribution line running along Sumas Avenue. A switch located on this line separates the two areas. This line provides redundancy in the system: should one substation be taken off line, power can be routed to the affected service area by opening the switch. The two substations each now operate at about 60 to 70 percent capacity during peak demand.~~

Conservation program. ~~Sumas has three (3) programs to support conservation. The first one is a City program that offers rebates for a number of ENERGY STAR appliances including clothes washers, dishwashers, refrigerators and water heaters. The second program is the BPA Energy Efficient Incentive, which includes a custom project and a lighting project, plus various other programs. The third program is net metering, which allows Sumas residents and businesses to install renewable systems such as solar and/or wind and receive payment for power delivered to the electrical grid. Sumas operates a program designed to reduce demand for electricity. The program encourages the use of energy efficient lighting, reduced flow shower heads, efficient appliances, etc.~~

Private facilities. Significant privately-owned electric facilities are located in and around Sumas:

- A 123 megawatt gas-fired co-generation facility owned by ~~Sumas Energy, Inc., (SEI)PSE~~ is located on the south side of ~~W.~~ Front Street, near the west city limits. The power generated at the ~~SEI~~ facility ~~is sold to Puget~~ supplies the regional power grid.
- Puget Power owns major facilities located in Sumas and is the provider of electrical service to the unincorporated area surrounding town. ~~Puget's PSE's~~ Sumas substation is located adjacent to the ~~SEI~~ co-generation facility, and two of ~~Puget's PSE's~~ 115 kV transmission lines pass through town along Front Street: the Sumas - Bellingham line, and the Sumas - Lynden line.

~~Puget PSE~~ has a public service obligation to furnish electrical service where and when demanded. Its service levels are regulated by the WUTC. Some of ~~Puget's PSE's~~ existing and proposed facilities are shown on Map 13, ~~and its facilities are described in detail in the company's "Whatcom County Draft GMA Electrical Facilities Plan," dated September 1992.~~

Future conditions

Based on growth in the industrial and residential areas, the City contracted with PSE in 2007 to upgrade Circuit 16 on the Hovel Road, to a larger conductor, and combining this with Circuit 12, enabling the City to increase its load capacity from 5 megawatts to 10 megawatts. In 2009, the City built a new overhead distribution line to feed IKO Pacific, which is the largest power

consumer in Sumas, thereby allowing for more growth on our underground distribution system in the industrial area. As energy demand increases at a given service voltage, the capacity of a given conductor is eventually exceeded. One way to prolong the service life of a conductor is to distribute energy at a higher voltage, thereby allowing the conductor to support new services. The city intends to use this strategy throughout the residential/commercial distribution system. All new transformers installed by the city are dual voltage, working both with the 2.4 kV distribution voltage now in place, and with 7.2 kV. An ongoing project is to replace old transformers with dual voltage units, allowing the eventual conversion of the entire distribution grid to 7.2 kV. This project will span several years, with final switch-over to the new voltage not anticipated before 2003.

The city has updated its service area agreement with PSE, which is before the WUTC. Sumas is currently working on an agreement to purchase PSE facilities that have been annexed into the city and into the city's service area. This would increase the city's customer base by 12 customers.

Sumas constructed a new three (3) phase underground distribution line along Hovel Road to serve the new ball field and the UGA and UGA Reserve areas to the southeast of the city. The City also built a new three phase underground distribution line south along the new SR 9 highway to serve the UGA south of the city. Expansion of the electric service area will require construction of new distribution facilities. The details of minor service expansion projects are insignificant to this analysis. The only currently planned distribution system project involves completion of a 13 kV loop through the industrial zone. There are existing dead-end underground lines running west on Kneuman Road and on Halverstick Road. The two lines should be connected via a new underground 13 kV line along Barbo. Puget has an existing overhead line along Barbo, but no customers are served from the line. The city should negotiate with Puget for removal of the line and should then install the desired underground line. The project can be accomplished by the city crew at a cost of \$50,000.

The City has an inter-local agreement with the Whatcom County Public Utilities District and the City of Blaine to share BPA conservation funds, equipment and personnel.

Private facilities. Puget PSE plans to construct another 115 kV transmission connecting their Sumas substation to Nugent's Corner. The exact route of the line is not yet known, but it will probably follow either SR 9, the B-N railroad tracks, or WSDOT's undeveloped right-of-way (originally intended as the new alignment for SR9). The proposed 115 kV line will be used to serve a future substation to be located near Nooksack and Everson, known as the Denson substation.

Telecommunications

Existing conditions

Telecommunication service is provided by ~~Verizon~~[Frontier Communications](#). The main switching office for Sumas is located downtown at [233 Garfield Street](#). All calls from the city and the surrounding area are transmitted through this main office. A fiber optic [backbone-line](#) was brought to the Sumas switch in 1995, ~~thereby eliminating line capacity problems that were present in the area earlier in the decade~~. DSL service became available in Sumas in the spring of 2001. [In 2012, Black Rock Cable also brought a high-speed fiber optic line to Sumas.](#)

~~Verizon-Frontier~~ also added a remote switching device east of the city on Reese Hill Road. This remote switching device will handles in southeast Sumas, as well as calls from the surrounding area. Long-distance calls are then transferred from the Reese Hill remote switching device to the Sumas main office.

[Television service is provided by the City of Sumas, and 61 channels are currently provided](#)

Future conditions

No telecommunications service constraints currently exist in and near Sumas, so no specific plans for upgrade are in place. As telecommunications services expand to include video services, line capacity will be increased to accommodate the proportionately larger line capacity required by video [and other](#) services.

Goals and Policies

[Goal. Provide access to private utilities to the residents of Sumas.](#)

[Policy. Whenever possible, the city should provide the private utilities with timely notice of the city's street and utility projects so that the utilities are able to coordinate construction and reduce overall infrastructure costs.](#)

[Policy. The city should encourage private utilities to expand service within Sumas to keep pace with development.](#)

[Policy. The city should notify private utilities regarding major developments, such as subdivisions, to support coordination on extension of utility services.](#)

8. Economic Development Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. In overview, this chapter presents ADD.

The GMA defines electricity, natural gas, and telecommunications as "utilities," and this chapter contains a discussion of each, as well as a discussion of cable television. Water, sanitary sewer, and storm sewer systems are defined as "public facilities" and are addressed in the Capital Facilities Element (Chapter 4). Sumas is unusual in that it owns and operates its own electric utility. The discussion of this utility is therefore more extensive than that of the privately owned utilities.

Economic Setting

Existing conditions

ADD

Future conditions

ADD

Goals and Policies

Sub-heading

ADD

9. Shoreline Management Element

Consistent with the GMA, the Shoreline Management Act and WAC 173-26 (the Shoreline Master Program Guidelines), the goals and policies from the Sumas Shoreline Master Program shall constitute the Shoreline Management Element of the city's comprehensive plan. The Sumas city council took final action to adopt the 2016 update of the Sumas Shoreline Master Program (SMP) on xx through adoption of Ordinance No. xxx. The Washington Department of Ecology approved the updated SMP in a letter dated xx, and the effective date of the updated SMP is xx.

Shoreline Master Program Goals and Policies

1.0 INTRODUCTION

1.1 SHORELINE MANAGEMENT PROGRAM

This document contains the policy component of the Sumas Shoreline Management Master Program. The goals and policies contained herein constitute the Shoreline Management Element of the City of Sumas Comprehensive Land Use Plan.

1.2 AUTHORITY

The goals, policies and regulations of the Sumas Shoreline Master Program are established under the authority of the Shoreline Management Act of 1971, now codified as Chapter 90.58 of the Revised Code of Washington (RCW), and the Shoreline Master Program Guidelines, Chapter 173-26 of the Washington Administrative Code (WAC).

1.3 PURPOSE

The purpose of the Sumas Shoreline Master Program is:

- A. To further the goals of the Shoreline Management Act as set forth in RCW 90.58.020; and
- B. To promote the public health, safety, and general welfare of the community by providing long range and comprehensive policies and effective and reasonable regulations for development and use of shorelines within the City; and
- C. To manage shorelines in a positive, effective, and equitable manner; and
- D. To plan for and foster all reasonable and appropriate uses, particularly uses directly dependent upon the water; and
- E. To preserve to the greatest extent feasible, consistent with the overall interest of the State, the City and the people generally, the public's opportunity to enjoy the physical and aesthetic qualities of the shorelines of the City by preserving views and increasing public access to the shorelines; and
- F. To manage the shorelines of the City to minimize, insofar as practical, damage to the shoreline area, while actively encouraging the restoration and enhancement of degraded shoreline functions and processes.

2.0 GENERAL ELEMENTS

The following general elements are included pursuant to RCW 90.58.100 and are addressed throughout the Sumas Shoreline Management Master Program:

2.1 ECONOMIC DEVELOPMENT

An element related to the location and design of industries, industrial projects of statewide significance, transportation facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of the shorelines of the state.

GOAL 2.1: Encourage utilization of all economic resources to improve the standard of living for residents of the City of Sumas while assuring that these economic resources are utilized in a manner that results in the least possible damage to the shoreline resources and surrounding environment.

Policy 2.1A: Economic development should be encouraged that has minimal adverse effects upon shoreline ecological functions and processes.

Policy 2.1B: Economic development policies established in the Sumas Comprehensive Plan should be implemented in shoreline areas consistent with this Program.

