THE CITY OF EVERSON

Comprehensive Land Use Plan
2004-2024

Adoption Date: December 14, 2004

4. Capital Facilities Element

Introduction

This element is a required part 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 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.

This introduction is followed by several sections. First comes a presentation of Everson's goals and policies related to capital facilities. Second comes a common set of planning assumptions that are pertinent for all kinds of facilities. Next come several sections describing the individual public works systems. In each such section, the existing status of the system will first be described, and future needs will then be discussed. The conceptual locations of major planned capital facilities are shown on Map 12.

Goals and Policies

Everson adopts the following goals and policies:

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 two years and, with the exception of emergency projects, the capital budget for any given year should include only those projects identified in this plan.

- 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.

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 capital facilities and public 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.

Planning Assumptions

Several assumptions described elsewhere in this plan are pertinent to the capital facilities element. This section will list those assumptions, and the calculations throughout the remainder of the capital facilities element will rely upon the assumptions. This approach ensures that the capital facilities element is consistent with the land-use element and provides an accurate estimate of the costs associated with implementing the plan.

- Population will increase to 4,202 by the year 2024: the city will accommodate 492 new residents in the next six years (2004-2010) and 2,147 in the next two decades.

- An average of 2.4 persons will live in each household. The newcomers will therefore need 205 dwelling units in the next six years, and 895 units in the next two decades.

- Growth will be accommodated in a variety of housing types. The left columns of Table 4-1 summarize the acreages and development densities described in the land-use element.

Scenarios for Analysis

The discussion will also center around two different scenarios or timeframes for analyzing costs.

1) **Short-term**. We can determine the amount of land required to *accommodate near-term growth*. We can then associate a price-tag for capital facilities with that land area. This alternative is labeled "short-term" in the following discussion, and a planning period of six years has been used for analysis. The six-year horizon is useful because it coincides with the period for which the city must prepare a financial analysis. Chapter 2 states that about 492 newcomers are expected in the next six years. The newcomers will need 205 housing units.

   One column of Table 4-1 shows the amount of development expected in the short term: 64 acres will be developed for residential use, broken down as follows: 52 acres SFR (151 units), and 12 acres MU (48 units), plus 5 acres of COM (2 units), and 20 acres of AG (4 units), providing 205 total dwelling units. We also assume that 25 acres of LI and 5 acres of COM will be developed, resulting in 250,000 square feet of nonresidential floor space, according to the densities of intended use described in the land-use element.

   Consistent with the county-wide planning policies calling for orderly and contiguous development within UGAs, we assume that all short-term development will occur within existing city limits (infill) or in the regions immediately adjacent to the city to the north (near Van Buren and Trapline) or to the south (near Everson-Goshen or Mission).

Table 4-1. Summary of Assumed Development Pattern

Zone	Developable acreage			Build-out capacity (units)	Density (units/acre)	Short-term development (acres)	Plan-period development (acres)
	Infill	UGA	Infill+UGA				
SFR	80	229	309	910	2.9	52	238
MU	81	7	88	399	4.5	12	40
COM	22	35	57	23	0.4	5	10
LI	63	174	237	-	-	25	94
AG	64	58	122	30	0.2	20	45
							5
Total	310	503	813	1,362		114	432

2) **Plan-period**. We can determine the capital costs associated with accommodation of *anticipated growth within the planning period.* This alternative is labeled "plan-period" in the following discussion. Recall that in keeping with county-wide planning policies, the UGA is sized to hold more than the anticipated number of newcomers. The final column of Table 4-1 shows how many acres are actually expected to develop in the planning period, and Map 11 shows an assumed pattern of development. The areas noted on the map are stronger candidates for development because of factors such as proximity to utilities and roads. Generally, the areas assumed to remain undeveloped are those at the fringes of the UGA. The development pattern on Map 11 is used as the basis of the trip-generation calculations discussed in the transportation element.

Domestic Water

Much of the information contained in this section is drawn from the 2002 Water System Comprehensive Plan and a March 1, 2004 memorandum, both prepared by Wilson Engineering.

Existing Status

Source. Everson draws water from three wells in the Strandell area, south of the Nooksack River. The volume of water available to the city is regulated by the Department of Ecology. The city now has a right to a total volume of 601 acre-feet per year, which is equivalent to an *average* pumping rate of 373 gallons per minute (gpm). This total volume is theoretically sufficient to serve a community of 7,000 to 8,000 people. However, Ecology also regulates the *peak* rate of withdrawal: the city is limited to a peak rate of 800 gpm. The three wells are together capable of producing more than that peak rate. Although the peak rate seems large compared to the average rate of 373 gpm, the peak rate is actually the factor that limits the service population. This is because the deepest of the three wells requires installation of an improved Maganese treatment system to achieve the maximum pumping volumes. Without the deep well, the pumping capacity is approximately 600 gpm. According to the Water System Plan, the water system in 2003 served

1,164 equivalent residential units (ERUs). On this basis, without the deep well, 413 ERUs can be added to the current number for a total of 1,577 ERUs. Each commercial or industrial use also consumes water, therefore the number of ERUs and the number of people that can be accommodated will be reduced in proportion to the amount of nonresidential development.

Treatment. Water is treated in two ways: disinfection is accomplished by chlorination; acidity is reduced by aeration. The equipment used for aeration and disinfection is designed to handle the peak rate of 800 gpm discussed above, so *surplus treatment capacity is also available for at least an additional 413 ERUs.*

Storage. Water is stored in two ground-level concrete reservoirs located at the Strandell well field. The reservoirs have a combined capacity of 360,000 gallons*, which is sufficient to supply a maximum of 1,255 ERUs.. Based on the 2003 ERU total of 1,164, only 91 ERUs were available as of 2003. This is equivalent to a population growth of approximately 218 people. As can be seen, water system storage capacity is the limiting factor for growth in the short term.*

Distribution. The distribution system consists of approximately 64,416 feet of pipe ranging in diameter from 1 to 12 inches and ranging in age from 0 to 60 years old. Because of rapid growth in the last 15-20 years, a substantial portion of the system consists of relatively young pipe, but much of the system consists of older pipe nearing the end of its service life. The city has emphasized replacement of water lines in recent years because of a perception that the system has been neglected over the years.

Aside from the issue of age, much of the pipe is undersized relative to current standards for water system design. The undersize pipes result in substandard pressures and flow volumes at places in the distribution grid, most notably the area near Greens Lane at the east end of town. Replacement projects typically involve the installation of larger-diameter pipes.

As described in the land-use element (Table 3-1), the system provides service to a developed area of approximately 300 acres, so pipe is laid at an average of 215 feet per acre to support existing development.

Future Needs

Source, treatment, storage. The city has reserve capacity to serve an additional 91 ERUS (or 218 people), while the land-use plan describes an influx of 2,147 people as well as extensive commercial and industrial development. There will therefore be a capacity shortfall in about 2 years, depending upon the pace of residential development, the scale of nonresidential growth and the success of any conservation efforts. The problematic components are source treatment and storage capacity. Source capacity will also become a critical component during the latter half of the planning period. The city must construct more storage and treatment facilities. Construction of treatment and storage are estimated to cost about $540,000. The city and the Department of Ecology have previously discussed a change of use for a 350-gpm industrial-use water right acquired by the city during a land purchase several years ago. If the city is able to convert the right to municipal use and change the location of withdrawal, then adequate water rights would be available to serve growth through the end of the planning period.

Distribution. The distribution system requires ongoing rehabilitation. Because the average service life of a buried pipe is roughly 40 years, the city must replace an average of 2.5% of the system each year. At this point, 2.5% of the system is equal to 1,600 lineal feet of pipe, but expansion of the service area will cause this value to rise over time. Of course, population growth will spread costs among an ever-larger number of ratepayers. The per-capita cost of rehabilitation might either increase or decrease, depending upon the density of development. Higher development densities (e.g., infill and multi-family use) can lead to lower per-capita costs, because the increase in the number of ratepayers is proportionately greater than the increase in the length of the distribution system. Conversely, low-density development can lead to higher long-term per-capita costs. The growth pattern assumed in this plan incorporates densities lower than now exist, so the cost per ratepayer can be expected to increase over time.

The eastern part of the UGA can't be served via the existing transmission line that extends as far as Greens Lane. That line has insufficient capacity to serve the 130 acres of new development proposed near SR 9. The Water System Plan describes a new 10-inch transmission line extending from Washington Street east along Main Street to Greens Lane, and then south(see Map 12). The new line would be 7,000 feet long and would cost approximately $200,000. Additionally, the eastern area is so distant from the reservoirs that a booster pump would be needed to deliver the water pressure and fire-flow volume needed to support industrial development along SR 9. A booster pump would cost about $100,000. Another option is contracting for water service from the City of Nooksack, which has high-capacity water lines closer to the proposed industrial area.