2.2 PUBLIC ACCESS

An element related to making provision for public access to publicly owned shoreline areas and privately owned shoreline areas where the public has been granted a right of use or access.

GOAL 2.2: Assure acquisition and maintenance of an adequate supply of visual and physical access to the shorelines for the residents of the City of Sumas and a reasonable number of transient users. Wherever possible, encourage utilization of public property for public access purposes.

Policy 2.2A: Public access should be located, designed, managed and maintained in a manner that protects shoreline processes and assures no net loss of ecological functions.

Policy 2.2B: The protection and provision of physical and visual access to publicly owned shorelands should be encouraged.

2.3 RECREATION

An element related to the preservation and enlargement of recreational opportunities, including, but not limited to, parks and recreational areas.

GOAL 2.3: Maintain an adequate supply of shoreline recreational opportunities for the residents of the City of Sumas and a reasonable number of transient users.

Policy 2.3A: Recreational development should be located, designed, managed and maintained to assure no net loss of shoreline ecological functions or ecosystem-wide processes.

2.4 CIRCULATION

An element related to the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the shoreline use element.

GOAL 2.4: Develop a safe, convenient, and diversified circulation system, consistent with the shoreline use goals, to assure efficient movement of people during their daily activities without significant adverse impact to or disruption of the natural functions of the shoreline environment.

Policy 2.4A: Transportation goals and policies as outlined in the Sumas Comprehensive Plan shall be implemented within shoreline areas consistent with this Program.

2.5 SHORELINE USE

An element related to the proposed general location, distribution and extent of uses on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land and water resources.

GOAL 2.5: Establish and implement policies and regulations for shoreline use consistent with the Shoreline Management Act of 1971 and the Sumas Comprehensive Plan. These policies and

regulations should promote a mixture of reasonable and appropriate shoreline uses that enhance the City's character, foster its historic and cultural identity, and protect shoreline resources.

Policy 2.5A: Shoreline and water areas with unique attributes should be identified and reserved for specific long-term uses, including commercial, industrial, residential, recreational, and open space uses.

Policy 2.5B: Activities and facilities shall be located on the shorelines in such a manner as to maintain or improve the ecological functions of the shoreline environment and assure no net loss of ecological functions.

Policy 2.5C: Proposed shoreline uses should be distributed, located and developed in a manner that will maintain or improve the health, safety and welfare of the public when such uses must occupy shoreline areas.

Policy 2.5D: Planning, zoning, and other regulatory and non-regulatory programs governing lands adjacent to shorelines should be consistent with the provisions of this Program.

Policy 2.5E: Preference should be given to water-dependent uses that are consistent with preservation of shoreline ecological functions and processes. Secondary preference should be given to water-related and water-enjoyment uses. Nonwater-oriented uses should be allowed only when substantial public benefit is provided with respect to the goals of the Act for public access and ecological restoration.

2.6 CONSERVATION

An element related to the preservation of natural resources and shoreline ecological functions and processes, including, but not limited to, wetlands, riparian and aquatic habitats, other priority fish and wildlife habitats and species, floodplains, geological features, scenic vistas and aesthetics for fisheries and wildlife protection.

GOAL 2.6: Assure the protection of unique, fragile and scenic elements and non-renewable natural resources within the shorelines of the City of Sumas, and protect shoreline ecological functions and the processes that sustain them to the maximum extent practicable.

Policy 2.6A: Critical areas should be protected through regulations that provide a level of protection that is at least as protective as the regulations established in Chapter 16.08 NMC.

Policy 2.6B: The protection and preservation of shoreline areas that are ecologically intact and minimally developed or degraded should be encouraged.

Policy 2.6C: Regulations and mitigation standards should be developed and implemented that ensure that new shoreline developments result in no net loss of shoreline ecological functions and processes.

Policy 2.6D: Renewable natural resources should be managed on a sustained yield basis.

Policy 2.6E: Shoreline uses should protect scenic vistas and the aesthetics of the shoreline environment.

2.7 HISTORICAL/CULTURAL RESOURCES

An element related to the protection and restoration of buildings, sites and areas having archaeological, historic, cultural, scientific or educational values within the shorelines of the City of Sumas.

GOAL 2.7: Preserve, protect and restore areas having archaeological, historic, cultural, educational or scientific values or significance through coordination and consultation with the appropriate local, state, tribal and federal authorities.

Policy 2.7A: Developments within shoreline areas should be encouraged and, where appropriate, required to avoid or minimize impacts to sites having archaeological, historic, cultural, educational or scientific value or significance.

Policy 2.7B: Opportunities for education related to archaeological, historical and cultural features should be encouraged where appropriate and be incorporated into public and private programs and developments.

2.8 FLOOD DAMAGE MINIMIZATION

An element that gives consideration to statewide interests in the prevention and minimization of flood damage.

GOAL 2.8: Establish and implement applicable floodplain management strategies to minimize private property damage, improve ecological function and prevent species and habitat loss in wetlands and streams.

2.9 RESTORATION AND ENHANCEMENT

An element related to the restoration and enhancement of shoreline ecological functions consistent with City restoration planning goals and objectives.

GOAL 2.9: Support the restoration and enhancement of shoreline ecological functions within the City of Sumas through vegetation conservation and timely restoration and enhancement of impaired shoreline areas to achieve a net gain in shoreline ecological functions over time.

Policy 2.9A: The goals and objectives of the City of Sumas Shoreline Restoration Plan should be supported and pursued to achieve a net gain in shoreline ecological functions.

Policy 2.9B: Areas of existing native vegetation should be protected and allowed to mature to enhance shoreline functions and ecological processes.

Policy 2.9C: Cooperative restoration programs between local, state, and federal agencies, tribes, non-profit organizations, and landowners should be encouraged to address shorelines with impaired ecological functions and/or processes.

Policy 2.9D: Restoration actions should be prioritized to restore native vegetation in riparian areas, improve water quality, and restore native vegetation and natural hydrologic functions of degraded areas.

Policy 2.9E: Restoration and enhancement efforts should be targeted towards improving habitat requirements of sensitive, priority and/or locally important fish and wildlife species.

Policy 2.9F: Shoreline ecological functions and processes and features should be restored and enhanced through voluntary and incentive-based public and private programs.

3.0 SHORELINES OF STATEWIDE SIGNIFICANCE

No shorelines of statewide significance are present within the City of Sumas.

4.0 ECOLOGICAL PROTECTION

Shorelines of the state are among the most valuable and fragile natural resources and there is great concern relating to their utilization, protection, and restoration.

4.1 NO NET LOSS

As established by WAC 173-26-186(8), this SMP is designed to assure, at minimum, no net loss of ecological functions necessary to sustain shoreline natural resources and to plan for restoration of ecological functions where they have been impaired. This section gives detail to the protection of shorelines as natural resources and applies the principle of “no net loss” to ecological function and ecosystem-wide processes to preserve and protect shorelines.

The concept of “net” recognizes that any development has actual or potential, short-term or long-term impacts and that through application of appropriate development standards and employment of mitigation measures in accordance with the appropriate mitigation sequence, those impacts will be addressed in a manner necessary to assure that the end result will not diminish the shoreline resources and the values as they currently exist.

GOAL 4.1: Assure that development and use within shoreline jurisdiction result in no net loss of ecological functions and ecosystem-wide processes.

Policy 4.1A: Shoreline uses and development should occur in a manner that assures no net loss of ecological functions and values. Uses shall be designed and conducted to minimize any resultant damage to the ecology and the environment.

Policy 4.1B: Development standards for density, frontage, setbacks, lot coverage, shoreline stabilization, vegetation conservation, buffers, critical areas, and water quality should protect existing shoreline ecological functions and processes.

Policy 4.1C: Critical areas associated with shorelines should be protected and managed in accordance with City of Sumas critical areas regulations.

4.2 EVALUATION OF CUMMULATIVE EFFECTS

Projects and activities authorized through City shoreline permits and shoreline exemptions have the potential to impact shoreline resources both positively and negatively. It's important for the City to be able to determine the net impact of such projects on the shoreline environment in order to make appropriate adjustments to shoreline policies and regulations.

GOAL 4.2: Track and periodically evaluate the cumulative effects of all city actions related to review and approval of projects and activities within shoreline areas.

Policy 4.2A: The City will maintain a database to track all shoreline permits and shoreline exemptions, including but not limited to: date of permit action, site address, project description, pre- and post-project photographs of the subject area, and description of required mitigation or proposed enhancement activities.

Policy 4.2B: Approximately every five years, the city will conduct an informal review of all approved shoreline permits and shoreline exemptions listed in the database to evaluate the cumulative effects of such activities on shoreline functions and resources, including water quality, habitat, shoreline vegetation, and riparian conditions.

5.0 SHORELINE JURISDICTION AND ENVIRONMENT DESIGNATIONS

5.1 SHORELINE JURISDICTION

Consistent with the definitions established in the Shoreline Management Act and implementing regulations, those areas that are within the jurisdiction of the Sumas Shoreline Management Master Program generally include those areas within the corporate limits of the City of Sumas as it currently exists, or as subsequently modified through annexation, including:

- A. All river and stream segments having a mean annual flow of at least 20 cubic feet per second, including the Sumas River and Johnson Creek, plus those adjacent land areas within 200 feet of the ordinary high water mark of all such river and stream segments; and
- B. Those wetland areas associated with any of the above aquatic areas, including, but not limited to, wetlands associated with Sumas Creek and Bone Creek; and
- C. As a local option, the adjacent land area within fifty (50) feet of the delineated edge of such associated wetlands.