Costs. Table 4-2 shows the capital costs associated with provision of water service under the two alternatives. The first two rows show the cost of constructing new distribution facilities. Typically, these costs are paid by developers. The values in these rows are calculated by multiplying acreages by pipe densities, and then applying an average cost. For example, the plan-period scenario includes 272 acres of residential land (SFR, MU). On average, the city installs 215 feet of pipe per developed acre. Multiplying 215 by 272, we see that the residential area might ultimately contain 58,480 feet of line. At an installed cost of $40 per foot, this line will cost $2,046,800, as highlighted in the table. The cost of installing non-residential pipe is presumed to be higher because of tougher fire-flow standards.

The third row shows the cost of the new water line and booster pump required to serve the eastern UGA. This cost is different from the others in that the line would not lie out in the UGA, but would traverse the existing city. The city might not succeed in charging the cost of this line entirely to developers; developers might argue that the city has an obligation to provide required flow volumes at the eastern end of the existing system.

The fourth row shows the cost of constructing new source and storage, as will be necessary prior to build-out. This cost might also be paid by the city.

In summary, the short-term scenario involves a major city-funded capital project related to the development of water system storage and treatment facilities. The build-out scenario anticipates that major projects will be undertaken to serve the eastern part of the UGA and to develop additional water source capacity.

Table 4-2. Water System Capital Costs

	Short-term	Plan-period	
Distribution - res. (@ $35) - developer pays	474,075	2,046,800	<---
Distribution - non-res. (@ $45) - developer pays	275,400	596,700	
Transmission & pumping to east - city pays?		300,000	
New source, storage, treatment - city pays	540,000	590,000	
Total	1,289,475	3,533,500	

Sanitary Sewer

The information contained in this section is drawn from a sludge-quality report prepared by Barrett Consulting Group in 1993, wastewater flow analysis reports prepared by Wilson Engineering in 1994 and 2004, and two engineering reports prepared by Harding Lawson Associates (HLA) in 1991 and 1992.

Existing Status

Collection. The sewage collection system consists of approximately 40,000 lineal feet of pipe.[2] With the exception of some 10-inch diameter pipe near the treatment plan, all of the system is 8-inch pipe. About 68% of the pipe is asbestos concrete, but PVC is installed in the newer Sable Terrace, Aspen, Evergreen Way and River's Edge subdivisions.

The system provides service to a developed area of about 210 acres, so pipe is laid at an average of 190 feet per acre to support existing development.

The collection system is divided into seven drainage basins. All parts of town south of the Nooksack River are included within a single basin. Because this southern area slopes north toward the river, the basin is drained entirely by gravity flow to a single lift station that pumps sewage across the river. The part of town north of the river is basically flat, so five basins and lift stations are needed to drain the area.

Sewer lines are shallow at both the southern and eastern extremes of the system, which means that further extension of the system can be accomplished only by adding new lift stations and basins.

Wilson reports that the lift stations serving the downtown core are operating at about 80 to 90 percent of capacity, while the stations serving south Everson, east Everson (Greens Lane), and west Everson (Park Drive) have considerable excess capacity.

[2] Note: the size of the sewer collection system is smaller than the size of the water distribution system because certain areas near the Mission Road are on city water but not on sewer.

In 1994 Wilson indicated that sewers near the downtown core were susceptible to I & I (infiltration and inflow). I & I is bothersome in that a large influx of "clean" water hampers the efficiency of a treatment plant and also occupies some of the plant's hydraulic capacity. Later that year the city repaired a number of leaking pipes in the downtown core, thereby significantly reducing the I &I problems in this area. The sewer main that runs along E. Main Street serving east Everson is also suspected of having problems with I & I.

Treatment. The treatment plant is an oxidation ditch facility located north of the river at the west end of town. The original plant was built in 1972. The plant was upgraded in 1988 in order to handle increased flows resulting from growth in Everson and from installation of a new sewer system in the neighboring city of Nooksack. Everson and Nooksack now share the capital and operating costs associated with the treatment plant.

The treatment plant has a design capacity of 440,000 gpd. Everson owns two-thirds of this capacity or 293,333 gpd. The other one-third of total capacity is owned by the city of Nooksack. Assuming that one equivalent residential unit (ERU) generates approximately 300 gpd of wastewater flow, Everson's share of the total treatment capacity is equal to 978 ERUs. This flow level is equivalent to a service population of 2,667, assuming typical sewage flows of 100 gpd per person. Average daily wastewater flows for the city in the year 2002 were approximately 205,000 gpd. This was the highest flow rate out of the last six years and is equivalent to 683 ERUs. Therefore, a conservative estimate is that Everson has available capacity for 295 additional ERUs.

Assuming annual growth of 3.6 percent, it is estimated that Everson will exceed its capacity share in the year 2014. In addition, it is estimated that Nooksack will exceed its share in 2023. Combined flows from both towns will exceed actual plant capacity in the year 2018. Addition of one or more industrial uses that generate large wastewater flows could significantly alter the above timeframes for reaching plant capacity.