5.2 SHORELINE JURISDICTION MAP

The general locations of those land and water areas subject to the jurisdiction of the Sumas Shoreline Management Master Program are shown on the City of Sumas Official Shoreline Map. The map does not necessarily identify or depict the precise, lateral extent of shoreline jurisdiction nor does it identify all associated wetlands. The lateral extent of the shoreline jurisdiction shall

be determined on a case-by-case basis based on the location of the ordinary high water mark (OHWM) and presence of associated wetlands.

5.3 SHORELINE ENVIRONMENT DESIGNATIONS ESTABLISHED

RCW 90.58 and WAC 173-26-310(2) require that the City of Sumas adopt a system of shoreline environment designations to be used for classifying areas falling within shoreline jurisdiction. This classification system is to be based on the existing use pattern, the biological and physical character of the shoreline, and the goals of the community as expressed through the comprehensive plan.

GOAL 5.3: Establish a set of shoreline environment designations that provides a systematic, rational and equitable basis to guide and regulate development within specific shoreline reaches having some degree of geographic unity, but that differ from adjacent reaches in terms of natural features or existing or potential development patterns.

Policy 5.3A: The shoreline environment designations of the City of Sumas shall include the following designations: Aquatic, Natural, Shoreline Residential, Urban Conservancy and Urban Conservancy-Wetland.

Policy 5.3B: Those areas within the City of Sumas and designated urban growth area that are within shoreline jurisdiction shall be shown on the Official Shoreline Map. This map shall also identify the locations of areas included in each shoreline environment designation.

Policy 5.3C: The purpose, designation criteria, management policies and development regulations applicable to each environment designation shall be established and implemented through this Program.

Policy 5.3D: Those areas within shoreline jurisdiction for which a shoreline environment designation is not shown on the Official Shoreline Map shall be designated the same as the immediately adjacent shoreline area or, where no such area exists, shall be designated Urban Conservancy.

5.4 AQUATIC ENVIRONMENT

5.4.1 Purpose

The purpose of the “aquatic” environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high water mark.

5.4.2 Designation Criteria

Shoreline areas shall be included in the aquatic environment if they include lands waterward of the ordinary high water mark of the Sumas River or Johnson Creek. Areas included in the aquatic designation shall include the underlying lands and water column.

5.4.3 Policies

The following management policies shall apply to areas within the aquatic environment:

Policy 5.4.3A: New over-water structures shall only be allowed for water-dependent uses or public access or ecological restoration.

Policy 5.4.3B: The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.

Policy 5.4.3C: In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.

Policy 5.4.3D: Uses that adversely impact the ecological functions of critical freshwater habitat should not be allowed except where necessary to support or further other shoreline goals and policies when impacts can be mitigated to the maximum extent possible.

Policy 5.4.3E: Shoreline uses and modifications shall be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

5.5 NATURAL ENVIRONMENT

5.5.1 Purpose

The purpose of the “natural” environment is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low intensity uses be allowed to maintain ecological functions and ecosystem-wide processes.

5.5.2 Designation Criteria

Shoreline areas shall be included in the natural environment based on meeting any of the following criteria:

- (1) The shoreline is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity; or
- (2) The shoreline contains forested areas that generally include native vegetation with diverse plant communities, multiple canopy layers, and the presence of large woody debris available for recruitment to adjacent water bodies; or
- (3) The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or
- (4) The shoreline contains largely undisturbed areas of wetlands or unstable bluffs; or
- (5) The shoreline is unable to support new development or uses without significant ecological impacts to ecological functions or risk to human safety; or
- (6) The shoreline is especially sensitive to human disturbance and important for the conservation and recovery of threatened or endangered species.

5.5.3 Policies

The following management policies shall apply to areas within the natural environment:

Policy 5.5.3A: Any use that would substantially degrade the ecological functions or natural character of the shoreline area should be prohibited.

Policy 5.5.3B: The following new uses shall not be allowed in the "natural" environment:

- Commercial uses.
- Industrial uses.
- Non-water-oriented recreation.
- Roads, utility corridors, and parking areas that can be located outside of "natural" designated shorelines.

Policy 5.5.3C: Access may be permitted for scientific, historical, cultural, educational, and low-intensity water-oriented recreational purposes, provided that no significant ecological impact on the area will result.

Policy 5.5.3D: Single family residential development is discouraged within this shoreline environment, but may be allowed on existing lots of record through approval of a conditional use permit if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of this environment designation.

Policy 5.5.3E: Agricultural uses of a very low intensity nature may be consistent with the Natural Environment when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.

Policy 5.5.3F: Development or significant vegetation removal shall not be allowed that would reduce the capability of vegetation to perform normal ecological functions or result in net loss of vegetation.

Policy 5.5.3G: Subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions shall not be allowed.

Policy 5.5.3H: The City should utilize grants and other funding sources to purchase those properties located in the Natural environment that contain high-value fish and wildlife habitats or species.

5.6 SHORELINE RESIDENTIAL ENVIRONMENT

5.6.1 Purpose

The purpose of the “shoreline residential” environment is to accommodate residential development and appurtenant structures that are consistent with the goals of RCW 90.58 and this Program. An additional purpose is to provide appropriate public access and recreational uses.

5.6.2 Designation Criteria

Shoreline areas shall be included in the shoreline residential environment if they lie within urban growth areas, as defined in RCW 36.70A.110, incorporated municipalities, “rural areas of more intense development,” or “master planned resorts,” as described in RCW 36.70A.360, if they are predominantly single-family or multifamily residential development or are planned and platted for such development.

5.6.3 Policies

The following management policies shall apply to areas within the shoreline residential environment:

Policy 5.6.3A: Development should be permitted only in those shoreline areas where adequate setbacks or buffers are possible to ensure no net loss of shoreline ecological functions, where there are adequate access, water, sewage disposal, and utilities systems and public services available, and where the environment can support the proposed use in a manner which protects or restores the ecological functions.

Policy 5.6.3B: Densities or minimum frontage width standards in the "shoreline residential" environment shall be established to protect the shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.

Policy 5.6.3C: Development standards for setbacks or buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality shall be established to ensure no net loss of ecological functions.

Policy 5.6.3D: Multifamily and multi-lot residential and recreational developments should provide community or public access and joint use for community recreational facilities where appropriate.

Policy 5.6.3E: Access, utilities, and public services should be available and adequate to serve existing needs and planned future development.

Policy 5.6.3F: Public or private outdoor recreation facilities should be encouraged if compatible with the character of the area. Preferred uses include water-dependent and water-enjoyment recreation facilities that provide opportunities for substantial numbers of people to access and enjoy the shoreline.

5.7 URBAN CONSERVANCY ENVIRONMENT

5.7.1 Purpose

The purpose of the “urban conservancy” environment is to protect and restore ecological functions of open space, floodplain, and other sensitive lands where they exist in urban and developed settings, while allowing for a variety of compatible uses.

5.7.2 Designation Criteria

Shoreline areas shall be included in the urban conservancy environment based on meeting any of the following criteria:

- (1) The area is suitable for a mix of water-related or water-enjoyment uses with other uses that allow a substantial number of people to enjoy the shoreline; or
- (2) The area is comprised of open space, critical areas, floodplains, or other areas that should not be more intensively developed; or
- (3) The area retains important ecological functions, even though partially developed; or
- (4) The area has potential for ecological restoration; or
- (5) The area has the potential for development that is compatible with ecological restoration.

5.7.3 Policies

The following management policies shall apply to areas within the urban conservancy environment:

Policy 5.7.3A: Uses that preserve the natural character of the area or promote preservation of open space, critical areas, floodplain, or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if found compatible.

Policy 5.7.3B: Standards shall be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications. These standards shall ensure that new development does not result in a net loss of shoreline ecological function or further degrade other shoreline values.

Policy 5.7.3C: Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be avoided or mitigated.

Policy 5.7.3D: Water-oriented uses should be given priority over non-water-oriented uses.

5.8 URBAN CONSERVANCY-WETLAND ENVIRONMENT

5.8.1 Purpose

The purpose of the “urban conservancy-wetland” environment is to protect and restore ecological functions of open space, floodplain, and other sensitive lands where they exist in urban and developed settings, while allowing for a variety of compatible uses.

5.8.2 Designation Criteria

Shoreline areas shall be included in the urban conservancy-wetland environment based on meeting any of the following criteria:

- (1) The area is suitable for a mix of water-related or water-enjoyment uses with other uses that allow a substantial number of people to enjoy the shoreline; or
- (2) The area is comprised of open space, critical areas, floodplains, or other areas that should not be more intensively developed; or
- (3) The area retains important ecological functions, even though partially developed; or
- (4) The area has potential for ecological restoration; or
- (5) The area has the potential for development that is compatible with ecological restoration.

5.8.3 Policies

The following management policies shall apply to areas within the urban conservancy-wetland environment:

Policy 5.8.3A: Uses that preserve the natural character of the area or promote preservation of open space, critical areas, floodplain, or sensitive lands either directly or over the long term should be the primary allowed uses. Uses that result in restoration of ecological functions should be allowed if found compatible.

Policy 5.8.3B: Standards shall be established for shoreline stabilization measures, vegetation conservation, water quality, and shoreline modifications. These standards shall ensure that new development does not result in a net loss of shoreline ecological function or further degrade other shoreline values.