Sludge disposal. Everson disposes of sludge through land application on local farm fields. Sludge is collected in a tank at the treatment plant and is then transported by truck to a series of holding tanks owned by Tjoelkers Brothers. When conditions are suitable (i.e., no rain is expected and the water table is low), the sludge is spread on the farm fields. The fields are used to produce feed crops for livestock.

In 1993 the EPA promulgated new rules controlling land-application of sludge (40 CFR Part 503). There are three main characteristics of sludge regulated by the rules:

- *Metals.* This standard relates to the concentration of ten separate metals in the sludge. Everson meets these standards with its existing treatment process, according to annual testing conducted since 1993.

- *Pathogen reduction.* This standard relates to the concentration of pathogens (bacteria, etc.) present in sludge. For a Class B facility such as Everson's, the standard calls for less than 2 million pathogens per gram of dry solids. Based on annual testing beginning in 1993, it is

clear that the Everson plant fails to meet this standard. The City's sludge disposal company now has the responsibility of meeting the standard.

- *Vector attraction reduction.* This standard relates to the concentration of volatile solids in sludge. If present in sludge, volatile solids attract disease vectors (e.g., rats). The standard calls for a minimum 38% reduction in the concentration of volatile solids as a result of the treatment process. Everson's plant achieves almost no reduction in volatile solids.

Inadequate sludge digestion is the main cause of the failures. The rules require that sludge be digested for 40 days at a temperature of 20° C (and even longer at lower temperatures). Barrett estimates that the Everson digester provides detention for only one to four days, on average. Tjoelkers Brothers monitors and manages its holding tanks such that sludge is not applied to farm fields until the sludge meets the applicable regulatory standards.

Future Needs

Collection and pumping. As mentioned above, the sewer lines are shallow at the southern and eastern limits of the existing system. The addition of large service areas can therefore be accomplished in either area only by the creation of new drainage basins and accompanying lift stations. The historic reliance upon gravity flow within south Everson will no longer pertain, because elevations don't increase substantially to the south and west of Sable Terrace. The future cost of collection and pumping will therefore be roughly equivalent (on a cost per acre basis) within the southern and eastern parts of the UGA.

Wilson recommends a continued effort to reduce I & I. Wilson recommends TV inspection of the worst basins, followed by sealing of leaking joints, at a cost of $35,000.

Transmission. The planning area south of the river contains over 500 acres slated for residential development, an area capable of accommodating more than 2,100 people. In contrast, Everson's total population (both north and south of the river) is expected to grow by only 2,147 during the next two decades. Clearly, only part of the southern residential area will develop during the planning period. The amount allowed to develop should correspond with the infrastructure capacity that can be readily provided. In this light, the capacity of the new lift station at the bridge sets a practical short-term limit to growth. That station will support a population of 1,800 south of the river, 1,000 more than currently exists. At planned SFR densities, 1,000 people could be accommodated in developments spanning about 145 acres.

The southern planning area also includes large areas slated for commercial or industrial development. *Such development will decrease the transmission capacity available for residential use.*

A portion of the transmission line leading to the river lift station has recently been upgraded and the remaining portions should be upgraded to provide matching capacity, including a new 15-inch trunk line running north along Mission Road to Robinson Street (see Map 12). This line will stretch 3,000 feet and cost $342,000. A backbone sewer trunk should extend south and west from the new Mission Road lift station to convey flows from the southwest part of the growth area. This line will stretch 34,000 feet and cost $400,000. The trunk line is necessary to

accommodate growth, so the cost of this facility should be passed on to developers through a connection fee surcharge applicable to developments south and west of the new lift station.

Treatment. Wilson suggests that Everson begin planning an expansion of the treatment plant when the actual wastewater flow reaches 85% of the design capacity for three consecutive months. This would allow construction of improvements before Everson's capacity share is exceeded. Wilson provides a rough estimate of $2 to $3 million for expansion of the treatment plant. Another option is to purchase excess capacity from Nooksack and postpone plant expansion for a few years.

Sludge disposal. Everson does not have any plans to change the current method of sludge disposal.

Cost summary. Table 4-3 shows the immediate capital costs associated with provision of sewer service under the two alternatives. The first row of the table shows the cost of constructing a new collection system, including both collection and lift stations. Typically, these costs are paid by developers. As in the water-system table discussed previously, the values in this row were calculated by multiplying acreages by pipe densities, and then applying an average cost. The cost of lift stations was included by estimating that a typical drainage basin covers 50 acres, and a lift station costs about $100,000.