Policy 5.8.3C: Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be avoided or mitigated.

Policy 5.8.3D: Water-oriented uses should be given priority over non-water-oriented uses.

6.0 GENERAL MASTER PROGRAM PROVISIONS

6.1 ARCHAEOLOGICAL AREAS AND HISTORIC SITES.

Native American and pioneer villages, military forts, old settlers homes, and trails were often located on shorelines because of the proximity of food resources and because water provided a practical means of transportation. These sites are nonrenewable resources and many are in danger of being lost through present day changes in land use and urbanization. Because of their rarity and the educational and cultural links they provide to our past, these locations should be preserved whenever possible.

Policy 6.1A: Sites should be permanently preserved to show respect for their cultural or historic significance and, where appropriate, to provide opportunities for scientific study and public observation.

Policy 6.1B: In areas documented to contain archeological or cultural resources, developers should be required to have the site inspected by a professional archaeologist in consultation with affected Indian tribes prior to permit issuance.

Policy 6.1C: Developers should be required to stop work immediately and notify City officials, affected Indian tribes and the state department of archaeology and historic preservation if sites containing archaeological or cultural resources are uncovered during excavation.

Policy 6.1D: Developers should be required to obtain all legal permits regarding archaeological areas and historic sites.

Policy 6.1E: In accordance with state law, all activities and development within shoreline jurisdiction shall comply with the applicable requirements of RCW 27.44, RCW 27.53 and WAC 25-48-060.

6.2 CRITICAL AREAS

Critical areas, as defined in RCW 36.70A.030 include the following:

- (1) *Wetlands;*
- (2) *Areas with a critical recharging effect on aquifers used for potable waters;*
- (3) *Fish and wildlife habitat conservation areas;*
- (4) *Frequently flooded areas; and*
- (5) *Geologically hazardous areas.*

Impacts to critical areas can result in significant adverse effects to public health and safety, the land and its vegetation and wildlife, and the waters of the state and their aquatic life.

Policy 6.2A: The public interest should be promoted and enhanced by reducing risks to life and property, by protecting and restoring ecological functions and ecosystem-wide processes and ensuring no net loss of these functions.

Policy 6.2B: In managing and regulating critical areas, scientific and technical information should be utilized as described in WAC 173-26-201(2)(a).

Policy 6.2C: Critical areas should be managed consistent with the minimum guidelines contained in WAC 365-190.

Policy 6.2D: The protection of existing ecological functions and ecosystem-wide processes should be encouraged and, wherever possible, restoration of degraded areas should be supported.

Policy 6.2E: The protection and restoration of critical areas within shoreline jurisdiction should be encouraged through implementation of the full range of planning and regulatory measures.

Policy 6.2F: Development standards for density, frontage, setbacks, lot coverage, shoreline stabilization, vegetation conservation, buffers, critical areas, and water quality should be utilized to protect existing shoreline ecological functions and processes.

Policy 6.2G: Critical area regulations shall adhere to standards established in the following sections of this Program, unless it is demonstrated through scientific and technical information as provided in RCW 90.58.100(1) and as described in WAC 173-26-201(2)(a) that an alternative provides better resource protection.

6.2.1 Wetlands

Wetlands provide many important ecological functions including flood attenuation, reduction of impacts to water quality, ground water recharge, maintenance of base in-stream flows, and provision of habitat for fish and wildlife. Impacts to wetlands can also contribute to adverse impacts on other important resources.

Policy 6.2.1A: Wetlands should be managed to achieve a policy of no net loss of wetland area, functions and values.

Policy 6.2.1B: Wetlands should be categorized to reflect differences in wetland quality and function, and higher quality/functioning wetlands should receive greater protection.

Policy 6.2.1C: Wetland regulations should address all activities and uses to assure no net loss of ecological functions in these critical areas.

Policy 6.2.1D: Buffers around wetlands should be provided that are adequate to ensure that wetland functions are protected and maintained over the long-term.

Policy 6.2.1E: Potential impacts to wetland buffers should also be considered when evaluating development proposals.

Policy 6.2.1F: Wetlands should be managed consistent with the mitigation priority sequence defined in WAC173-26-020, and compensatory mitigation should be allowed only after mitigation sequencing has been applied.

6.2.2 Rivers and Streams – Critical Freshwater Habitat

Many ecological functions associated with rivers and streams are impacted both by activities within the stream corridor and those occurring on adjacent uplands throughout the watershed.

Policy 6.2.2A: River and stream corridors should be protected and restored where necessary to ensure no net loss of ecological functions within shoreline jurisdiction.

Policy 6.2.2B: Damage to riverine shoreline areas that retain their ecological functions should be avoided or mitigated.

Policy 6.2.2C: Degraded riverine shoreline areas should be restored wherever feasible.

Policy 6.2.2D: Incentives should be provided to encourage re-connection of the main river channel with associated water bodies, dry channels, and associated wetlands.

Policy 6.2.2E: Except where necessary to protect life and property, new restrictions to channel movement within the channel migration zone should not be allowed, and natural channel configurations within the channel migration zone should be encouraged over time.

Policy 6.2.2F: Vegetation conservation areas or buffers should be established along all river and stream corridors.

Policy 6.2.2G: Development within the channel migration zone, vegetation conservation area or established buffers should not be allowed unless it can be shown that adverse impacts to natural channel movement, ecological functions and ecosystem-wide processes can be avoided or minimized, and impacts can be appropriately mitigated.

6.3 FLOOD DAMAGE MINIMIZATION

Flood hazard reduction measures consist of both structural and non-structural measures. Structural measures may include construction of dikes, levees, revetments and floodwalls, channel realignment, and elevation of structures consistent with the National Flood Insurance Program. Non-structural measures may include setbacks, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, and storm water management programs.

Policy 6.3A: Where feasible, non-structural flood hazard reduction measures should be given preference over structural measures.

Policy 6.3B: When available and where consistent with the Shoreline Management Act, flood hazard reduction policies and regulations should be based on applicable watershed management plans, comprehensive flood hazard management plans or other comprehensive planning efforts.

Policy 6.3C: Flood hazard protection measures should not result in a net loss of ecological functions associated with the rivers and streams.

Policy 6.3D: River and stream corridors should be retained in or restored to more natural hydrological conditions, and it should be recognized that seasonal flooding is an essential natural process.

Policy 6.3E: New development should not be allowed that significantly or cumulatively increases flood hazard, nor results in a net loss of ecological function.

Policy 6.3F: New development within the shoreline area, including the subdivision of land, should not be allowed that requires structural flood hazard reduction measures, except where necessary to support water-dependent uses.

Policy 6.3G: Where allowed, structural flood hazard reduction measures should be set back as far as possible from the channel migration zone.

Policy 6.3H: New structural flood hazard reduction measures may be allowed within the channel migration zone if it is determined through a geotechnical analysis that no other alternative to reduce flood hazard to existing development is feasible.

6.4 PUBLIC ACCESS

Public access includes the ability of the general public to reach, touch and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations.

Policy 6.4A: The amount and diversity of public access to the state's shorelines, including physical and visual access, should be increased, consistent with the natural shoreline

character, private property rights, public rights under the Public Trust Doctrine, public safety, and local public access planning.

Policy 6.4B: The public's opportunity to enjoy the physical and aesthetic qualities of the shorelines of the state, including views of the water, should be protected.

Policy 6.4C: The public interest with respect to the public's right to access waters of the state held in public trust should be promoted and enhanced while protecting private property rights and ensuring public safety.

Policy 6.4D: Development within the shoreline area should be regulated, where appropriate, to minimize interference with the public's ability to access the shoreline.

Policy 6.4E: A local public access planning process should be undertaken utilizing input from affected property owners to identify specific public access needs and opportunities within the City shoreline area. This process should result in an integrated plan for development of shoreline public access, including prioritization of projects and locations, and establishment of public access requirements for shoreline permits.

Policy 6.4F: Consistent with local public access planning, all development within the shoreline area should be required to make a proportionate contribution, either material or financial, toward meeting public access goals, either through dedication of land, granting of easements, provision of public access facilities, or other appropriate means.

Policy 6.4G: Public access improvements that have the potential to result in a net loss of ecological functions should be designed to minimize adverse impacts, and such improvements that would likely cause significant ecological impacts that cannot be mitigated should not be allowed.

6.5 VEGETATION CONSERVATION

Vegetation conservation includes activities to protect and restore vegetation along or near shorelines that contribute to ecological functions of shoreline areas. Vegetation conservation provisions include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative plant species.

Policy 6.5A: The ecological functions and ecosystem-wide processes performed by vegetation along shorelines should be protected and restored.

Policy 6.5B: Vegetation conservation efforts should be encouraged to protect human safety and property, increase the stability of river banks, reduce the needs for structural stabilization measures, improve the visual and aesthetic qualities of the shoreline, and enhance shoreline uses.

Policy 6.5C: Vegetation conservation and restoration policies and regulations should be implemented as necessary to assure no net loss of ecological functions, to avoid adverse impacts on soil and hydrology, and to reduce the hazard of slope failures or accelerated erosion.

Policy 6.5D: Riparian corridors and significant habitat should be protected and restored.

Policy 6.5E: The importance of shoreline vegetation should be recognized, including: providing shade to maintain cooler water temperature, providing organic input, providing food, stabilizing banks and minimizing erosion, reducing fine sediment through stormwater retention and filtering, providing a source of large woody debris, regulating the microclimate, and providing critical riparian habitat.