The remaining rows contain other projects, as described earlier. In the short-term, a total of $35,000 of city projects is identified.

Table 4-3. Sewer System Capital Costs

	Short-term	Plan-period
New collection & lift stations (developer pays)	990,000	4,225,900
I & I project	35,000	35,000
Transmission to southwest Everson (developer pays)	342,000	742,000
Expansion of treatment plant		2,500,000
Total	1,367,000	7,502,900

Streets and Sidewalks

The Whatcom County Council of Governments (WCCOG) prepared the 1996 transportation element of this plan. As part of the project, WCCOG did an inventory of Everson's streets in the fall of 1993. City staff updated the inventory in 2004. The updated inventory has been used to complete this section of the capital facilities element.

Existing Status

Streets. As shown in Table 4-4, Everson contains a total of 9.95 lineal miles of streets classified into three categories. Most are classified as local, but a small number are classified as arterial or as highway. Maintenance of local and arterial streets is the responsibility of the city. The highway category includes only SR 544, a highway maintained by the Washington State Department of Transportation (WSDOT).

Table 4-4 also shows the paved area of the street system and a breakdown of pavement conditions. SR 544 is in the worst overall condition, with 34 percent of its paved area rated as fair or poor, and the remainder rated good. With regard to the streets maintained by the city, the arterial streets are in the best condition, with 99 percent of the paved area rated as either good or very good. In contrast, only 72 percent of the local streets fall in those categories, with the remaining 28 percent rated as fair or poor.

Table 4-5 provides more information about each street maintained by the city. Pavement condition is shown in the right columns.

Most streets in Everson lack sidewalks and drainage facilities. In 1990, Everson revised its requirements for new streets built by developers. New streets are required to be built with a minimum 60' right of way, sidewalks on both sides of the street, and curbs and gutters for storm drainage.

Table 4-4. Size and Condition of Street System

Street Category	Length miles	Total Paved Area sq yds	Pavement Classified by Condition sq yds			
			Very Good	Good	Fair	Poor
Local	7.65	122,349 100%	35,235 29%	52,718 43%	26,818 22%	7,578 6%
Arterial	0.41	9,047 100%	5,858 65%	3,056 34%	133 1%	0 0%
Highway (SR 544)	1.89	32,196 100%	0 0%	21,310 66%	6,442 20%	4,444 14%
Total	9.95	163,591	41,092	77,084	33,393	12,022

Table 4-5. Characteristics of Streets Maintained by the City

Street	Length feet	Sidewalk present?	Total Paved Area sq yds	Pavement Classified by Condition sq yds			
				Very Good	Good	Fair	Poor
Arrowhead Ln	225		400		400		
Aspen Dr	442		982			804	178
Aspen Pl	100		820			820	
Baker Ave	1,137		3,667		1,944	1,723	
Birchwood Dr	840	75%	3,267	3,267			
Blair Dr	1,311	√	3,205		3,205		
Blankers St	543		846		357	489	
Cashmere Ln	1,436	√	3,510	1,049	1,816	645	
Cedar Pl	180		932			932	
Chestnut Ct	190	√	1,099	1,099			
Chestnut St	677		2,151	2,151			
Christopher Ln	574	√	2,281	2,281			
Colton Ln	256	√	1,115	1,115			
Dahlquist Ln	778		3,458	3,458			
E Second St	747	√	1,992	1,813	179		
E Third St	553	√	2,642		2,642		
Emmerson Rd	622		3,041		3,041		
Evergreen Wy	947	√	4,209	4,209			
Evergreen Pl	80	√	356	356			
Everson Rd	2,319		8,761		5,727	952	2,082
Freda Ave	267		593				593
Greens Ln	1,014		3,605		3,605		
Kale St	83		184		184		
Kirsch St	350		1,400		1,400		
Kobe Ct	165	√	1,036	1,036			
Lincoln St	1,125	√	2,500		1,109	1,391	
Main St	711	√	2,686			2,686	
Marcus St	388	√	733			733	
McGaskill St	169		451			451	
Mead Ave	623		1,294		220	1,074	
Mission Rd	4,417		10,797		10,797		
N Harkness St	1,126	24%	1,788		430	1,001	357
S Harkness St	428	√	1,997		1,997		
N Washington St	2,163	√	9,047	5,858	3,056	133	
S Washington St	1,294	√	5,176			1,740	3,436
Oakdale Dr	660	√	2,743	2,743			
Oakdale Ln	250		1,149	1,149			
Old Everson Rd	450		1,000			1,000	
Park Dr South	1,299		3,940		1,551	2,389	
Pioneer Ct	190	25%	1,115	1,115			
Poplar Dr	171		380		380		
Reed's Ln	1,196	72%	2,924		2,110	814	
River St	251		502		502		
Robinson St	1,258		3,023		1,566	1,457	
Roeder St	753		1,473		559	914	
Sable Dr	1,791	44%	4,776	4,776			

Sable Ln	412	√	1,007	1,007			
Shuksan St	446		918		918		
Shuksan Wy	966	√	3,621	2,711		910	
Strandell St	709		1,330			1,330	
W First St	818		2,143		1,210		933
W Second St	939		2,675		1,252	1,423	
W Third St	1,207		3,639		2,499	1,140	
W Fourth St	503		1,118		1,118		
Total	42,559		131,396	41,093	55,774	26,951	7,579

Future Needs

Everson's planned street projects generally fall into two categories. One category is routine maintenance of streets, which involves resurfacing of an existing road. The second category is major projects involving reconstruction and redesign. The city's six-year Transportation Improvement Program (TIP) for the period 2004 - 2010 is shown in Table 4-6. The TIP includes several reconstruction projects to correct deficiencies (e.g., poor pavement, narrow roadways) in various parts of town. Three projects involve arterials (Mission Rd., N. Washington St., and Blair Dr./Reed's Lane) and the city will pursue TIB funding, which requires a 5 percent local match. The City is considering adding Lincoln St. as an arterial, in which case that project would also qualify for TIB funding. Two projects involve replacing deteriorated downtown sidewalks and other related improvements in the downtown area. These projects are eligible for federal STP funding because sidewalks are "enhancements" to the overall transportation system. One project involves reconstructing streets located within the Wellhead Protection Area to decrease potential impacts to the city wellfield. This project would be eligible for both CDBG and PWTF funding. Another project involves improving sub-standard streets in the Blankers Addition area, including W. 1st, W. 2nd and W. 3rd Streets. It is anticipated that these improvements would qualify for CDBG funding. Finally, the Harkness St. project is integrated with an effort to revitalize the downtown core. The city bought a ramshackle building that sat in the right-of-way for N. Harkness St. The city has since demolished the building and intends to redevelop the area between Main St. and the smoke stack to include parking, a street, and a sidewalk that might serve as the route for the Bay-to-Baker trail. Adjacent businesses are expected to finance much of the redevelopment effort.

Two additional projects that are not included in the 6-year TIP should also be mentioned. One project, W. Third St., is associated with new development in the area between Park Drive and N. Harkness, and developers are expected to pay the cost. Cedar St. is the name of a proposed connector between Everson-Goshen Road and Mission Road, through the southern growth area. The street is expected to serve as the border between industrial and residential areas. The city anticipates that Cedar St. will be built with external funds from either the developers or from CERB, which provides funding for infrastructure necessary to support industrial development.

Table 4-6. Six-Year TIP for 2004 - 2010.

Location	Length	Project	Year	Cost	Funds
Mission Rd. (2phases)	4,200	reconstruct	2005	1,877,000	TIB
N. Washington	850	reconstruct	2006	21,000	TIB
N. Harkness	1,060	reconstruct	2010	220,000	CDBG
Blair Dr./Reed's Lane	1,580	reconstruct	2007	446,000	TIB
Lincoln St.	1,060	reconstruct	2007	220,000	TIB
Blankers Addition Road Improvements	1,267	reconstruct	2008	275,000	CDBG
Wellhead Protection Area	2,100	reconstruct	2009	840,000	PWTF, CDBG
Downtown sidewalks and related improvements	5,800	replace	2006	119,000	STP

Storm Sewer

Existing Status

No integrated storm drainage system exists in Everson. As with the sanitary sewer, the Nooksack River divides the town into two distinct drainage areas.

North. North of the river, a small area in the downtown core near Harkness Street is drained by an 18-inch concrete line that runs west to the river. Another line drains the mobile home park near Reeds Lane, running east under Blair Drive to a drainage ditch paralleling Blair Drive. Finally, N. Washington Street (from Third Street north to the city limits) is drained by a line that empties into a drainage ditch along the north city limits. Elsewhere on the north bank, runoff flows overland until it reaches the two drainage ditches mentioned above. Those ditches empty into Johnson Creek.

Maintenance of the ditches and of Johnson Creek is the responsibility of the local drainage district. Due to regulatory and cost constraints, the district is apparently unable to complete frequent maintenance, with the result that the drainages are not able to convey as much water as possible.