6.6 VIEWS AND AESTHETICS

Scenic vistas, views of the water and aesthetic qualities of the shoreline area are important, and the public's ability and opportunity to enjoy shoreline views and aesthetics should be protected.

Policy 6.6A: Areas with scenic vistas, views of the water and high aesthetic value should be identified and protected.

Policy 6.6B: Developments should be designed to minimize adverse impacts on views from public property and views enjoyed by a substantial number of residents.

Policy 6.6C: Policies related to the protection of views and aesthetics should be implemented through site planning, height limitations, setbacks, siting of buildings and accessories, screening, vegetation conservation, architectural controls, sign control regulations, appropriate development siting, screening and architectural standards, designation of view corridors and maintenance of natural vegetative buffers.

6.7 WATER QUALITY, STORMWATER AND NONPOINT POLLUTION

Water quality refers to the physical characteristics of water within shoreline jurisdiction, including water quantity and hydrological, chemical, aesthetic, recreation-related, and biological characteristics. The following policies refer to development and uses affecting water quality and quantity, including the creation of impervious surfaces and the development of storm water management facilities.

Policy 6.7A: New development should be prohibited from causing significant ecological impacts due to alterations in water quality, quantity or flow characteristics.

Policy 6.7B: Policies and regulations related to storm water runoff should maintain or contribute to assuring no net loss of ecological functions, including ground water recharge and hydrological base flow considerations.

Policy 6.7C: Storm water outfalls should not result in a net loss of ecological functions and ecosystem-wide processes.

Policy 6.7D: Storm water facilities and discharges to wetlands within shoreline jurisdiction should only be allowed where impacts to water quality, quantity and flow characteristics have been fully considered and mitigated.

7.0 SHORELINE USE POLICIES

The following activities have been identified as those types of uses that can occur on shorelines of the City of Sumas. Policy statements have been developed for these various activities in order to insure the proper use of the shoreline.

7.1 AGRICULTURE

Agriculture includes those methods used in vegetation and soil management as defined by WAC 173-26-020. The methods used in the agricultural processes have a great effect on the conditions of shorelines and water quality. These policies shall not apply retroactively to agricultural operations meeting the definition of existing and ongoing agriculture, but shall apply to new agricultural development, including associated clearing and grading in support of new agricultural uses.

Policy 7.1A: Agricultural uses shall generally be located outside of shoreline areas and be designed to assure no net loss of ecological functions or ecosystem-wide processes.

Policy 7.1B: A buffer zone of naturally occurring vegetation should be maintained between all tilled areas and bodies of water within shoreline jurisdiction.

Policy 7.1C: Livestock shelters and animal feeding facilities located within the shoreline area should make provisions to control run-off from feeds, manure, and associated animal wastes.

Policy 7.1D: Agricultural practices shall not use products which can potentially harm aquatic life within the shoreline area, except where used consistent with an approved Integrated Pest Management Plan.

Policy 7.1E: The watering of livestock in associated bodies of water shall not be permitted.

Policy 7.1F: Tilled areas shall meet erosion control best management practices as outlined by the Natural Resource Conservation Service, U.S. Dept. of Agriculture.

Policy 7.1G: The local SMP shall not require modification of or limit ongoing and existing agricultural activities occurring on lands zoned for agriculture and where pre-existing non-conforming agricultural activities have been recognized.

Policy 7.1H: The SMP recognizes the importance of agriculture and supports its continued viability in the community while maintaining shoreline ecological functions and processes.

7.2 AQUACULTURE

Aquaculture is the culture of food fish, shellfish, or other aquatic plants and animals. It is generally recognized that development of aquaculture within the City of Sumas is unlikely.

Policy 7.2A: Aquaculture should be consistent with the surrounding shoreline environment.

Policy 7.2B: Consideration should be given to protecting visual and physical access to shoreline areas when locating aquaculture uses.

Policy 7.2C: Aquaculture activities should be designed, located and operated in a manner that supports long term beneficial use of the shoreline and protects and maintains shoreline ecological functions and processes. Aquaculture should not be permitted where it would result in a net loss of shoreline ecological functions; adversely affect the quality or extent of habitat for native species; adversely impact habitat for threatened or endangered species; or interfere with water-dependent uses.

Policy 7.2D: Aquaculture should not be permitted in areas where it would result in a net loss of ecological function, and should be designed and located so as not to spread disease to native aquatic life, establish new non-native species which cause significant ecological impacts, or significantly impact the aesthetic qualities of the shoreline.

7.3 COMMERCIAL DEVELOPMENT

Commercial developments are those uses that are involved in wholesale and retail trade or business activities. Because most commercial developments depend on people to support their various activities, these developments lead to concentrations of people and traffic, which in turn have a great effect on the condition of the shoreline. Water-dependent commercial developments require a shoreline location. It is recognized that these types of commercial development are unlikely in Sumas. If unregulated, non-water-dependent commercial development can have an undesirable impact on the shoreline.

Policy 7.3A: Commercial development should not result in a net loss of ecological functions or have significant adverse impacts to other shoreline uses, resources and values provided in RCW 90.58.020 such as recreation and public access.

Policy 7.3B: Preference should be given first to water-dependent commercial uses over non-water-dependent commercial uses; and second to water-related and then to water-enjoyment commercial uses over non-water-oriented commercial uses.

Policy 7.3C: Although some activities, such as restaurants, do not require a shoreline location, they do increase public enjoyment of the shoreline and should be given consideration for location there.

Policy 7.3D: Commercial developments on shorelines should be encouraged to locate in areas where commercial developments already exist.

Policy 7.3E: Commercial developments requiring parking should locate these facilities on upland areas away from the immediate water's edge to minimize impacts to shoreline activities and resources.

Policy 7.3F: Consideration should be given to the effect on public physical and visual access likely to result from new commercial development.

Policy 7.3G: Commercial developments should provide public access, unless such improvements are demonstrated to be infeasible or present hazards to life or property.
Policy 7.3H: Restoration of impaired shoreline ecological functions and processes should be encouraged as part of commercial development.

7.4 INDUSTRIAL DEVELOPMENT

This category includes those industrial uses engaged in primary production. It is recognized that water-dependent industry is unlikely in the City of Sumas. Non-water-dependent industrial development can have a very great impact on shoreline areas.

Policy 7.4A: Shoreline priority should first be given to those industries that require a waterfront location for their operations, and second to those industries that are water-related over non-water oriented uses.

Policy 7.4B: Industrial development should not be located or designed in a manner that will result in a net loss of ecological function or that will interfere with other shoreline uses, resources or values.

Policy 7.4C: Where feasible, industrial development should incorporate environmental cleanup and restoration of the shoreline area.

Policy 7.4D: Vegetation removal should be limited to the minimum necessary to accommodate permitted primary structures.

Policy 7.4E: Industrial development should be compatible with the surrounding shoreline area.

Policy 7.4F: Cooperative use of parking and storage facilities by industry should be encouraged.

Policy 7.4G: Wherever possible, industrial development should not interfere with public visual and physical access to the shoreline.

Policy 7.4H: Industrial development should be encouraged to provide public access, except where such access would pose a threat to public health or safety or to private property.

Policy 7.4I: Industrial development on publicly owned lands should be required to provide public access.

Policy 7.4J: Restoration of impaired shoreline ecological functions and processes should be encouraged as part of industrial development.

Policy 7.4K: The heights of buildings should be limited to that height necessary to perform the primary function.

7.5 IN-STREAM STRUCTURES

An in-stream structure is waterward of the ordinary high water mark and either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow.

Policy 7.5A: In-stream structures should serve to protect and preserve ecosystem-wide processes, ecological functions, and cultural resources, including fish and fish passage, wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas.

Policy 7.5B: The location and planning of in-stream structures shall give due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.

Policy 7.5C: Failing, harmful, unnecessary, or ineffective in-stream structures should be removed and, where appropriate, replaced. Where feasible, shoreline ecological functions and processes should be restored.

7.6 MINING

Mining is the removal of sand, gravel, soil, minerals, and other earth materials from the earth for economic use. Mining alters the natural character, resources and ecology of shorelines and may adversely affect critical shoreline resources.

Policy 7.6A: Mining should be prohibited within shoreline jurisdiction.

7.7 RECREATIONAL DEVELOPMENT

Recreation is the refreshment of body and mind outdoors or indoors through forms of play, sports, amusement or relaxation. Water-related recreation accounts for a very high proportion of all recreational activity in the Pacific Northwest. The recreational experience may be an active one involving boating, swimming, fishing or hunting or the experience may be passive such as enjoying the natural beauty of a shoreline, nature study, or picnicking.

Policy 7.7A: Shoreline recreational development should provide an adequate supply of commercial and public facilities for active and passive recreational uses without causing significant ecological impacts.

Policy 7.7B: Where possible, shoreline recreational facilities should be linked to other recreational attractions by pedestrian and bicycle trails.

Policy 7.7C: Only those recreational activities that are compatible with the shoreline environment in which they are located should be encouraged, and these uses should be developed to insure that no net loss of shoreline ecological functions or ecosystem-wide processes results.

Policy 7.7D: First priority should be given to water-dependent recreational uses and second priority should be given to water-enjoyment and water-related recreational uses over non-water oriented uses.

Policy 7.7E: Priority should be given to recreational developments that provide opportunities for public access to the shoreline area.