South. South of the river there is a line running from Kale Street to the river along Everson Road. There is a relatively new storm drain line that runs along the eastern boundary of the elementary school that discharges to a tributary to Scott Ditch. There are also drywells constructed in new developments such as Sable Terrace and Birchwood. The drywells were effective when first constructed, but as oily pollutants permeated the gravel in the drywells, the drywells became ineffective. They still function under normal conditions, but a hard rain will cause them to flood.

Future Needs

Stormwater plan. During 1999 and 2000, Wilson Engineering developed a comprehensive stormwater management plan for the city of Everson. This plan describes the drainage situation in detail and identifies the capital improvements needed to achieve certain levels of service.

An examination of the city and growth area reveals that areas north of the river are almost flat, with gentle slopes toward the north, *away* from the Nooksack River. Drainage will always be a problem for these areas. The only natural features that might serve as drainage outfall are Johnson Creek and the Sumas River. Each of these has limited capacity to convey stormwater, and each is already of concern with regards to water quality. The situation is better south of the Nooksack River, where the rolling topography presents opportunities for effective drainage to the Nooksack River and to Scott Ditch.

Standards. Everson must adopt a basic stormwater program, according to the requirements of the Puget Sound Stormwater Plan. The basic program should include the following elements,

some of which were implemented in 2003 through adoption of the Department of Ecology Stormwater Manual for Western Washington:

- Ordinance establishing minimum stormwater requirements for new developments and redevelopment projects (adopted in 2003).
- Ordinance establishing an operations and maintenance program applicable to privately owned drainage facilities.
- Adoption of a set of technical design standards for stormwater facilities (adopted in 2003.
- Adoption of a public education program.

In addition, Everson has been participating in and coordinating with the Water Resource Inventory Area #1 (WRIA #1) effort currently underway. WRIA #1 is a basin-planning program sponsored by the Department of Ecology that includes participation by local jurisdictions, stakeholders and tribes.

Schools

Existing Status

Nooksack Valley School District No. 508 (NVSD) provides public schooling for Everson as well as Sumas, Nooksack, and part of unincorporated Whatcom county. NVSD operates four schools that serve families within the city of Everson as described in Table 4-6.

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. NVSD's facilities are generally in good shape. The newest facility is the Nooksack Elementary school, which was constructed in 1998. The Everson Elementary school is a relatively new facility opened in the fall of 1993, and the Middle school underwent a major renovation in the 1993 - 1994 school year. Four new classrooms were added to the High school during that school year. The district has no other capital improvements planned as of 2004.

Future Needs

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-6 enrollment will slowly decline to 476 in 2009 and 7-12 enrollment will also decline to 780 in the same period. However, the state's projections do not take into consideration the recent pattern of increased development in Everson. At the growth rates included in this plan, both upper-school and lower-school enrollment will be within existing capacity through the year 2010.

In summary, NVSD has sufficient classroom capacity through the year 2010 and well beyond that for the High School.

Table 4-6. Characteristics of School Facilities

School (location)	Grades	Classrooms	Capacity[1]	Enroll-ment	Class size
Nooksack Elementary (county)	K-5	14	360	309	22.1
Everson Elementary (Everson)	K-5	12	300	248	20.7
Middle School (Nooksack)	6-8	19	762	467	24.6
High School (county)	9-12	32	960	520	16.3

[1] Capacity based on ratio of 20 students per room (K-3), 25 students per room (4-6), 30 students per room (7-12), and 12 handicapped students per room (K-12).

Parks

Existing Status

Community parks. Everson has two community parks:

- Riverside Park. This 8.5 acre park lies at the west city limits adjacent to the Nooksack River. Amenities include a parking lot, a boat launch area, two baseball fields, a restroom building with attached covered picnic pavilion, 10 picnic sites, a Scout Cabin, and paths with river-related interpretive signs. The park is in excellent condition, as most amenities (except for the baseball fields and Scout Cabin) were constructed in 1993. In addition to Everson residents, this park is used heavily by residents of Nooksack and the surrounding county.

- Everson City Park. This 2.7 acre park lies behind city hall in the central business district. Amenities include two tennis courts, a gazebo, a picnic pavilion, a basketball court, a playfield, and some playground equipment. The tennis and basketball courts are usable but in poor shape (rough, cracked pavement and torn nets). Other amenities are in good shape.

The two community parks total 11.2 acres. Considering only Everson's population, the city has 6.6 acres of community park per 1,000 population, well above a typical planning standard of 2.5 acres per 1,000: Everson seemingly has excess community park capacity. However, heavy use of Riverside Park by Whatcom county and Nooksack residents complicates the situation. With

650 people in Nooksack, and with Lynden and Sumas parks several miles distant, an assumed service-area population of 4,000 is reasonable. The resulting ratio of 2.8 acres per 1,000 is a more realistic and sobering measure of capacity. City officials perceive Riverside Park as taxed to capacity. In particular, the baseball fields are in almost constant use during the warm-weather months.