Policy 7.7F: Private investment in recreation facilities should be encouraged.

Policy 7.7G: Recreational development requiring extensive structures, utilities and roads and/or substantial modifications of topography or vegetation removal should not be located or expanded in areas where damage to persons, property, and/or shoreline functions and processes is likely to occur.

Policy 7.7H: Trail links between shoreline parks and public access points should be encouraged for walking, bicycle riding and other non-motorized vehicle access where appropriate.

Policy 7.7I: Where appropriate, recreation facilities should incorporate public education regarding shoreline ecological functions and processes, the role of human actions on the environment and the importance of public involvement in shoreline management.

7.8 RESIDENTIAL DEVELOPMENT

Residential development includes single-family and multifamily development, camping clubs, mobile home parks, or the creation of new residential lots through subdivision or conversion from another use. All residential development, including residential development exempt from the shoreline permit requirements, should be consistent with the following policies.

Policy 7.8A: Residential subdivisions proposed for the shoreline area should incorporate clustering of dwelling units to reduce physical and visual impacts on shorelines and to reduce utility and road costs. Where appropriate, such developments should include public or private open space and recreation facilities.

Policy 7.8B: Residential development should not result in a net loss of ecological functions. The following measures should be incorporated into applicable regulations: setbacks, buffers, density allowances, vegetation conservation requirements and limitations on shoreline armoring.

Policy 7.8C: Residential development that at a size and location that will cause significant ecological impacts should not be permitted.

Policy 7.8D: Subdivisions and conversions from non-residential uses should be required to create lots of sufficient size and configuration to allow residences to be constructed without causing significant ecological impacts.

Policy 7.8E: Subdivisions should be encouraged not to locate any structure within close proximity of the immediate water's edge, and instead use this area as open space.

Policy 7.8F: Vegetation removal should be limited to the minimum necessary to accommodate permitted primary residential structures.

Policy 7.8G: Subdivisions should be encouraged to provide community or public physical and/or visual access to shorelines.

Policy 7.8H: Erosion and sedimentation control measures should be included as part of the development plans.

Policy 7.8I: Residential development should be planned and built to minimize the need for shoreline stabilization and flood hazard reduction measures.

Policy 7.8J: Single-family residences are identified as a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.

7.9 TRANSPORTATION AND PARKING

A road is a linear passageway for motor vehicles, and a railroad is a linear passageway with tracks for train traffic. The construction of linear transportation facilities and parking associated with allowed uses can both support and limit access to shorelines. Such development can also impair the visual qualities of water-oriented vistas, expose soils to erosion, increase storm water runoff, and accelerate or retard development along shorelines.

Policy 7.9A: Whenever feasible, major highways and railroads should be located away from shorelines.

Policy 7.9B: Safe, reasonable and adequate circulation systems to, and through or over, shorelines should be provided and maintained.

Policy 7.9C: The impact on the natural shoreline environment should be considered when designing, locating and constructing transportation facilities and parking in the shoreline area. Impacts to shoreline ecological functions and processes should be mitigated to the maximum extent practicable.

Policy 7.9D: Parking facilities shall only be allowed as necessary to support an authorized use and should be located in upland areas away from the water's edge unless no practicable alternative exists.

Policy 7.9E: Road and transportation planning should make provisions for public transportation, pedestrian and bicycle access to shoreline areas, where appropriate.

Policy 7.9F: Provisions should be made in highway and road design for compatible multiple uses, such as utility lines, pedestrian shore access, scenic pull-outs and view points.

Policy 7.9G: Railroad construction should be limited to maintenance of existing facilities.

Policy 7.9H: Transportation facilities should be located and designed to avoid impacts to public recreation and public access areas and to significant natural, historic, archaeological or cultural sites.

7.10 UTILITIES

Utilities are systems, services or facilities that produce, convey, store, or process various items including electricity, oil, gas, communications, sewage, water and the like. The installation of this apparatus necessarily disturbs the landscape, but can be planned to have minimal visual and physical effect on the environment.

Policy 7.10A: Utility facilities should be designed and located to assure no net loss of shoreline ecological functions, preserve the natural landscape, and minimize conflicts with present and planned uses.

Policy 7.10B: Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities, that are non-water-oriented should not be allowed within shoreline areas, unless it can be demonstrated that no other feasible option is available.

Policy 7.10C: Multiple use corridors should be used as much as possible when locating utilities.

Policy 7.10D: After a utility installation/maintenance project has been completed, the affected area should be replanted with native vegetation.

Policy 7.10E: The location of utilities should be chosen so as not to obstruct scenic views.

Policy 7.10F: Where possible, utilities should be placed underground to minimize impacts to the aesthetic qualities of the area.

Policy 7.10G: Utilities should be located in existing rights-of-way and utility corridors when available.

Policy 7.10H: Utilities should be located and designed to avoid impacts to public recreation and public access areas and to significant natural, historic, archaeological or cultural sites.

8.0 SHORELINE MODIFICATION POLICIES

Shoreline modifications are related to construction of a physical element such as a dike, bulkhead, or fill. They can also include such activities as clearing and grading, or significant vegetation removal.

8.1 BOAT RAMPS

Boat ramps are permanent structures for launching watercraft. It is recognized that development of boat ramps in the City of Sumas is unlikely.

Policy 8.1A: Boat ramps are water-dependent uses and should be given priority for shoreline location.

Policy 8.1B: Boat ramps should be sited, designed and constructed to minimize adverse effects on the shoreline and shoreline resources.

Policy 8.1C: New boat ramps should only be allowed for water-dependent uses or public access.

Policy 8.1D: Land disturbance associated with boat ramp construction should be limited to the minimum necessary to accommodate the proposed use.

Policy 8.1E: New construction should be allowed only when it has been shown that a specific need exists to support the proposed use.

Policy 8.1F: Boat ramps should be designed and constructed to avoid or minimize impacts to critical habitat and should result in no net loss of ecological function, while contributing to public physical and visual access to and enjoyment of waters of the state.

8.2 DOCKS

A dock is a structure built over or floating upon the water, used as a landing place for marine transport or for recreational purposes. A concentration of docks along the shore can interfere with or prevent public use of the water surface.

Policy 8.2A: New docks should be allowed only for water-dependent uses or public access.

Policy 8.2B: Docks associated with a single family residence is considered a water-dependent use, provided that it is designed and used as a facility to access watercraft and other moorage facilities are not available or feasible. Moorage for water-related and water-enjoyment uses or shared moorage for multifamily use should be allowed as part of a mixed-use development or where they provide public access.

Policy 8.2C: Dock construction should be limited to the minimum necessary to accommodate the proposed use.

Policy 8.2D: New construction should be allowed only when it has been shown that a specific need exists to support the proposed use.

Policy 8.2E: Docks should be designed and constructed to avoid or minimize impacts to critical habitat and sediment transport and should result in no net loss of ecological function, while contributing to public physical and visual access to and enjoyment of waters of the state.

Policy 8.2F: Docks should be constructed of materials that will not adversely affect water quality or aquatic plants and animals in the long term.

8.3 DREDGING

Dredging is the removal of unconsolidated material (gravel, sand, and silt) or other earthen materials from the bottom of a water body, for navigational purposes, underwater crossings, obtaining fill material, or construction projects. If not adequately regulated, dredging has the potential to cause significant environmental harm.

Policy 8.3A: Dredging and dredging disposal should only be done in a manner that avoids significant ecological impacts.

Policy 8.3B: Dredging other than for flood control, channel maintenance, and habitat creation/enhancement purposes should not be permitted.

Policy 8.23C: Dredging should be prohibited unless all appropriate feasibility studies have been completed and reviewed.

Policy 8.3D: In those instances where dredging is permitted, the shoreline area should not be used as a disposal site for dredge spoils, unless such use would create or enhance habitat value.

Policy 8.3E: All proposals for dredging operations should be coordinated and consistent with plans, policies, guidelines, and regulations of federal, state, and/or local agencies.

8.4 LANDFILL AND EXCAVATION

This category includes those activities that re-shape or change the character of the surface of the land. Activities covered by this section include land clearing, landscaping, excavation and grading or other earth moving projects.

Policy 8.4A: Landfill and excavation should only be permitted to the minimum extent necessary to accommodate an approved shoreline use or development.

Policy 8.4B: Landfill and excavation activities should be located, designed, and constructed to protect shoreline resources and to assure no net loss of ecological functions and ecosystem-wide processes.

Policy 8.4C: Fills waterward of the ordinary high water mark should be allowed only when necessary to support: water-dependent uses, public access, ecological restoration, and other uses as outlined by WAC 173-26-231(3)(c). Unavoidable impacts should be mitigated to the maximum extent practicable.

Policy 8.4D: Landfill should be permitted in limited instances to restore uplands where recent erosion has rapidly reduced upland area, to build beaches and protective berms for shore stabilization or recreation, to restore or enhance degraded shoreline ecological functions and processes, or to moderately elevate low uplands to make such uplands more suitable for purposes consistent with this Program.

Policy 8.4E: Fill and excavation activities should have appropriate feasibility studies completed and reviewed prior to authorization. Factors such as total water surface reduction, impediment to water flow and circulation, reduction of water quality, and destruction of habitat should be considered before granting a permit.

Policy 8.4F: Fill should not be allowed where shore stabilization works would be required to maintain the materials placed.

Policy 8.4G: Erosion control best management practices should be utilized during construction. The perimeters of landfills and excavations should be landscaped or otherwise stabilized to retard soil erosion.

Policy 8.4H: Fill material should be of a quality that will not result in adverse impacts to water quality.

8.5 OUTDOOR ADVERTISING AND SIGNS

Signs are publicly displayed boards whose purpose is to provide information, direction or advertising. Signs and billboards, because they are intended to be very visible, can have a great effect on the aesthetics of an area.

Policy 8.5A: In general, signs should be constructed to minimize interference with visual access to the shoreline. Where such locations are available, signs should be constructed against existing buildings to minimize visual obstructions of the shoreline and water bodies.

Policy 8.5B: Size, height, density and lighting of signs should be compatible with adjacent shoreline uses.

Policy 8.5C: Signs should be designed mainly to identify the premises and nature of enterprise without unduly distracting uninterested passers-by.

Policy 8.5D: No off-premise advertising signs or billboards should be permitted within the shoreline area.

Policy 8.5E: Moving or flashing signs and neon lighting for signs within the shoreline area should be prohibited.

Policy 8.5F: Interpretive signage should be allowed and, where appropriate, encouraged within the shoreline area.

8.6 SHORELINE FLOOD PROTECTION

Shoreline flood protection refers to flood control structures along streamways and includes rip-rapping, and construction of levees and dikes, but excludes other shoreline stabilization work such as bulkheads and groins.

Policy 8.6A: The design, location and construction of shoreline flood protection features should be undertaken only if it minimizes alteration of the natural shoreline.

Policy 8.6B: Shoreline flood protection should minimize any intrusion on areas below the ordinary high water mark.

Policy 8.6C: Wherever possible, construction of shoreline flood protection structures should provide for protection, preservation and restoration of ecological functions and ecosystem-wide processes.

Policy 8.6D: Wherever possible, construction of shoreline flood protection facilities should provide opportunities for public access to the shoreline.

Policy 8.6E: New construction should be located and designed to avoid the need for new shoreline flood protection in the future.

8.7 SHORELINE HABITAT AND NATURAL SYSTEMS ENHANCEMENT PROJECTS

Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines.

Policy 8.7A: Shoreline habitat and natural systems enhancement projects shall be encouraged where consistent with the City's restoration plan.

Policy 8.7B: Projects including modification of vegetation, removal of nonnative or invasive plants, shoreline stabilization, dredging, and filling, shall also be encouraged, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.

8.8 SHORELINE STABILIZATION

Shoreline stabilization includes actions taken to address erosion impacts to property, housing, businesses, or structures caused by natural processes. These can include both non-structural and structural methods of stabilization. Non-structural methods include setbacks, relocation of structures, ground water management, and planning and regulatory measures. Structural methods include shore defense works such as rip-rap, bulkheads and groins. Bulkheads are wall-like structures erected at bank edge, the purpose of which is to protect uplands or fills from erosion by moving water. Groins are wall-like structures extending from the bank, the purpose of which is to divert the natural longshore movement of materials and cause a beach to build on the drift side of the groin.

Policy 8.8A: Wherever possible, construction of shoreline stabilization should result in no net loss of ecological functions and ecosystem-wide processes. Mitigation should be provided if

necessary to insure no net loss of shoreline functions and processes.

Policy 8.8B: Shoreline stabilization should be constructed in a manner that will minimize alteration of the natural shoreline.

Policy 8.8C: New development should be located and designed to avoid the need for future shoreline stabilization to the extent feasible.

Policy 8.8D: New stabilization measures should not be allowed except when necessity is demonstrated and should only be allowed for the purpose of protecting existing upland areas and not for the purpose of creating new uplands.

Policy 8.8E: New or expanded structural shore stabilization should only be allowed when non-structural measures, vegetation planting, or on-site drainage improvements would be insufficient to achieve the identified objectives.

Policy 8.8F: Shore stabilization should not be permitted to unnecessarily interfere with public access to public shorelines, nor with other appropriate shoreline uses including, but not limited to, navigation, or private recreation.

Policy 8.8G: Wherever feasible, opportunities for public access should be incorporated into the design and construction of shoreline stabilization projects.

Policy 8.8H: The use of natural-appearing rock and other natural materials should be encouraged in construction of shoreline stabilization.

Policy 8.8I: Failing, harmful, unnecessary, or ineffective structures should be removed and, where appropriate, replaced. Where feasible, shoreline ecological functions and processes should be restored using non-structural methods or less harmful long-term stabilization measures.

Policy 8.8J: Before locating groins, the effect of these structures on the movement of water and drift materials, on fish and wildlife, and on the aesthetic quality of the shoreline should be considered.

Policy 8.8K: Groins should only be allowed where necessary to support public access, shoreline stabilization or other public purpose.

8.9 SOLID WASTE DISPOSAL

Solid waste disposal includes collection, transport and disposal of all discarded or spent materials other than liquids such as sewage or wastewater. The shoreline is a particularly sensitive area and consequently especially susceptible to the environmental impacts that often accompany the operation of solid waste disposal facilities.

Policy 8.9A: Solid waste disposal facilities should not be permitted in the shoreline area.

Policy 8.9B: Solid waste transfer stations should only be allowed by conditional use within shoreline areas where no other feasible location exists.

Appendix I: Glossary

Agricultural Land: means land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, or livestock and that has long-term commercial significance for agricultural production.

Arterial [Minor]: a roadway providing movement along significant corridors of traffic flow. Traffic volumes, speeds and trip lengths are high, although usually not as great as those associated with principal arterials.

Arterial [Principal]: a roadway providing movement along major corridors of traffic flow. Traffic volumes, speeds and trip lengths are high, usually greater than those associated with minor arterials.

Available Capital Facilities: means that facilities or services are in place or that a financial commitment is in place to provide the facilities or services within a specified time. In the case of transportation, the specified time is six years from the time of development.

Capacity: the measure of the ability to provide a level of service on a public facility.

Capital Facility: means a physical structure owned or operated by a government entity which provides or supports a public service.

Capital Improvement: means physical assets constructed or purchased to provide, improve or replace a public facility and which are large scale and high in cost. The cost of a capital improvement is generally non-recurring and may require multi-year financing.

Collector: a roadway providing service which is of relative moderate traffic volume, moderate trip length and moderate operating speed. Collector roads collect and distribute traffic between local roads or arterial roads.

Commercial Uses: activities within land areas which are predominantly connected with the sale, rental and distribution of products, or performance of services.

Comprehensive Plan: means a generalized coordinated land use policy statement of the governing body of a county or city that is adopted pursuant to this chapter.

Concurrency: means that adequate capital facilities are available when the impacts of development occur. This definition includes the two concepts of "adequate capital facilities" and of "available capital facilities" as defined above.

Consistency: means that no feature of a plan or regulation is incompatible with any other feature

of a plan or regulation. Consistency is indicative of a capacity for orderly integration or operation with other elements in a system.

Contiguous Development: means development of areas immediately adjacent to one another.

Critical Areas: include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

Density: a measure of the intensity of development, generally expressed in terms of dwelling units per acre. Can also be expressed in terms of population density [i.e., people per acre].

~~Useful for establishing a balance between potential local service use and service capacities.~~

Domestic Water System: means any system providing a supply of potable water for the intended use of a development which is deemed adequate pursuant to RCW 19.27.097.

Financial Commitment: means that sources of public or private funds or combinations thereof have been identified which will be sufficient to finance capital facilities necessary to support development and that there is assurance that such funds will be timely put to that end.

Forest Land: means land primarily useful for growing trees, including Christmas trees subject to the excise tax imposed under RCW 84.33.100 through 84.33.140, for commercial purposes, and that has long-term commercial significance for growing trees commercially.

Geologically Hazardous Areas: means areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are-may not be suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

Growth Management: a method to guide development in order to minimize adverse environmental and fiscal impacts and maximize the health, safety, and welfare benefits to the residents of the community.

Household: a household includes all the persons who occupy a group of rooms or a single room which constitutes a housing unit.

Impact Fee: a fee levied by a local government on new development so that the new development pays its proportionate share of the cost of new or expanded facilities required to service that development.

Industrial Uses: the activities predominantly connected with manufacturing, assembly, processing, or storage of products.

Infrastructure: means those man-made structures which serve the common needs of the population, such as: sewage disposal systems, potable water wells serving a system, solid waste disposal sites or retention areas, stormwater systems, utilities, bridges and roadways.

Intensity: a measure of land uses activity based on density, use, mass, size and impact.

Land Development Regulations: means any controls placed on development or land use activities by a county or city, including, but not limited to, zoning ordinances, subdivision ordinances, rezoning, building construction, sign regulations, binding site plan ordinances or any other regulations controlling the development of land.

Level of Service [LOS]: an indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on and related to the operational characteristics of the facility. LOS means an established minimum capacity of capital facilities or services provided by capital facilities that must be provided per unit of demand or other appropriate measure of need.

Long-term Commercial Significance: includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the land.

Local Road: a roadway providing service which is of relatively low traffic volume, short average trip length or minimal through traffic movements, and high volume land access for abutting property.

Manufactured Housing: conventional housing utilizing premanufactured components.

Minerals: include gravel, sand, and valuable metallic substances.

Mobile Home: a single portable manufactured housing unit, or a combination of two or more such units connected on-site, that is:

- a. designed to be used for living, sleeping, sanitation, cooking, and eating purposes by one family only and containing independent kitchen, sanitary, and sleeping facilities;
- b. designed so that each housing unit can be transported on its own chassis;
- c. placed on a temporary or semi-permanent foundation; and
- d. is over thirty-two feet in length and over eight feet in width.