Neighborhood parks. Everson also has two neighborhood parks:

- Aspen park. This 0.7 acre park lies in the Aspen subdivision at the south edge of the city off the Everson-Goshen Road. Amenities include playground equipment and a half-court for basketball.

- Sable Terrace park. This 1.4 acre park lies in the Sable Terrace subdivision at the south edge of the city off the Everson-Goshen Road. Amenities include playground equipment.

The two neighborhood parks total 2.1 acres, resulting in a ratio of 1.2 acres of neighborhood park per 1,000, somewhat below a typical planning standard of 1.5 acres per 1,000. Aside from the issue of gross acreage, there is also an issue of distribution. The south end of town has two parks, and residents living near the community parks can use those facilities as neighborhood parks, but many neighborhoods have no park facility, including Strandell, Greens Lane, and Washington Park. The lack of neighborhood parks is mitigated somewhat by the residential zoning standard of 9,600 square foot lots: many residents have large yards.

Future Needs

City officials are interested in developing more capacity at the Riverside community park. Undeveloped acreage exists immediately west of the park. Another 8 acres could hold two ballfields (either soccer or baseball) as well as more trails and picnic sites. No estimate is available of the cost of acquiring the land and developing the amenities.

Officials also recognize that new residential developments should include neighborhood parks, particularly if the developments involve higher densities, as might be the case in the residential multi-use zone. The city might acquire park land as a mitigation measure through the SEPA process.

Six-Year Financing Plan

This section demonstrates whether the city has the resources to pay for the capital facilities required 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 modifications to the sewer treatment plant.

Four spreadsheets are shown below, corresponding to the four major funds (or groups of funds) in the Everson accounting system. Each spreadsheet shows projected revenue and expenditure over the six-year span from 2005 through 2010. The spreadsheets are based on the estimated 2004 year-end results. The dozens of line items in the accounting system are consolidated into a few major categories. For instance, expenditures are allocated to just three categories: salaries and benefits, operations and maintenance, and capital outlay (including debt service). The major capital projects presented earlier in this chapter are listed individually.

One column contains percentage values used to predict future amounts. For the most part, we simply assume that revenues and expenditure will increase proportionate to expected growth. 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 increases in revenue 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 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:

Current Expense.

This spreadsheet represents costs associated with legislative, executive, judicial, legal, general governmental, police, health, fire, park, and library cost centers. This fund is stretched to the limit, and the fund balance is expected to decline over the next six years. The city plans to develop a larger commercial and industrial property tax base to provide a long-term remedy to declining balances.

Transportation System.

This fund is in reasonable shape, showing a rough balance between revenue and planned projects. The positive fund balance at the end of six years is based on the assumption that the City will e successful in obtaining the funding necessary to complete the projects included in the six-year transportation plan. The city plans to explore new revenue sources (e.g., local option gas tax) and to use alternate financing schemes such as LIDs in order to fund more projects, if possible.

Sewer System.

This spreadsheet incorporates the sewer fund, the sewer capital improvements fund, the bond fund, and the bond reserve fund. Several major projects are anticipated in the next six years. The spreadsheet shows adequate revenue to pay for the projects, with the exception of the year 2010. Planning and design work on the treatment plant upgrade is expected to begin in 2010, and the city will have $500,000 on hand to begin the upgrade project. Rates may be inadequate to cover payments on a $2 million debt. The city recently raised rates, both to accumulate a bit more cash (and thus reduce the size of the new debt) and to avoid a drastic single-year rate increase in 2010. Additional increases may be necessary once the project gets under way.

Water System.

This spreadsheet incorporates both the water fund and the water capital improvement fund. The fund shows a sizeable beginning balance with major expenditures in 2005, as the city undertakes major improvements to system storage and treatment. With no major projects expected in the later half of the six year period, this fund will accumulate cash. The water rates were raised in 2004 and seem to be appropriate, given the anticipated need for capital to develop an additional water source near the end of the planning period.

Consolidated results.

This spreadsheet simply adds together the results of the previous four. It shows that the city has the overall resources to fund the projects anticipated in the next six years. As noted above, the enterprise funds (water, sewer) are the soundest, and they account for the healthy overall picture. The city intends to bolster the transportation and current expense funds by seeking commercial and industrial tax base and by using alternate financing sources such as LIDs.