Multi-Family Housing: as used in this plan, multi-family housing is all housing which is designed to accommodate two or more households.

Owner: any person or entity, including a cooperative or a public housing authority [PHA], having the legal rights to sell, lease, or sublease any form of real property.

Planning Period: means the 20 year period following the adoption of a comprehensive plan or such longer period as may have been selected as the initial planning horizon by the planning jurisdiction.

Public Facilities: include streets, roads, highways, sidewalks, street and road lighting systems,

traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.

Public Services: include fire protection and suppression, law enforcement, public health, education, recreation, environmental protection, and other governmental services.

Regional Transportation Plan: means the transportation plan for the regionally designated transportation system which is produced by the Regional Transportation Planning Organization.

Regional Transportation Planning Organization (RTPO): means the voluntary organization conforming to RCW 47.80.020, consisting of local governments within a region containing one or more counties which have common transportation interests.

Resident Population: means inhabitants counted in the same manner utilized by the US Bureau of the Census, in the category of total population. Resident population does not include seasonal population.

Right-of-way: land in which the state, a county, or a municipality owns the fee simple title or has an easement dedicated or required for a transportation or utility use.

Rural Lands: means all lands which are not within an urban growth area and are not designated as natural resource lands having long term commercial significance for production of agricultural products, timber, or the extraction of minerals.

Sanitary Sewer Systems: means all facilities, including approved on-site disposal facilities, used in the collection, transmission, storage, treatment or discharge of any waterborne waste, whether domestic in origin or a combination of domestic, commercial or industrial waste.

Shall: means a directive or requirement.

Should: means an expectation.

Single-Family Housing: as used in this plan, a single-family unit is a detached housing unit designed for occupancy by not more than one household. This definition does not include mobile homes, which are treated as a separate category.

Solid Waste Handling Facility: means any facility for the transfer or ultimate disposal of solid waste, including land fills and municipal incinerators.

Transportation Facilities: includes capital facilities related to air, water or land transportation.

Transportation Level of Service Standards: mean a measure which describes the operational condition of the travel stream, usually in terms of speed and travel time, freedom to maneuver, traffic interruptions, comfort, convenience and safety.

Transportation System Management (TSM): means low capital expenditures to increase the capacity of the transportation network. TSM strategies include but are not limited to signalization, channelization, and bus turn-outs.

Transportation Demand Management Strategies (TDM): means strategies aimed at changing travel behavior rather than at expanding the transportation network to meet travel demand. Such strategies can include the promotion of work hour changes, ride-sharing options, parking policies, telecommuting.

Urban Growth: refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth.

Urban Growth Area: means those areas designated by a county pursuant to RCW 36.70A.110.

Utilities: means facilities serving the public by means of a network of wires or pipes, and structures ancillary thereto. Included are systems for the delivery of natural gas, electricity, telecommunications services, and water and for the disposal of sewage.

Visioning: means a process of citizen involvement to determine values and ideals for the future of a community and to transform those values and ideals into manageable and feasible community goals.

Wetland: means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities. However, wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands, if permitted by the county or city.

Zoning: the demarcation of an area by ordinance [text and map] into zones and the establishment of regulations to govern the uses within those zones [commercial, industrial, residential] and the location, bulk, height, shape, and coverage of structures within each zone.

Appendix II: Acronyms

AASHTO	American Association of State Highway Traffic Officials
ADT	Average Daily Traffic
BBLENS	Birch Bay Blaine Lynden Everson Nooksack Sumas
<u>BPA</u>	<u>Bonneville Power Administration</u>
CAO	Critical Areas Ordinance
DEA	David Evans & Associates, Inc.
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GMA	Growth Management Act
HUD	(United States Department of) Housing and Urban Development
<u>ITS</u>	<u>Intelligent Transportation Systems</u>
LENS	Lynden Everson Nooksack Sumas
LOS	Level of Service
<u>NRCS</u>	<u>United States Department of Agriculture Natural Resource Conservation Service</u>
NWI	National Wetlands Inventory
OFM	Washington State Office of Financial Management
<u>PSE</u>	<u>Puget Sound Energy</u>
PTBA	Public Transportation Benefit Area
RCW	Revised Code of Washington
SCS	United States Department of Agriculture Soil Conservation Service
SEPA	State Environmental Policy Act
SMP	Shoreline <u>Management Master</u> Program
<u>STP</u>	<u>Surface Transportation Program</u>
TIB	Transportation Improvement Board
<u>TIP</u>	<u>Transportation Improvement Program</u>
UATA	Urban Arterial Trust Account
UGA	Urban Growth Area
USGS	United States Geological Survey
WAC	Washington Administrative Code
WCCOG	Whatcom <u>County</u> Council of Governments
WSDOT	Washington State Department of Transportation
WTA	Whatcom Transportation Authority

Appendix III: Community Survey

Unedited text of comments made by respondents:

Get rid of the service stations and bars and stop catering to the needs of business only.

I think the city is more concerned with the Canadian business owners than with its own citizens.

I preferred the old character of Sumas, businesses closed on Sunday and not all Canadian owned businesses -- I feel the average resident is worse off now than 15 years ago, with traffic pollution, and noise.

Fewer gas stations.

City revenue dollars -- long-term businesses create better paying jobs which in turn offer the opportunity for local youth to stay and work and prosper in their own hometown. Right now you have to look outside Sumas for good job opportunities.

Serious considerations towards a mall complex of some sort with a variety of shops, etc., so tax dollars can stay in Sumas and not head to Everson or Lynden.

Start a new commercial area so residents do not have to fight border traffic.

It's big enough now -- any more growth there will be no trees - or farmlands left. The animals won't have any homes -- our air would be ruined. Also cut down on Canadian traffic.

Don't let grocery stores and gas stations go beyond Cherry Street.

Try to think of Sumas and its residents, not just money and Canadians.

Most of the favorable features or characteristics are gone -- sold to the highest bidder.

Sumas has been taken over by a foreign country and no longer exists as a small town. Small town services, businesses, etc., are gone. It no longer is a desirable place to live and raise a family. Pride in home maintenance is gone as more and more homes have absentee landlords. The Canadian dollar has not improved the average resident's life -- it has made it worse -- only the businessman profits! Zoning means nothing! HUD housing brings in more non-contributing residents.

Let's not miss the opportunity for growth. We have many commercial opportunities we should take advantage of, and then allow residential growth to follow. We should take advantage of people passing through to better our community further.

Keep the natural beauty, but please allow some space for commercial development. I feel that the city is not actively interested in a strong, broad tax base and future.

Most characteristics of Sumas have been lost years ago.

As far as I see it, Sumas is right now nothing more than a gate. We have this huge fenced back yard with nothing in it to play with. If the city continues to restrict business growth, you may as well start making out a rent check to Lynden. There must be thousands of lost dollars going through

Sumas to Lynden, Everson and Bellingham every day. Until this city decides to get off its hand and make a positive step towards business growth it will remain nothing more than a passageway to other points that can offer people what they need.

Would like to see a wider variety of businesses. I would rather spend money in my own community and support it rather than supporting another which I must do more than 50 percent of the time I need something.

When are we going to quit being just a border strip and develop Sumas as a place we can be proud of? New business, better parks and schools.

If we can create a community where there is a balance of jobs and activity opportunities then we can keep our kids from growing up and leaving town. Let's not fear change, but welcome it.

I'd like to see Sumas as a self-supporting city where people wouldn't have to leave town to find services and commodities in other places outside Sumas.

Let's plan for a positive future for Sumas, i.e., allowing some urban growth so that city doesn't wither away, but so it can become a place to come, not a place just to pass through. At the same time keeping the quality of life good.

Where is Sumas going? Will there ever be opportunities in town (outside of farming, gas stations) for young people to stay in their hometown?

Seek middle of the road attitude between growth and quality of life.

Do something about the Canadian back up.

Get the Canadian traffic off Cherry Street.

Some way to take traffic around the town.

Control Canadian traffic jams better.

Route Canadians off Cherry Street onto Port side of town. Put all new businesses on that side of town, not Front Street area.

Control of Nooksack River with adequate help from county, state, federal govt.

What about the flood threat and the problems it causes? Where can Sumas grow if the flooding isn't controlled?

I walk a great many times and sidewalks need improving in many places.

I like the new sidewalks on Cherry Street and would like to see more on the other streets in town.

Need more low-income housing! Bus service would be welcome.

Should have places for people to live before there is big commercial places put in -- also should keep what housing there is.

We especially appreciate our clean, pure water.

Determining a comprehensive plan that will accommodate every public interest instead of allowing one group of people their exclusive wishes.

Sumas used to be a nice town to live in, but it is run without regard to the people who live here.

City doesn't take into consideration the well-being of the resident enough.

Why are you asking? You do what you want anyway...

We built our home in Sumas for the quality it had to offer, beauty, community living, church, schools, neighbors -- quiet -- breath of fresh air. Out of all these questions are we able to maintain a simple way of life?

I appreciate Sumas. I hope we all, public and private, try to put in as much as we take out of our community. Most important, that we attempt to find a balance between proper growth and private rights.

I love this town.

Appendix IV: SEPA Documents

Appendix V: County-Wide Planning Policies

City of Sumas Comprehensive Plan

April 2016 DRAFT